

Understanding Streaming and Copyright: A Comparison of the United States and European Regimes

Thomas Y. Lu

Follow this and additional works at: <https://digitalcommons.law.umaryland.edu/jbtl>

Recommended Citation

Thomas Y. Lu, *Understanding Streaming and Copyright: A Comparison of the United States and European Regimes*, 13 J. Bus. & Tech. L. 185 (2018)

Available at: <https://digitalcommons.law.umaryland.edu/jbtl/vol13/iss2/3>

This Articles & Essays is brought to you for free and open access by the Academic Journals at DigitalCommons@UM Carey Law. It has been accepted for inclusion in Journal of Business & Technology Law by an authorized editor of DigitalCommons@UM Carey Law. For more information, please contact smccarty@law.umaryland.edu.

THOMAS Y. LU*

Understanding Streaming and Copyright: A Comparison of the United States and European Regimes

What are the legal risks when entrepreneurs or business units start their online streaming businesses in the United States and in the European Union regimes? We posit here that legal risks are both substantive and procedural. Both risks come from the recent decisions of the United States district courts, Supreme Court, or from the European Court of Justice (“ECJ”). By comparing the U.S. and the European legal regimes, we can find the similarities between the two —briefly and broadly stated, they protect copyright holders. Because of the broad protection, the substantive risks are shifted to online streaming businesses. Procedurally, the online streaming businesses have to understand the differences between the two regimes. They have to provide enough factual evidence in the pleading stage of the U.S. and to be concerned about legislative adoption in member states of the E.U. These risks can be lowered by the development of a business model where all stakeholders benefit. Also, providing adequate terms of use in the platform is critical to escape liability when infringement occurs. Finally, when confronting lawsuits, managers and legal counsels should hire and cooperate with local lawyers so that they can lower the risk of high damage costs.

I. INTRODUCTION

Smartphones and wireless services have changed consumers viewing behavior dramatically. People have moved towards using a single mobile device instead of several devices for replying to emails, reading and sharing news, or even watching TV and listening to music.¹ Moreover, because of the more mature application of cloud computing services, firms can easily store their contents on a cloud and distribute that content by using compatible signals to smartphones, and consumers

©2018 Thomas Y. Lu

* J.S.D. Candidate, Washington University in St. Louis School of Law. The author thanks professor Henry Biggs for his helpful and informative comments, suggestions and editing.

1. See generally David Pierce, *The 10-Year Quest to Make Your Phone do Everything*, WIRED (Apr. 24, 2017, 7:00 AM), <https://www.wired.com/2017/04/10-year-quest-make-phone-everything/> (explaining that the move towards a single device has been coming for a long time).

UNDERSTANDING STREAMING AND COPYRIGHT

with smartphones can still enjoy content at any time through streaming without using a large amount of storage on their devices.² These demands on the Internet and streaming services reflect a strategic investment by companies.³ A 2017 report by Kleiner Perkins Caufield & Byers revealed that the total advertisement expenditures on the Internet will exceed the expenditures on television.⁴ This trend shows that the substitutive effect of the Internet and streaming services is unavoidable and explains why we have to know how to manage them for businesses.

Many platform providers such as Netflix, Hulu, YouTube, etc., offer videos or audio streaming services for consumers and make profits from ads from different markets.⁵ According to a report released by McKinsey & Company in 2015, the total compound annual growth rate (“CAGR”) of the North American and the European markets for online streaming services is 16.3 million U.S. dollars, the highest number among markets.⁶ Moreover, the total spending on the media of the two markets is 927 million U.S. dollars.⁷ These statistics suggest that Europe and the U.S are the two main markets for Internet service, including online streaming services.⁸

However, if an entrepreneur or a manager of the business unit desires to establish their own streaming services in the future, they will bear some legal risks in those two markets. What kind of legal risks do these businesses bear? Are there any similarities and differences between the different regimes? With the knowledge of these legal risks in two regimes, how should one manage these legal risks as an entrepreneur or a manager? To address these questions, this work will be divided into the following parts: Part II will focus on the basic business model of an online

2. See Arif Mohamed, *A History of Cloud Computing*, COMPUTER WEEKLY (Mar. 2009), <http://www.computerweekly.com/feature/A-history-of-cloud-computing> (explaining that cloud-based technology has been around for a while and that the cloud is great for “increased storage, flexibility and cost reduction”).

3. Rani Molla, *2017 is Already the Biggest Year Ever for Data Center Investment in the U.S.*, RECODE (Sept. 28, 2017, 6:00 AM), <https://www.recode.net/2017/9/28/16374640/2017-biggest-year-data-center-investment-energy-cloud-streaming-internet-traffic>.

4. See Mary Meeker, *Internet Trends 2017 – Code Conference*, (May 31, 2017), <http://www.kpcb.com/internet-trends> (showing that, globally, more money will be spent on internet advertising than on television advertising).

5. See Andrew Beattie, *How YouTube Makes Money Off Videos*, INVESTOPEDIA (June 7, 2017, 10:48 AM), <https://www.investopedia.com/articles/personal-finance/053015/how-youtube-makes-money-videos.asp> (explaining that YouTube uses advertising to make money); see also Anna Swartz, *How Does Hulu Make Money? Hulu’s Business Model Explained*, MIC (Feb. 3, 2016), <https://mic.com/articles/134275/how-does-hulu-make-money-hulu-s-business-model-explained#.U8jz tvX1W> (explaining that Hulu uses, among other things, ads to make money).

6. MCKINSEY & CO., *GLOBAL MEDIA REPORT 2015 12* (2015), <https://www.mckinsey.com/industries/media-and-entertainment/our-insights/global-media-report-2015> (follow hyperlink titled “Download the report” to access a PDF copy of the report).

7. *Id.*

8. See *id.* (viewing all of the regions together, North American and Europe vastly out-spend their counterparts in Latin America, the Middle East/Africa, and Asia in media advertising).

THOMAS Y. LU

streaming service and its related technologies. This is important because most legal issues stem from the business model and these related technologies. Part III and Part IV will elaborate and compare cases and explore the reasonings in the two big markets for online streaming services based on the business model stated in Part II. Finally, recommendations will be made for people who desire to develop an online streaming business in the future in Part V, followed by the conclusion in Part VI.

II. BASIC TECHNOLOGY AND ECONOMICS OF ONLINE STREAMING SERVICE

A. Technological Structure of Online Streaming Service

Online streaming service can be broadly divided into three types—aggregation, storage and distribution.⁹ These structures need enough Central Processing Unit (“CPU”) power for portable devices, great network bandwidth environment, and increased access to the network for customers.¹⁰ Aggregation technology, such as Multi-Bitrate streaming¹¹ or Real Time Messaging Protocol (“RTMP”),¹² allows content producers to transform content, such as videos, into fragmented signals that

9. See Sarah Perez, *JustWatch Debuts New Search Engine for Cord Cutters*, TECH CRUNCH (Feb. 5, 2015), <https://techcrunch.com/2015/02/05/justwatch-debuts-a-new-search-engine-for-cord-cutters/> (establishing that “aggregation” is a type of streaming service that acts as a TV guide of all streaming services); see also Nelson Granados, *Only Top Video Streaming Services Are Likely to Survive in the Trump Era*, FORBES (Jan. 25, 2017, 10:48 AM), <https://www.forbes.com/sites/nelsongranados/2017/01/25/only-top-video-streaming-services-are-likely-to-survive-in-the-trump-era/#5402e6dd3319> (explaining that another type of streaming service can be in distribution); Sarah Perez, *Sling TV Rolls Out a Better DVR With An Option to Protect Recordings, Record From Fox*, TECH CRUNCH (June 14, 2017), <https://techcrunch.com/2017/06/14/sling-tv-rolls-out-a-better-dvr-with-an-option-to-protect-recordings-record-from-fox/> (implying that a storage device is a type of online streaming service).

10. See Barb Gonzalez, *Internet Speed Requirements for Video Streaming*, LIFEWIRE (Dec. 3, 2017), <https://www.lifewire.com/internet-speed-requirements-for-movie-viewing-1847401> (explaining that bandwidth and access to the network are vital to effective streaming); see also Rob Pegoraro, *You’re Buying a 4K TV. How Much Internet Bandwidth Do You Need?*, USA TODAY (Dec. 10, 2017, 2:05 PM), <https://www.usatoday.com/story/tech/columnist/2017/12/10/youre-buying-4-k-tv-how-much-internet-bandwidth-do-you-need/933989001/> (establishing that internet speed and bandwidth are related concepts and that if the bandwidth is clogged up by other devices, then one may have a harder time streaming).

11. See Jordan Sheldrick, *Use Multi-Bitrate Streams to Deliver the Best Possible Live Broadcast*, EPIPHAN VIDEO (Oct. 31, 2016), <https://www.epiphan.com/blog/multi-bitrate-best-possible-broadcast/> (establishing that by using a multi-bitrate stream, the viewer can choose whichever stream is best for their network).

12. RTMP is a TCP-based protocol which maintains persistent connections and allows low-latency communication. To deliver streams smoothly and transmit as much information as possible, it splits streams into fragments, and their size is negotiated dynamically between the client and server. See H. PARMAR & M. THORNBURGH, *ADOBE’S REAL TIME MESSAGING PROTOCOL 1* (Adobe Dec. 21, 2012), http://www.images.adobe.com/www.adobe.com/content/dam/acom/en/devnet/rtmp/pdf/rtmp_specification_1.0.pdf.

UNDERSTANDING STREAMING AND COPYRIGHT

can be stored in the channel program, often set up on a server (or the cloud).¹³ Storage technology can archive the content in FMP4 form from the channel program temporarily and then transmit it to the streaming endpoint, or it can let the channel program directly link to a streaming endpoint as a live path.¹⁴ Finally, the key technology for the distribution of the content lies in the streaming endpoint.¹⁵ This function can transform FMP4 or a live path from a channel program into several signals that can fit into different smartphone platforms.¹⁶

B. Economy of Online Streaming Service

Based on the development of the technology discussed above, what are the characteristics of an online streaming service from the demand side? YouTube provides a compelling example. Content providers can develop their streaming channels by uploading clips, and where those interested can subscribe to them.¹⁷ Firms can embed their commercials in the content, and YouTube can charge different fees based on the timing, the length, the quantity of the content, and the nature of the embedding.¹⁸ When people watch YouTube, they also watch commercials¹⁹—giving customers a positive impression of the product or service and

13. See generally Ali C. Begen, *IPTV, Internet Video and Adaptive Streaming Technologies*, CISCO (2012), https://www.cisco.com/c/dam/global/en_ca/assets/plus/assets/pdf/IPTV-Internet-Video-ABEGEN.pdf (discussing what aggregation technology is and how it works).

14. See generally Gernot Zwantschko, *Halve Your Encoding, Packaging and Storage Costs – HLS With Fragmented MP4*, BITMOVEN (Dec. 13, 2016), <https://bitmovin.com/halve-encoding-packaging-storage-costs-hls-fragmented-mp4/> (discussing the new fMP4 technology, mobile devices, and streaming).

15. See Gail Pennington, *If You're Into Streaming TV, Here's Your Guide*, ST. LOUIS POST-DISPATCH (July 16, 2016), http://www.stltoday.com/entertainment/television/gail-pennington/if-you-re-new-to-streaming-tv-here-s-your/article_e8a9dd76-3117-5dcd-852d-031971fb162b.html (establishing that phones, tablets, computers, and TV's can all be used as an endpoint to streaming).

16. See generally *What's New in HTTP Live Streaming*, APPLE, <https://developer.apple.com/videos/play/wwdc2016/504/> (last visited Feb. 13, 2018); Will Law & Shawn Michels, *CMAF: What it is and Why it May Change Your OTT Future*, AKAMAI BLOG (June 20, 2016, 10:04 AM), <https://blogs.akamai.com/2016/06/cmaf-what-it-is-and-why-it-may-change-your-ott-future.html>; Samantha Bookman, *Apple's fMP4 Announcement at WWDC a 'Significant Step' for Video Encoding Standards, Akamai Says*, FIERCECABLE (June 22, 2016, 9:51 AM), <https://www.fiercecable.com/online-video/apple-s-fmp4-announcement-at-wwdc-a-significant-step-for-video-encoding-standards>.

17. Jerri Collins, *What is YouTube? How Do I Use It?*, LIFEWIRE (June 27, 2017), <https://www.lifewire.com/youtube-101-3481847>.

18. Shawn Forno, *Understanding YouTube Video Ads: TrueView Explained*, IDEA ROCKET ANIMATION (Feb. 27, 2017), <https://idearocketanimation.com/14052-youtube-video-ads/>.

19. See Garrett Sloane, *Advertisers Can Now Target YouTube Ads Based on People's Google Search Histories*, ADAGE (Jan. 20, 2017), <http://adage.com/article/digital/advertisers-target-youtube-ads-based-search-histories/307614/> (establishing that now advertisers will be able to target their ads better now); see also Conor Dougherty & Emily Steel, *YouTube Introduces Subscription Service*, N.Y. TIMES (Oct. 22, 2015), <https://www.nytimes.com/2015/10/22/technology/youtube-introduces-youtube-red-a-subscription-service.html> (discussing the

THOMAS Y. LU

impulse to buy.²⁰ From this example, we can understand that product or service companies are customers of the online streaming service.²¹ They buy “advertising rights” of the streaming videos or audios and then embed commercials within the YouTube streaming service.²² These rights can be calculated as royalties in different devices, sold, and owned by different firms, and, most importantly, they can also be subject to equitable relief from the court. These characteristics—rivalrous and excludable—reveal that a streaming service and its related “advertising rights” are private goods, although the marginal cost of production is almost zero.²³

III. LESSONS FROM THE TWO REGIMES

Based on the introduction of technology and the economy of online streaming services, we can understand the potential legal issues that might appear in these three structures—either in the aggregation, storage, or distribution component. A more complicated question to address is whether these issues might be intertwined. How does the U.S. court deal with those issues? What if the issues appear in a European regime? In this part, we will first elaborate on important cases that happened recently in the U.S. and in the European regime that have affected online streaming service businesses, the two largest markets for online streaming services. Then the part concludes by briefly comparing the two regimes and elaborates their similarities and differences.

A. The U.S. Regime

The courts of the United States have recently decided three important cases: two cases dealing with substantive issues related to online streaming services and one related to procedural issues. The two substantive-issue cases, *American Broadcasting Companies, Inc. v. Aereo Inc.*,²⁴ and *Fox Broadcasting Company, Inc. v. DISH Network*

release of YouTube Red, a subscription service providing uninterrupted music and ad-free videos for a monthly fee).

20. Nigel Harris, *Why Good Advertising Works (Even When You Think it Doesn't)*, ATLANTIC (Aug. 31, 2011), <https://www.theatlantic.com/business/archive/2011/08/why-good-advertising-works-even-when-you-think-it-doesnt/244252/>.

21. See Betsy McLeod, *How Much Does it Cost to Advertise on YouTube?*, BLUE CORONA (Feb. 12, 2017), <https://www.bluecorona.com/blog/how-much-does-it-cost-to-advertise-youtube> (explaining the relationship between YouTube and advertisers).

22. See generally *TrueView in-stream ads*, GOOGLE SUPPORT, <https://support.google.com/display-specs/answer/6055025?hl=en> (last visited Feb. 14, 2018) (explaining that ads are embedded within YouTube when TrueView in-stream ads are used).

23. Jay Anderson, Note, *Stream Capture: Returning Control of Digital Music to the Users*, 25 HARV. J.L. & TECH. 156, 169–70 (2011) (explaining that on-demand streaming is a private good because it is excludable and rivalrous).

24. 134 S. Ct. 2498 (2014).

UNDERSTANDING STREAMING AND COPYRIGHT

L.L.C.,²⁵ were decided in 2014 and 2015 respectively. The one procedural case, *Joint Stock Company Channel One Russia Worldwide v. Infomir LLC*,²⁶ was in early 2017.

1. American Broadcasting Companies, Inc v. Aereo, Inc. (“Aereo”)

This seminal Supreme Court decision, both for its majority and dissenting opinions, revolves around the streaming structure of the company Aereo.²⁷ Aereo was founded in 2012 by Chaitanya Kanojia, and backed by Barry Diller’s IAC, an American media and Internet company located in New York City, which was at the time quite popular in the online streaming industry.²⁸ The structure of its streaming was as follows: first, subscribers paid monthly fees to Aereo select programming on Aereo’s website;²⁹ then, Aereo servers would “select” antennas to catch the selected over-the-air broadcasts;³⁰ third, the broadcast would pass to Aereo’s transcoder, which in turn translated the broadcast signals into digital format for the Internet;³¹ finally, the data would be saved in Aereo’s hard drive, in a “subscriber-specific folder”—something a subscriber can do on multiple devices.³²

Aereo believed to be safe because of the recent holding in *Cartoon Network LP, LLLP v. CSC Holdings, Inc.*³³ In *Cartoon Network LP, LLLP*, Cablevision, a cable television provider, had the technology of a “Remote Storage DVR” (“RS-DVR”).³⁴ Similar to a traditional digital video recorder (“DVR”), Cablevision’s DVR allowed customers to pause, record, replay, and/or rewind previously recorded content.³⁵ Unlike traditional DVRs, which require a hard drive to be placed in the home of the subscriber, the Cablevision DVR stored content on servers at Cablevisions broadcast facilities.³⁶ To implement the DVR service Cablevision streamed their existing digital television system through a second server, which identified requested content, then copied, and streamed this content onto permanent storage for later retrieval.³⁷ The

25. 160 F. Supp. 3d 1139 (C.D. Cal. 2015).

26. No. 16-CV-1318, 2017 WL 696126 (S.D.N.Y. Feb. 15, 2017).

27. *Aereo*, 134 S. Ct. at 2503.

28. Brian Stelter, *New Service Will Stream Local TV Stations in New York*, N.Y. TIMES (Feb. 14, 2012), <https://mediadecoder.blogs.nytimes.com/2012/02/14/new-service-will-stream-local-tv-stations-in-new-york/?smid=tw-nytimstv&seid=auto>.

29. *Aereo.*, 134 S. Ct. at 2503.

30. *Id.*

31. *Id.*

32. *Id.*

33. 536 F.3d 121, 123 (2d Cir. 2008).

34. *Id.*

35. *Id.* at 125.

36. *Id.*

37. *Id.* at 124.

THOMAS Y. LU

Cartoon Network Court held that this form of streaming was legal because the way that Cablevision transmitted was not “to the public.”³⁸

Soon after Aereo’s founding, several major broadcasters, including CBS Corporation’s CBS, Comcast’s NBC, Disney’s ABC, and 21st Century Fox’s Fox sued Aereo for copyright infringement in federal court, seeking a preliminary injunction.³⁹ The broadcasters argued that Aereo infringed their copyrighted material because Aereo’s streams constituted public performances.⁴⁰ On July 11, 2012, District Court Judge Alison Nathan denied the claim, citing as precedent the *Cartoon Network* case, which had established the legality of cloud-based streaming and DVR services.⁴¹

Broadcasters appealed to the U.S. Court of Appeals for the Second Circuit.⁴² On April 1, 2013, the Second Circuit upheld the lower court’s ruling, finding that Aereo’s streams to subscribers were not “public performances,” and thus did not constitute copyright infringement.⁴³ The Second Circuit also affirmed the earlier district court decision that denied the broadcasters a preliminary injunction against Aereo.⁴⁴ Broadcasters then filed a petition to the United States Supreme Court and on January 10, 2014, the Supreme Court granted certiorari.⁴⁵

The reasoning of the majority opinion reversing the Second Circuit’s holding proved highly controversial because it did not apply traditional copyright infringement theory.⁴⁶ The Court instead first elaborated the public performance right⁴⁷ and the history of the Amendment of the Copyright Act of 1976.⁴⁸ That amendment included two changes: one, it rejected two holdings concerning community antenna television (“CATV”) that fell beyond the Act’s scope;⁴⁹ and two,

38. *Id.* at 139 (reversing in part, vacating in part *Twentieth Century Fox Film Corp. v. Cablevision Sys. Corp.*, 478 F. Supp. 2d 607 (S.D.N.Y. 2007) on the grounds that the case did not directly address the duration requirement; Cablevision’s volitional conduct was not sufficiently proximate to copying as to be liable for direct infringement; and because the relevant transmissions were not “to the public”).

39. *Am. Broad. Cos., Inc. v. Aereo, Inc.*, 874 F.Supp. 2d 373, 375 (S.D.N.Y. 2012), *aff’d sub nom.* *WNET, Thirteen v. Aereo, Inc.*, 712 F.3d 676 (2d Cir. 2013), *rev’d and remanded sub nom.* *Am. Broad. Cos., Inc. v. Aereo, Inc.*, 134 S. Ct. 2498 (2014).

40. *Id.* at 376.

41. *Id.* at 373–75.

42. *WNET, Thirteen v. Aereo, Inc.*, 712 F.3d 676, 680 (2d Cir. 2013), *rev’d and remanded sub nom.* *Am. Broad. Cos., Inc. v. Aereo, Inc.*, 134 S. Ct. 2498 (2014).

43. *Id.* at 696.

44. *Id.* at 680.

45. *Am. Broad. Cos., Inc. v. Aereo, Inc.*, 134 S. Ct. 2498 (2014).

46. *Id.* at 2511; Dallas T. Bullard, Note, *The Revolution Was Not Televised: Examining Copyright Doctrine After Aereo*, 30 *BERKELEY TECH. L.J.* 899, 916 (2015).

47. See 17 U.S.C. § 106(4) (2012) (“in the case of literary, musical, dramatic, and choreographic works, pantomimes, and motion pictures and other audiovisual works, to perform the copyrighted work publicly.”).

48. *Am. Broad. Cos., Inc. v. Aereo, Inc.*, 134 S. Ct. 2498, 2504 (2014).

49. *Id.* at 2505 (“In 1976 Congress amended the Copyright Act in large part to reject the Court’s holdings in *Fortnightly* and *Teleprompter*.”).

UNDERSTANDING STREAMING AND COPYRIGHT

it placed the CATV system within the scope of the Copyright Act by changing the scope of the word “perform”⁵⁰ and adding a “Transmit Clause.”⁵¹ Congress included the CATV system under the umbrella of the Act because the system enhances a viewer’s ability to receive broadcast signals.⁵² Using the history of the amendment and the new meaning for “perform” and “Transmit Clause,” the Court determined whether Aereo’s streaming scheme infringed on the rights of broadcasters.⁵³

With respect to the term “perform,” the Court admitted that CATV and Aereo were different, but the difference was deemed insignificant because both subscribers of CATV and Aereo could choose any program they liked and had to activate the machinery.⁵⁴ In terms of the Transmit Clause, the Court applied its objectives to Aereo and decided that Aereo was within the scope of the Transmit Clause for several reasons.⁵⁵ First, a subscriber is indifferent as to whether a show was delivered through a multi-subscriber antenna or a smaller antenna.⁵⁶ Second, an entity can transmit or communicate a performance through one or several transmissions simultaneously or consecutively, where the performance is of the same work.⁵⁷ Third, Aereo’s retransmission of a TV program by using user-specific copies is just a “process” for transmitting a performance.⁵⁸ Finally, Aereo transmitting to large numbers of paying subscribers who lack any prior relationship to the works was held to fall within the meaning of the “public.”⁵⁹

The dissenting opinion, delivered by Justice Antonin Scalia, focused instead on traditional copyright infringement theory and predicted the majority opinion would direct streaming business into an unpredictable future since it adopted an improvised “look-like-cable TV” method and disrupted settled jurisprudence on the volitional-conduct doctrine.⁶⁰ Volitional conduct, briefly stated, is derived from common law principles in tort theory.⁶¹ The doctrine requires that a person must have committed some voluntary act that caused the infringement to occur for that person or entity to

50. 17 U.S.C. § 101 (2012) (including ‘to “perform” a work means to recite, render, play, dance, or act it, either directly or by means of any device or process or, in the case of a motion picture or other audiovisual work, to show its images in any sequence or to make the sounds accompanying it audible.’).

51. *Aereo*, 134 S. Ct. at 2506.

52. *Id.*

53. *Id.* at 2506–10.

54. *Id.* at 2506–07.

55. *Id.* at 2507–10.

56. *Id.* at 2508–09.

57. *Am. Broad. Cos., Inc. v. Aereo, Inc.*, 134 S. Ct. 2498, 2508 (2014).

58. *Id.* at 2509.

59. *Id.* at 2509–10 (holding that a group of people outside of families and friends can be called the public, and the public need not be situated together).

60. *Id.* at 2511–18 (Scalia, J., dissenting).

61. *Id.* (Scalia, J., dissenting).

THOMAS Y. LU

be guilty of infringement and not simply passive conduct.⁶² Justice Scalia argued that direct infringement required that “volitional-conduct” while secondary infringement did not.⁶³ Moreover, Justice Scalia used two examples to further explain the difference: Video-on-demand (“VOD”) and a store for copying, or copy shop.⁶⁴ VOD companies, such as Netflix, respond automatically to user demands of videos Netflix has made available on their system, therefore it is Netflix that “chooses” the content.⁶⁵

On the other hand, in a store for copying, the company itself provides no content, only copy machines—it is the customers who choose the content, not the company.⁶⁶ Thus, the company may only be secondarily liable rather than directly since there is no volitional conduct.⁶⁷ Justice Scalia then applied the analytical framework above to the *Aereo* case.⁶⁸ Justice Scalia reasoned that Aereo is similar to a “copy shop that provides its patron with library cards.”⁶⁹ The reason being that first, Aereo does not pre-arrange an assortment of movies and TV shows like Netflix; second, Aereo does not relay any programs until a subscriber “selects” the program and asks Aereo to relay it.⁷⁰ Since broadcasters sued Aereo for direct infringement, based on the reasons above, Justice Scalia argued the claim must fail.⁷¹ This decision has had a huge impact on streaming businesses.⁷² The next case addressed was significantly affected by *Aereo*.⁷³

2. *Fox Broadcasting Co. v. DISH Network LLC* (“DISH”)

Almost six months later, *Fox Broadcasting Company v. DISH Network LLC* followed, another decision specifically regarding streaming.⁷⁴ In this case, the Court surprisingly held that some of DISH’s technologies infringed Fox’s copyrights while others did not.⁷⁵ Fox was one of four major commercial networks that broadcasted

62. *Id.* at 2512 (Scalia, J., dissenting).

63. *Am. Broad. Cos., Inc. v. Aereo, Inc.*, 134 S. Ct. 2498, 2512–14 (2014) (Scalia, J. dissenting); *see Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 433 (1984) (discussing liability for direct and secondary copyright infringement).

64. *Aereo*, 134 S. Ct. at 2513–14 (Scalia, J., dissenting).

65. *Id.* at 2513 (Scalia, J., dissenting).

66. *Id.* (Scalia, J., dissenting); *CoStar Grp, Inc. v. LoopNet, Inc.*, 373 F.3d 544, 550 (4th Cir. 2004).

67. *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 437–38 (1984).

68. *Aereo*, 134 S. Ct. at 2514 (Scalia, J., dissenting).

69. *Id.*

70. *Id.*

71. *Id.* at 2518.

72. Aaron Sankin, *How to get broadcast TV for free, even without Aereo*, WASH. POST (July 2, 2014), https://www.washingtonpost.com/news/the-intersect/wp/2014/06/30/how-to-get-broadcast-tv-for-free-even-without-aereo/?noredirect=on&utm_term=.c8fd6ea5709b.

73. *Fox Broad. Co. v. DISH Network LLC*, 160 F. Supp. 3d 1139, 1159 (C.D. Cal. Jan. 12, 2015).

74. *Id.* at 1149.

75. *Id.* at 1183.

UNDERSTANDING STREAMING AND COPYRIGHT

television in the U.S.⁷⁶ It had several different contracts with various distributors.⁷⁷ In one such agreement, Fox entered into retransmission consent agreements with cable television systems, satellite television services and other multichannel video programing distributors (“MVPD”) such as DISH, which retransmit Fox’s programs to their subscribers.⁷⁸ For another, Fox created contracts with VOD companies such as Hulu, Netflix, Amazon, and Apple to offer the rights to stream Fox programming to subscribers over the Internet.⁷⁹ On May 24, 2012, Fox Broadcasting Company, Inc., Twentieth Century Fox Film Corp., and Fox Television Holdings, Inc. (“Fox”) filed a complaint against Defendants DISH Network LLC and DISH Network Corporation (“DISH”) alleging copyright infringement and breach of contract in the United States District Court, Central District of California.⁸⁰

DISH had several technologies which distributed Fox’s contents to subscribers.⁸¹ In the following subsections, we will introduce these challenged technologies and elaborate on the district court’s somewhat surprising reasoning.

1) Sling Technology and DISH Anywhere

Sling technology can let DISH subscribers send television content to another location by using smartphones, laptops, or tablets.⁸² Therefore, the content that DISH subscribers have access to while using Sling is already received via their DISH subscription.⁸³ DISH Anywhere refers to Sling technology that enables subscribers to access live and recorded programming from their set-top boxes (“STBs”) remotely on computers and mobile devices.⁸⁴ To use DISH Anywhere, a subscriber must first create an online ID and download SlingPlayer, a browser extension.⁸⁵ Next the user must log in to DISHAnywhere.com on a personal computer or download the free DISH Anywhere app for a tablet or smartphone.⁸⁶ The Subscribers can also stream certain live programming (as opposed to viewing via a Sling-enabled STB, as described above) of certain cable television networks on the DISHAnywhere.com

76. *Id.* at 1150.

77. *Id.*

78. *Id.*

79. Fox Broad. Co. v. DISH Network LLC, 160 F. Supp. 3d 1139, 1150 (C.D. Cal. 2015).

80. *Id.* at 1149.

81. *Id.* at 1173–74.

82. *Id.* at 1153.

83. *Id.*

84. *Id.*

85. Fox Broad. Co. v. DISH Network LLC, 160 F. Supp. 3d 1139, 1154 (C.D. Cal. 2015).

86. *Id.* at 1155.

THOMAS Y. LU

website under the “Shows” tab.⁸⁷ The networks available for live streaming include USA, MSNBC and others, but *not* Fox.⁸⁸

This technology, the Court cited the *Aereo* case, but instead of adopting the majority opinion, the Court applied Scalia’s dissenting opinion which applied traditional copyright infringement theory for direct and secondary infringement.⁸⁹ For direct infringement, the Court held DISH did not engage in volitional conduct to infringe because it was the subscribers themselves that had created their online IDs, downloaded the SlingPlayers, paid the bills, and, most importantly, selected the programs that were sent from the STBs.⁹⁰ None of DISH’s employees actively responded to the user’s request or intervened in the selection process.⁹¹

For secondary infringement, DISH subscribers were held to not publicly perform by using DISH anywhere for three principal reasons.⁹² First, DISH is a licensee, not an owner of copyrighted programming, therefore it cannot transfer title or ownership to its subscribers.⁹³ Second, DISH subscribers were valid possessors of copyrighted work based on the retransmission consent agreement between Fox and DISH.⁹⁴ Third, since DISH subscribers were valid possessors of copyrighted work, they could transmit the programs rightfully to another device, for themselves or for someone in their households.⁹⁵

2) *PrimeTime Anytime (“PTAT”) Service*

A subscriber may use PTAT to set a single timer on the Hopper to record all of the primetime programming shown on any or all of the four major broadcast networks any or all nights of the week.⁹⁶ If a primetime show is pre-empted by local breaking news or a Presidential address, the Hopper will record exactly what is aired during primetime of the local television market.⁹⁷ Recordings made with the PTAT feature will be saved for up to eight days and will be deleted after that time, unless the subscriber decides to save the PTAT recording for a longer period of time in her “My Recordings” folder.⁹⁸

87. *Id.*

88. *Id.* at 1161.

89. *Id.* at 1162.

90. *Id.* at 1161.

91. Fox Broad. Co. v. DISH Network LLC, 160 F. Supp. 3d 1139, 1161 (C.D. Cal. 2015).

92. *Id.*

93. *Id.*

94. *Id.*

95. *Id.* at 1155.

96. *Id.*

97. Fox Broad. Co. v. DISH Network LLC, 160 F. Supp. 3d 1139, 1156 (C.D. Cal. 2015).

98. *Id.* at 1175.

UNDERSTANDING STREAMING AND COPYRIGHT

The Court again used the traditional copyright infringement framework to analyze the PTAT service.⁹⁹ For direct infringement, the Court held that DISH did not make copies by itself—did not engage in volitional conduct—because DISH just provided functions and default settings such as how long copies were available for viewing, and, most importantly, DISH subscribers controlled the PTAT and did the recording.¹⁰⁰ “A system that operates automatically at a user’s command to make a recording does not in itself render the system’s provider a volitional actor for purposes of direct copyright infringement.”¹⁰¹ For instance, the subscriber “may choose to designate fewer nights of the week or record only certain networks, but DISH establishes the default settings.”¹⁰² Moreover, DISH did not distribute or transmit by itself either because PTAT is a system for recording and it is being received by subscribers’ STBs which are inside the subscribers’ homes.¹⁰³ Those recordings are not distributed, delivered, or transmitted to any other location or person using PTAT alone.¹⁰⁴

For secondary infringement, the Court cited *Sony* to support its reasoning.¹⁰⁵ The Court held that there were three principal lessons to be taken from *Sony*.¹⁰⁶ First, a time-shifting service, one that allows a user to watch material at a later time, is not infringement.¹⁰⁷ Second, the supplier of equipment is not secondarily liable for copyright infringement.¹⁰⁸ Third, a plaintiff in a secondary infringement case must prove that a particular use is “harmful” or “adversely affects the potential market,” mere speculation of the harm is not enough.¹⁰⁹ Applying these lessons of *Sony* to this case, the PTAT service should be considered a kind of time-shifting service and most importantly, there is no harm for service itself for two reasons.¹¹⁰ Only DISH subscribers have access to the PTAT service so only a small fraction of households

99. *Id.* at 1168–69.

100. *Id.* at 1169.

101. *Id.*

102. *Id.*

103. *Fox Broad. Co. v. DISH Network LLC*, 160 F. Supp. 3d 1139, 1170 (C.D. Cal. 2015).

104. *Id.* (explaining that distribution generally falls into either the “make-available” theory or the “actual dissemination” theory, and determining that DISH’s “act of merely ‘making available’ copyrighted programming to its subscribers through PTAT does not amount to distribution without actual dissemination.”).

105. *Id.* (citing *Sony Corp. of Am. v. Universal City Studios, Inc.* 464 U.S. 417, 454–56 (2012)).

106. *Id.* at 1170–71.

107. *Id.* at 1170 (citing *Sony Corp. of Am. v. Universal City Studios, Inc.* 464 U.S. 417, 449–50 (2012)).

108. *Id.* (citing *Sony Corp. of Am. v. Universal City Studios, Inc.* 464 U.S. 417, 454–56 (2012)).

109. *Fox Broad. Co. v. DISH Network LLC*, 160 F. Supp. 3d 1139, 1171 (C.D. Cal. 2015) (citing *Sony Corp. of Am. v. Universal City Studios, Inc.* 464 U.S. 417, 451 (2012)).

110. *Id.* at 1172–73 (labeling PTAT a “time-shifting technology”).

THOMAS Y. LU

can use the service.¹¹¹ Additionally, the PTAT recording can only be available for eight days.¹¹²

3) *AutoHop and the QA Copies*

AutoHop is yet another technology that aids the user in skipping unwanted advertisements.¹¹³ By using AutoHop, DISH subscribers can choose to automatically “skip” commercials while playing back recorded shows.¹¹⁴ The commercials are not removed from the recordings viewed with AutoHop, and the recorded files are not altered in any way.¹¹⁵ Quality Assurance (“QA”) copies were used to mark the start and stop time of the show’s segments, in order to allow users to skip commercials and to quality-test the functionality of AutoHop.¹¹⁶ Thus, the QA copies “were used exclusively for testing the AutoHop announcement files and never distributed to any customer.”¹¹⁷

In terms of these two technologies, AutoHop was held to not infringe Fox copyright because the ads are not Fox’s copyrighted work and AutoHop’s only additional functionality was to skip ads.¹¹⁸ For QA copies, DISH argued that their copies qualify as Fair Use under 17 U.S.C § 107, but the court disagreed when it applied the four-factor analysis from the statute.¹¹⁹ The Court, in this case, zeroed in on two of the four factors: factor one, the purpose and character of the use, and factor four, the effect of the use upon the potential market for or value of the copyrighted work.¹²⁰ For the first factor, the Court decided that the QA copies were not transformative by differentiating this case from *Sega*.¹²¹ In *Sega*, Accolade made intermediate copies for developing new games.¹²² Here, on the other hand, QA copies are made to allow subscribers to skip commercials in the copyrighted

111. *Id.* at 1172 (quoting DISH’s expert, John Hauser, who stated that “the Hopper represents only a small fraction [of households with DVR]”).

112. *Id.*

113. *Id.* at 1176 (explaining that “Autohop provides a mechanism for automatically skipping commercials by marking when the commercial break begins and ends”).

114. *Id.*

115. *Fox Broad. Co. v. DISH Network LLC*, 160 F. Supp. 3d 1139, 1176 (C.D. Cal. 2015) (explaining that Autohop “does not delete or otherwise alter the commercials from the PTAT recordings”).

116. *Id.* at 1175.

117. *Id.* at 1156.

118. *Id.* at 1176–77.

119. *Id.* at 1174, 1177.

120. *Id.* at 1175 (citing *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 590 (1994)); *see also* 17 U.S.C. §107 (2012).

121. *Fox Broad. Co. v. DISH Network LLC*, 160 F. Supp. 3d 1139, 1175 (C.D. Cal. 2015) (quoting *Fox Broad. Co. Inc. v. DISH Network L.C.C.*, 905 F. Supp. 2d 1088, 1103 (C.D. Cal. 2012)).

122. *Sega Enters. Ltd. v. Accolade, Inc.*, 977 F.2d 1510, 1518 (9th Cir. 1992).

UNDERSTANDING STREAMING AND COPYRIGHT

programming.¹²³ For the fourth factor, QA copies were held to harm the potential market for two principal reasons: there is a market for the right to copy that Fox can monetize by granting the right to copy its programs through negotiating licensing; and QA copies are an unauthorized use of Fox programming and would impair Fox's ability to monetize.¹²⁴

The discussion of these two cases addresses the legal landscape for streaming within the U.S.¹²⁵ In the global space, is it possible for U.S. companies to use technologies to stream outside the U.S. and then be sued in U.S. courts by foreign entities claiming infringement? This scenario is described in the following case.

3. *Joint Stock Company Channel One Russia Worldwide v. Infomir LLC* (“*Infomir LLC*”)

In *Joint Stock Company Channel One Russia Worldwide v. Infomir LLC*,¹²⁶ the plaintiffs were Russian broadcasters who sued Infomir and Goodzone, hosted and operated in Brooklyn, New York, for hacking and generally acquiring without permission the encrypted signals to plaintiffs' servers.¹²⁷ The defendants then streamed the wrongfully acquired signals over computer software, IPTV, or other devices.¹²⁸ To be more specific, defendants' customers accessed the defendants' website, downloaded the software or received equipment necessary for viewing pirated content, subscribed, and paid a fee.¹²⁹

Based on the facts above, Russian broadcasters might have won the case, but the case was dismissed because the plaintiffs failed to provide enough factual evidence in their complaint.¹³⁰ To be more specific, in count six, the plaintiffs needed to prove the broadcasters' copyrighted materials are not from the United States because plaintiffs did not register their copyrighted materials in the U.S.¹³¹ The plaintiffs argued that based on the Berne Convention Implementation Act¹³² they did not need to register to sue in the U.S. jurisdiction.¹³³ If the copyrighted materials were

123. *DISH*, 160 F. Supp. 3d at 1175.

124. *Id.* at 1176.

125. See generally *Am. Broad. Co., Inc. v. Aereo, Inc.*, 134 S.Ct. 2498 (2014); *Fox Broad. Corp. v. DISH Network LLC*, 160 F. Supp. 3d 1139 (C.D. Cal. 2015).

126. No. 16 Civ. 1318, 2017 WL 2988249, at *1 (S.D.N.Y. Mar. 27, 2017).

127. Report and Recommendation to the Hon. George B. Daniels, *Joint Stock Co. Channel One Russia Worldwide v. Infomir LLC*, No. 16-CV-1318, 2017 WL 696126, at *1, 1-2 (S.D.N.Y. Feb. 15, 2017).

128. *Id.* at *2.

129. *Id.* at *2.

130. *Id.* at *20.

131. *Id.* at *12.

132. 17 U.S.C. §101 (2012).

133. Report and Recommendation to the Hon. George B. Daniels, *Joint Stock Co. Channel One Russia Worldwide v. Infomir LLC*, No. 16-CV-1318, 2017 WL 696126, at *1, *10 (S.D.N.Y. Feb. 15, 2017) (“the party

THOMAS Y. LU

created in Russia, they needed to prove that they were owners of those copyrighted materials under Russian law.¹³⁴ Since the allegedly infringing acts took place in the U.S, the plaintiff had to prove infringement under U.S copyright infringement theories.¹³⁵

It was essential for the plaintiffs to prove all three conditions to be successful in the pleading stage, which the plaintiffs did not.¹³⁶ For instance, the complaint alleges that their programming at issue was “primarily” first broadcast in Russia, subject to “limited exceptions.”¹³⁷ The plaintiffs failed to explain the exceptions and whether those programs were also broadcasted elsewhere.¹³⁸ Under a direct infringement analysis, they also failed to prove that the defendants’ volitional conduct caused the allegedly infringing acts, as discussed in the dissenting opinion of *Aereo*.¹³⁹ Similarly for secondary infringement, the plaintiff failed to provide factual evidence to prove the preconditions required.¹⁴⁰

B. European Regime

In the European regime, a directive requires member states of the European Union (“E.U.”) to accomplish a particular result without dictating the specific text or general means of achieving that result.¹⁴¹ One specific directive, 2001/29/EC, called “The Harmonization of Certain Aspects of Copyright and Related Rights in the

seeking to protect a work must first establish that the subject of copyright is not a United States work.”) (quoting *Elohim EPF USA, Inc. v. Total Music Connection, Inc.*, CV 14-02496-BRO, 2015 WL 12655484 (C.D. Cal. Nov. 19, 2015)).

134. *Id.* at *10 (quoting *Elohim EPF USA, Inc. v. Total Music Connection, Inc.*, No. CV 14-02496-BRO, 2015 WL 12655484 (C.D. Cal. 2015)).

135. *Id.* at *12 (citing *Creazioni Artistiche Musicali, S.r.l v. Carlin America, Inc.*, No. 14-cv-9270, 2016 WL 7507757 (S.D.N.Y. 2016)).

136. *Joint Stock Co. Channel One Russia Worldwide v. Infomir LLC*, No. 16-CV-01318(GBD)(BCM), 2017 WL 825482, at *15 (S.D.N.Y. Mar. 2, 2017) (allowing the plaintiff to amend for deficiencies in complaint).

137. Complaint at 16, *Joint Stock Co. Channel One Russia Worldwide v. Infomir LLC*, 2017 WL 825482 (S.D.N.Y. Mar. 2, 2017) (No. 16-CV-01318), 2016 WL 10731626 (S.D.N.Y.).

138. *See Id.* at 17–18.

139. *Compare Joint Stock Co. Channel One Russia Worldwide v. Infomir LLC*, No. 16-CV-01318(GBD)(BCM), 2017 WL 825482, at *15 (S.D.N.Y. Mar. 2, 2017), *with Am. Broad. Cos., Inc. v. Aereo, Inc.*, 134 S. Ct. 2498 (2014).

140. Complaint at 17–18, *Joint Stock Co. Channel One Russia Worldwide v. Infomir LLC*, 2017 WL 825482 (S.D.N.Y. Mar. 2, 2017) (No. 16-CV-01318), 2016 WL 10731626 (S.D.N.Y.).

141. Consolidated Version of the Treaty on the Functioning of the European Union art. 288, Mar. 30, 2010, O.J. C 83/47, C 83/171–72 (“To exercise the Union’s competences, the institutions shall adopt regulations, directives, decisions, recommendations and opinions. A regulation shall have general application. It shall be binding in its entirety and directly applicable in all Member States. A directive shall be binding, as to the result to be achieved, upon each Member State to which it is addressed, but shall leave to the national authorities the choice of form and methods. A decision shall be binding in its entirety upon those to whom it is addressed. Recommendations and opinions shall have no binding force.”).

UNDERSTANDING STREAMING AND COPYRIGHT

Information Society,” regulates the online streaming services for all the E.U. member states.¹⁴² The purpose of this directive is written in Article 1 Section 1—“protection of copyright and related rights in the framework of the internal market, with particular emphasis on the information society.”¹⁴³ Furthermore, Article 3 mandates certain requirements for online streaming services as follows:

*Article 3****Right of communication to the public of works and right of making available to the public other subject-matter***

1. Member States shall provide authors with the exclusive right to authorize or prohibit 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 them from a place and at a time individually chosen by them.

3. The rights referred to in paragraphs 1 and 2 shall not be exhausted by any act of communication to the public or making available to the public as set out in this Article.¹⁴⁴

The interpretation and application of Article 3 is important for online streaming companies in the E.U. The following three cases relate to its application.

1. ITV v. TVCatchup Ltd (“TVCatchup”)

In *ITV v. TVCatchup*,¹⁴⁵ ITV represented a network of television channels that operated regional television services as well as shared programs between each other to be displayed on the entire network in the United Kingdom.¹⁴⁶ TVCatchup (“TVC”) provides a service in the E.U. that permits its users to receive “live streams of free-to-air television broadcasts” through the Internet, including the broadcasts transmitted by ITV.¹⁴⁷ TVC ensures its customers “can obtain access only to content which they are already legally entitled to watch in the United Kingdom by virtue of their television license.”¹⁴⁸ “The terms to which users must agree include the possession of a valid TV license and a restriction of use of TVC services to the United

142. Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the Harmonization of Certain Aspects of Copyright and Related Rights in the Information Society, 2001 O.J. L 167/10.

143. *Id.* at L 167/12.

144. *Id.* at L 167/16.

145. Case C-607/11, *ITV Broadcasting Ltd. v. TVCatchup Ltd.*, 2013, (Mar. 7, 2013), <http://curia.europa.eu>.

146. *Id.* ¶ 35.

147. *Id.* ¶ 9–11.

148. *Id.* ¶ 10.

THOMAS Y. LU

Kingdom.”¹⁴⁹ “The TVC website has the ability to authenticate the user’s location and to refuse access where the conditions imposed on users are not satisfied.”¹⁵⁰

TVC functions similarly to the Aereo technology mentioned earlier.¹⁵¹ It has servers for four different areas: (1) acquisition, (2) encoding, (3) origin, and (4) edge servers.¹⁵² ITV transmits “normal terrestrial and satellite broadcast signals” that are captured “via an aerial and then passed to the acquisition servers, which extract individual video streams from the received signal without altering them.”¹⁵³ “The encoding servers then convert the incoming streams into a different compression standard.”¹⁵⁴ Soon after, “the origin servers then prepare streams of video for sending over the Internet in a variety of formats.”¹⁵⁵ As with Aereo’s technology, “the channels offered by TVC are processed further if only one TVC subscriber has requested that channel; if there is no request for a given channel, the signal is discarded.”¹⁵⁶ “Edge servers connect with a user’s computer or mobile telephone using the Internet.”¹⁵⁷ “When an edge server receives a request for a channel from a user, unless it is already streaming that channel to a different user, the edge server connects to the origin server which streams that channel.”¹⁵⁸ “The software on the edge server creates a separate stream for each user who requests a channel through it.”¹⁵⁹ “An individual packet of data leaving the edge server is thus addressed to an individual user, not to a class of users.”¹⁶⁰

Although the High Court of Justice (England and Wales) referred five questions to the Court of Justice (Fourth Chamber), there are two main issues for our analysis here.¹⁶¹ First, whether the concept of ‘communication to the public’ stated in Article 3(1) of Directive 2001/29 must be interpreted to cover a retransmission of the works where the retransmission is made by an organization other than the original broadcaster.¹⁶² Second, whether it is lawful for the subscribers within the area of reception of the terrestrial television broadcast to receive the retransmission by

149. *Id.* ¶ 10.

150. *Id.* ¶ 10.

151. *See supra* Part III.A.1.

152. Case C-607/11, *ITV Broadcasting Ltd. v. TVCatchup Ltd.*, 2013, ¶ 12 (Mar. 7, 2013), <http://curia.europa.eu>.

153. *Id.* ¶ 13.

154. *Id.* ¶ 13.

155. *Id.* ¶ 13.

156. *Id.* ¶ 13.

157. *Id.* ¶ 14.

158. Case C-607/11, *ITV Broadcasting Ltd. v. TVCatchup Ltd.*, 2013, ¶ 14 (Mar. 7, 2013), <http://curia.europa.eu>.

159. *Id.*

160. *Id.*

161. *Id.* ¶ 16–18.

162. *Id.* ¶ 18.

UNDERSTANDING STREAMING AND COPYRIGHT

means of internet streaming.¹⁶³ The justice in this case first reasoned that the objective of Directive 2001/29 was the protection of authors and allowing them to obtain an appropriate reward for the use of their works including communication to the public.¹⁶⁴ Then the justice cited recital 23 in the preamble of the directive, which states:

*(23) This Directive should harmonise further the author's right of communication to the public. This right should be understood in a broad sense covering all communication to the public not present at the place where the communication originates. This right should cover any such transmission or retransmission of a work to the public by wire or wireless means, including broadcasting. This right should not cover any other acts.*¹⁶⁵

Based on the assumption of a “broad” interpretation of “communication to the public,” the justice further explained why TVC’s service fell within the meaning of “communication” and “to the public” stated in Article 3(1) separately.¹⁶⁶ For the interpretation of “communication,” the justice cited the wording of recital 23 and Article 3(3) of Directive 2001/29 and Article 2 and 8 of Directive 93/83.¹⁶⁷ To be more specific, the recital 23 states that “[T]his right should cover *any such transmission or retransmission of a work to the public* by wire or wireless means, including broadcasting.”¹⁶⁸ Article 3(3) says that “[T]he rights referred to in paragraphs 1 and 2 *shall not be exhausted* by any act of communication to the public or making available to the public as set out in this Article.”¹⁶⁹

Moreover, Articles 2 and 8 of Directive 93/83 require that fresh authorization for a “simultaneous, unaltered and unabridged retransmission by satellite or cable of an initial transmission of television or radio programs containing protected works, *even though those programs may already be received in their receiving area by other technical means, such as by wireless means or terrestrial networks.*”¹⁷⁰ From these three supporting interpretations of “communication” the justice concluded that TVC’s service falls within the broad scope of communication under Directive

163. *Id.* ¶ 18.

164. Case C-607/11, *ITV Broadcasting Ltd. v. TVCatchup Ltd.*, 2013, ¶ 4 (Mar. 7, 2013), <http://curia.europa.eu>.

165. *Id.* ¶ 3 (emphasis added).

166. *Id.* ¶ 21–23.

167. *Id.* at ¶ 3–6.

168. *Id.* ¶ 3.

169. *Id.* ¶ 4.

170. Case C-607/11, *ITV Broadcasting Ltd. v. TVCatchup Ltd.*, 2013 (Mar. 7, 2013), <http://curia.europa.eu>; see Council Directive 93/83/EEC on the coordination of certain rules concerning copyright and rights related to copyright applicable to satellite broadcasting and cable retransmission, 1993 O.J. L 248/15.

THOMAS Y. LU

2001/29, even if TVC used a specific technical means different from the original communication.¹⁷¹ Intriguingly, the justice further mentioned the exception of this broad interpretation—maintaining or improving the quality of section of a preexisting transmission.¹⁷² However, TVC’s service does not purposefully maintain or improve the quality of transmission, it only needs to make profits through advertising from retransmission.¹⁷³

For the interpretation of “to the public”, the justice cited *SGAE* as a precedent to explain that “the public” means “a fairly large number of persons.”¹⁷⁴ Furthermore, the justice explained as in *Aereo* : “it is irrelevant whether the potential recipients access the communicated works through a one-to-one connection. That technique does not prevent a large number of persons from having access to the same protected work at the same time.”¹⁷⁵ The justice further held that since all residents in the United Kingdom with an internet connection or television licenses may access ITV programs at the same time, these “indeterminate” residents imply a large set of persons.¹⁷⁶ Therefore, TVC’s service also fell within the meaning of “to the public” stated in Article 3(1).¹⁷⁷ Although the comparative analysis is done in part IV, it is easy to see the similarities between the *Aereo* and *ITV* cases based on their facts and judicial outcomes.¹⁷⁸ The next section, further examines these two systems, specifically through analysis of *C More Entertainment AB v. Linus Sandberg*.¹⁷⁹ It is worth noting that procedurally the issue addressed next could not happen under U.S. Law as it concerns how E.U. member states respond to directives in their own legislative branches.

2. *C More Entertainment AB v. Linus Sandberg* (“*Linus Sandberg*”)

C More Entertainment is a pay TV company that formerly operated as Canal+.¹⁸⁰ It targets the Nordic countries and has a separate channel in Sweden.¹⁸¹ It also

171. Case C-607/11, *ITV Broadcasting Ltd. v. TVCatchup Ltd.*, 2013, (Mar. 7, 2013), <http://curia.europa.eu>.

172. *Id.* (citing Case C-429/08, *Football Ass’n Premier League Ltd. and Others v. QC Leisure and Others*, 2011 E.C.R. I-9083, ¶ 194; Case C-432/09, *Airfield NV & Canal Digitaal BV v. Sabam*, 2011 E.C.R. I-9363, ¶ 74, 79).

173. *Id.* ¶ 29.

174. *Id.* at ¶ 32 (citing Case C-306/05, *SGAE v. Rafael Hoteles SA*, 2006 E.C.R. I-11519, ¶ 37, 38).

175. Case C-607/11, *ITV Broadcasting Ltd. v. TVCatchup Ltd.*, 2013, ¶ 34 (Mar. 7, 2013), <http://curia.europa.eu> (citing *Am. Broad. Cos., Inc. v. Aereo, Inc.*, 134 S.Ct. 2498, 2509 (2014)).

176. *Id.* ¶ 32, 36.

177. *Id.* ¶ 26.

178. *See infra* Part IV.

179. Case C-279/13, *C More Ent. AB v. Linus Sandberg*, 2015 (Mar. 26, 2015), <http://curia.europa.eu>.

180. *Company Overview of C More Entertainment AB*, BLOOMBERG (Feb. 9, 2018), <https://www.bloomberg.com/research/stocks/private/snapshot.asp?privcapId=5637099>.

181. *Id.*

UNDERSTANDING STREAMING AND COPYRIGHT

broadcasts a number of ice hockey games on its website.¹⁸² People who are interested in those games can pay for access.¹⁸³ Mr. Sandberg established a website and created links that circumvented the paywall put in place by C More Entertainment.¹⁸⁴ “Via those links, internet users could access the live broadcasts of two ice hockey matches by C More Entertainment [on 20 October and 1 November 2007] for free.”¹⁸⁵ After Mr. Sandberg was informed by C More Entertainment through a phone call and cease and desist letter, he was prosecuted before the Hudiksvalls tingsrätt (District Court, Hudiksvall) for offenses against copyright law in literary and artistic works.¹⁸⁶ On November 10, 2010, Mr. Sandberg was found guilty of an infringement of the copyright, and the Court found that C More Entertainment was the copyright holder.¹⁸⁷

Both Mr. Sandberg and C More Entertainment appealed the case to the Hovrätten för Nedre Norrland (Court of Appeal of Nedre Norrland).¹⁸⁸ That court found “no part of the commentators’, cameramen’s, or picture producers’ work on the broadcasts of the ice hockey matches ... reached the level of originality required for copyright protection” under copyright law in literary and artistic works.¹⁸⁹ Therefore, it held that “C More Entertainment was not the holder of a copyright, but of related rights that had been infringed.”¹⁹⁰ Consequently, that court ordered “Mr. Sandberg to pay fines higher than those imposed at first instance, and slightly reduced the compensation awarded to C More Entertainment.”¹⁹¹

When C More Entertainment brought an appeal against that judgment before the Högsta domstolen,¹⁹² the Court incidentally took the view that it “does not follow from either the wording of Directive 2001/29 or case law of the Court that the insertion of a hypertext link on a website constitutes an act of communication to the public.”¹⁹³ Moreover, the Court noted that “the relevant national legislation provides for expansive related rights than those set out in Article 3(2) of Directive 2001/29.”¹⁹⁴ For example, the protection conferred by Swedish law is “not restricted to acts of making works available “on demand.””¹⁹⁵ Here, the Högsta domstolen decided to

182. Case C-279/13, C More Ent. AB v. Linus Sandberg, 2015, ¶ 11 (Mar. 26, 2015), <http://curia.europa.eu>.

183. *Id.*

184. *Id.* ¶ 12.

185. *Id.* ¶ 12.

186. *Id.* ¶ 15.

187. *Id.* ¶ 15.

188. Case C-279/13, C More Ent. AB v. Linus Sandberg, 2015, ¶ 16 (Mar. 26, 2015). <http://curia.europa.eu>.

189. *Id.* ¶ 17.

190. *Id.* ¶ 17.

191. *Id.* ¶ 17.

192. This is the Supreme Court of Sweden. *Id.* ¶ 18.

193. *Id.* ¶ 19.

194. Case C-279/13, C More Ent. AB v. Linus Sandberg, 2015, ¶ 19 (Mar. 26, 2015), <http://curia.europa.eu>.

195. *Id.*

THOMAS Y. LU

stay the proceedings and to refer the following question to the Court for a preliminary ruling: May the member states give wider protection to the exclusive right of authors by enabling “communication to the public” to cover a greater range of acts than provided for in article 3(2) of Directive 2001/29?¹⁹⁶

The European Court of Justice (“ECJ”) explained the purpose of Directive 2001/29 and Article 3 (1) from recitals 7, 23 and 25.¹⁹⁷ Recital 7 provides:

*The Community legal framework for the protection of copyright and related rights must, therefore, also be adapted and supplemented as far as is necessary for the smooth functioning of the internal market.*¹⁹⁸

Recital 23 further elaborates: “This Directive should *harmonize* further the author’s right of communication to the public.”¹⁹⁹

Recital 25 furthermore states:

*The legal uncertainty regarding the nature and the level of protection of acts of on-demand transmission of copyright works and subject-matter protected by related rights over networks should be overcome by providing for harmonized protection at Community level.*²⁰⁰

By comparing these three recitals, it is clear that the objective of Directive 2001/29 is to harmonize the framework of copyright law between member states, not to “equalize” the framework, which means each member state can have some level of difference.²⁰¹ Furthermore, the Justice cited recital 16 of Directive 2006/115 to support the interpretation above, specifically : “Member States should be able to

196. This procedure is called preliminary reference procedure. Under Article 19(3)(b) of the Treaty on European Union (“TEU”) and Article 267 of the Treaty on the Functioning of the European Union (“TFEU”), the Court of Justice of the European Union has jurisdiction to give preliminary rulings on the interpretation of Union law and on the validity of acts adopted by the institutions, bodies, offices or agencies of the Union. Consolidated Version of the Treaty on European Union art. 19(3)(b), 2010 O.J. C 83/01, at 27; Consolidated Version of the Treaty on the Functioning of the European Union art. 267, 2008 O.J. C 115/47, at 164. Moreover, Article 256(3) TFEU provides that the General Court is to have jurisdiction to hear and determine questions referred for a preliminary ruling under Article 267 TFEU, in specific areas laid down by the Statute. *Id.* art. 256(3), at 159–60. However, since no provisions have been introduced into the Statute in that regard, the Court of Justice alone currently has jurisdiction to give preliminary rulings.

197. Case C-279/13, *C More Ent. AB v. Linus Sandberg*, 2015, ¶ 3 (Mar. 26, 2015), <http://curia.europa.eu> (citing Council Directive 2001/29 art. 7, 23, 25, 2001 O.J. L 167/10).

198. *Id.* (quoting Council Directive 2001/29 art. 7, 2001 O.J. L 167/10).

199. *Id.* (quoting Council Directive 2001/29 art. 23, 2001 O.J. L 167/10).

200. *Id.* (quoting Council Directive 2001/29 art. 25, 2001 O.J. L 167/10).

201. *Id.* at ¶ 7 (quoting Council Directive 2006/115, art. 16, 2006 O.J. L 376/28).

UNDERSTANDING STREAMING AND COPYRIGHT

provide for more far-reaching protection for owners of rights related to copyright than that required by the provisions laid down in that directive in respect of broadcasting and communication to the public.”²⁰² Thus, this recital clearly explains that Directive 2006/115 gives the Member States an alternative of providing for more protective provisions with regard to the broadcasting and communication to the public of transmissions made by broadcasting organizations.²⁰³ This option allows member states to choose to grant a different scope of exclusive rights for copyright law.²⁰⁴

Combined with the two interpretations of directives related to copyright law of “communication to the public,” the Justice concluded that the function of these directives is to provide a minimum level of protection for copyright law with regard to communication to the public.²⁰⁵ Each member state has the alternative of expanding their protections based on circumstances.²⁰⁶

The next case, *Stichting Brein v. Jack Frederik Wullems*, will focus instead on add-on software, an additional software which allows customers to receive free transmission of copyrighted works.²⁰⁷ This case is different from the *ITV* case since the defendant sought to substitute incumbent online streaming services but fails to do so because of this case.²⁰⁸

3. *Stichting Brein v. Jack Frederik Wullems, acting under the name of Filmspeler (“Filmspeler”)*

Jack Frederik Wullems sold a device called the “*filmspeler*” through his own website and other online distribution channels.²⁰⁹ This device connected an image or sound signal to a TV screen.²¹⁰ When a customer connects to the Internet and turns on the TV, the customer can stream the image or audio from websites.²¹¹ Controversially, Mr. Wullems installed one more function in his device, open source software called

202. Council Directive 2006/115, art. 16, 2006 O.J. L 376/28 (emphasis added).

203. *Id.*

204. *Id.*

205. Case C-279/13, *C More Ent. AB v. Sandberg*, 2015, ¶ 33 (Mar. 26, 2015), <http://curia.europa.eu>.

206. *See id.* ¶ 35.

207. *See* Richard H. Stern, *Copyright Infringement by Add-On Software: Going beyond Deconstruction of the Mona Lisa Moustache Paradigm and Not Taking Video Game Cases Too Seriously*, 31 *JURIMETRICS J.* 205, 207–08 (1991) (offering a general description of what an “add-on” does); *see also* TECH TERMS, <https://techterms.com/definition/addon> (last visited Feb. 14, 2018) (defining “add on”).

208. *See* Case C-607/11, *ITV Broadcasting Ltd. v. TVCatchup Ltd.*, 2013, (Mar. 7, 2013), <http://curia.europa.eu>; *see also* Opinion of Advocate General Sanchez-Bordona, *Stichting Brein v. Wullems*, Case C-527/15, [2016], E.C.R. I __ (delivered Dec. 8, 2016).

209. Opinion of Advocate General Sanchez-Bordona, *Stichting Brein v. Wullems*, [2016], E.C.R. I __ (delivered Dec. 8, 2016), ¶ 15.

210. *Id.*

211. *Id.*

THOMAS Y. LU

XBMC, which was integrated with add-ons.²¹² These add-ons, created by third parties, were freely downloadable on Mr. Wullems's website and contained hyperlinks.²¹³ These hyperlinks let customers watch a variety of live streaming contents without paying.²¹⁴ Combined with all these characteristics, the device could be used as a tool for customers to watch live streaming sporting events which should have been paid for.²¹⁵ Moreover, Mr. Wullems promoted his device by the following slogan: "Never again pay for films, series, sport, directly available without advertisements and waning time. (no subscription fees, plug and play) Netflix is now past tense!"²¹⁶

In May 2014, Stichting Brein, a foundation involved in protection of copyright and other related rights associated with film producers, distributors and publishers, contacted Mr. Wullems and asked him to stop selling the devices.²¹⁷ Two months later, Stichting Brein sued Mr. Wullems in the Rechtbank Midden-Nederland²¹⁸ and sought an injunction.²¹⁹ The Court stayed the case and referred one of the important issues to the Court of Justice²²⁰ because case law was not clear on the issue of whether there is a "communication to the public" under article 3 of Directive 2001/29 if the work has been previously published but without the right holder's authorization.²²¹ At the hearing, Mr. Wullems argued that "his intervention was 'not crucial' and that he merely 'enabled' the public to have access to content that can be downloaded from other websites."²²² He argued that "*filmspeler* was not, therefore, an essential part of the process connecting the website on which protected content [was] made available unlawfully and the end user."²²³ Moreover, the sale of Mr. Wullems' device "did not provide direct but 'indirect' access to that content," so that the connection between Mr. Wullems and the copyrighted works was trivial at most.²²⁴

212. *Id.* ¶ 16.

213. *Id.* ¶ 16.

214. *Id.* ¶ 17.

215. Opinion of Advocate General Sanchez-Bordona, *Stichting Brein v. Wullems*, [2016], E.C.R. I ___ (delivered Dec. 8, 2016), ¶17.

216. *Id.* ¶ 19.

217. *Id.* ¶ 20.

218. This is the District Court of the Central Netherlands.

219. Opinion of Advocate General Sanchez-Bordona, *Stichting Brein v. Wullems*, [2016], E.C.R. I ___ (delivered Dec. 8, 2016).

220. *See supra* note 197 and accompanying text (explaining the authorization and establishment of the Court of Justice).

221. Opinion of Advocate General Sanchez-Bordona, *Stichting Brein v. Wullems*, [2016], E.C.R. I ___ (delivered Dec. 8, 2016), ¶ 24. The other issue is related to the exception of "lawful use" under Article 5 of Directive 2001/29 and I skip this issue since this paper focuses on Article 3 issues.

222. *Id.* ¶ 47.

223. *Id.* ¶ 47.

224. *Id.* ¶ 47.

UNDERSTANDING STREAMING AND COPYRIGHT

The Justice first responded to Mr. Wullems' argument and then provided reasons why his provision for the device fell within the meaning of "communication to the public."²²⁵ In response, the Justice decided that the device itself was substantially a "communication to the public" because the device provided purchasers with immediate access to unspecified copyrighted works on the internet without the consent of right holders.²²⁶ The device provided a functionality involving the "prior selection" of websites that allowed copyrighted content to be viewed without any payment. Therefore, the provision of a device with add-ons could be deemed as a "direct" access to copyrighted works.²²⁷

The Justice further reasoned that there was no difference between posting hyperlinks to copyrighted works on a website and "installing hyperlinks in a multimedia device designed specifically for use with the internet."²²⁸ Both conducts were deemed types of "communication" because their functional purpose is to let people enjoy copyrighted works on the internet by clicking hyperlinks.²²⁹ In terms of the "to the public" requirement, a "new public" must be satisfied "where the communication of the protected work was not made by means of a specific method which differs from the methods used up to that time."²³⁰ A new public, defined by the Court, is a public which copyright holders did not take into account.²³¹ Here, the device sold by Mr. Wullems enlarges the pool of users beyond that intended by the authors of those copyrighted works, and, therefore, the "to the public" requirement is satisfied.²³² Moreover, the promotion by Mr. Wullems to "never again pay" makes clear his willful intention to unlawfully infringe.²³³

In order to have a more in-depth analysis between the two regimes and provide sound recommendations for streaming businesses in the concluding part, in the next part the two regimes are compared.

IV. COMPARATIVE ANALYSIS BETWEEN TWO REGIMES

After introducing three cases for each of the regimes, this Part pinpoints the similarities and differences between the two regimes. As previously mentioned in

225. *Id.* ¶ 48–49.

226. *Id.* ¶ 50.

227. Opinion of Advocate General Sanchez-Bordona, *Stichting Brein v. Wullems*, [2016], E.C.R. I ___ (delivered Dec. 8, 2016), ¶ 50.

228. *Id.* ¶ 51.

229. *Id.* ¶ 52.

230. *Id.* ¶ 56.

231. *Id.* ¶ 59.

232. *Id.* ¶ 59.

233. Opinion of Advocate General Sanchez-Bordona, *Stichting Brein v. Wullems*, [2016], E.C.R. I ___ (delivered Dec. 8, 2016), ¶ 53.

THOMAS Y. LU

Part I, the U.S. and European markets are the two largest streaming markets.²³⁴ Therefore, it is important to compare the two regimes so that entrepreneurs or managers can understand the legal risks when establishing a streaming platform in those markets. The following paragraphs, first compare the similarities and then the differences between the two regimes.

A. Similarities between two regimes

There are three notable similarities between these two regimes. The first similarity is the structure of the online streaming service.²³⁵ For example, when comparing the two regimes, we can find some similarities between Aereo and TVCatchup Ltd.²³⁶ They both have a complete system for aggregation, storage, and distribution.²³⁷ Additionally, in the aggregation stage, they both capture signals without any license, no matter whether they are already legally available.²³⁸

The second similarity is the case outcomes.²³⁹ We can see that most cases, both in the U.S and European regimes, have dealt with substantive issues of interpretation or application of “public performance” or “communication to the public” similarly.²⁴⁰ For instance, defendants in the cases *Aereo*, *TVCatchup Ltd*, and *Filmspeler* violated the meaning of either “public performance” or “communication to the public.”²⁴¹

The third similarity between the two regimes is the reasonings of the cases.²⁴² In comparison with the similarity of the U.S and European regimes, the majority opinion of *Aereo* is similar to the opinion in *TVCatchup Ltd* in affirming it is not important to differentiate the transmission of signals to many individuals separately

234. See *supra* Part I. See also MCKINSEY & CO., *supra* note 6 (providing relevant figures to demonstrate that the U.S. and E.U. are the two largest streaming markets).

235. Compare *Am. Broad. Cos., Inc. v. Aereo Inc.*, 134 S.Ct. 2498, 2503 (2014) (describing the structure of Aereo’s streaming service and how it works), with *Case C-607/11, ITV Broadcasting Ltd. v. TVCatchup Ltd.*, 2013, ¶ 12–14 (Mar. 7, 2013), <http://curia.europa.eu> (detailing the different servers that TVC uses and how their streaming system works).

236. Compare *Am. Broad. Cos., Inc. v. Aereo Inc.*, 134 S.Ct. 2498, 2503 (2014) (describing the structure of Aereo’s streaming service and how it works), with *Case C-607/11, ITV Broadcasting Ltd. v. TVCatchup Ltd.*, 2013, ¶ 12–14 (Mar. 7, 2013), <http://curia.europa.eu> (detailing the different servers that TVC uses and how their streaming system works).

237. See *Aereo*, 134 S.Ct. at 2503 (discussing the streaming system components); see also *C-607/11, ITV Broadcasting, Ltd. v. TVCatchup Ltd.*, 2013, ¶ 12–14 (Mar. 7, 2013), <http://curia.europa.eu> (detailing the streaming system components).

238. See *Aereo*, 134 S.Ct. at 2503; see also *C-607/11, ITV Broadcasting, Ltd. v. TVCatchup Ltd.*, 2013, ¶ 8–9 (Mar. 7, 2013), <http://curia.europa.eu> (detailing the parties in the suit and their actions).

239. See *supra* Part III.

240. See *supra* Part III.A, Part III.B.

241. See *supra* Part III.A, Part III.B.

242. See *supra* Part III.A, Part III.B.

UNDERSTANDING STREAMING AND COPYRIGHT

or a large amount of people simultaneously.²⁴³ To be more specific, the justices in *Aereo* held that “retransmitting a TV program by using user-specific copies is just a ‘process’ of transmitting a performance.”²⁴⁴ Similarly, the justice in *TVCatchup Ltd* said that “it is irrelevant whether the potential recipients access the communicated works through a one-to-one connection.”²⁴⁵

B. Differences between the two regimes

There are four principal differences between the two regimes. First, the structure of the streaming service.²⁴⁶ When comparing cases within one regime, we can see that in the U.S regime there is a big difference between *Aereo* and DISH Network’s business at the aggregation stage; *Aereo* did not acquire any license from broadcasters in advance while DISH Network did.²⁴⁷ This difference likely played a substantial role in the divergent outcomes of the two cases.²⁴⁸ For *Infomir LLC*, its business model is similar to *Aereo* but because of a poorly pled complaint the outcome was drastically different than *Aereo*’s.²⁴⁹ In the European regime, except for *TVCatchup Ltd*, the two businesses focus on circumvention or provision of add-on software to “intervene” in the distributive processes from copyrighted websites.²⁵⁰

Second, the standard adopted by the two regimes is different.²⁵¹ We can see that although judges in the *DISH Network LLC* and *Infomir LLC* cases also cited *Aereo* to support their arguments, they both did not adopt the rule that the majority opinion applied, and instead they applied the framework—traditional copyright infringement theory—that Justice Scalia used in his dissenting opinion.²⁵² In the European regime, there is a specific directive—Directive 2001/29/EC—that addresses copyright issues related to websites and online streaming services among

243. See *Am. Broad. Cos., Inc. v. Aereo, Inc.*, 134 S.Ct. 2498, 2510 (2014); *Case C-607/11, ITV Broadcasting Ltd. v. TVCatchup Ltd.*, 2013, ¶ 48 (Mar. 7, 2013), <http://curia.europa.eu>.

244. *Aereo*, 134 S.Ct. at 2509.

245. *Case C-607/11, ITV Broadcasting Ltd. v. TVCatchup Ltd.*, 2013, ¶ 34 (Mar. 7, 2013), <http://curia.europa.eu>.

246. See *supra* Part II.A.

247. *Am. Broad. Cos., Inc. v. Aereo, Inc.*, 134 S.Ct. 2498 (2014); *Fox Broad. Co. v. DISH Network LLC*, 160 F. Supp. 3d 1139, 1162 (C.D. Cal. 2015).

248. See *Fox Broadcasting Co.*, 160 F. Supp.3d at 1160 (noting that “*Aereo* streamed a subscriber-specific copy of its programming from *Aereo*’s hard drive to the subscriber’s screen via individual satellite when the subscriber requested it, whereas DISH Anywhere can only be used by a subscriber to gain access to her own home STB/DVR and the authorized recorded content on that box”).

249. *Joint Stock Co. Channel One Russia Worldwide v. Infomir LLC*, No. 16-CV-1318, 2017 WL 696126 (S.D.N.Y. Feb. 15, 2017).

250. See *supra* Part III.B.2; Part III.B.3.

251. See *supra* Part III.

252. *Fox Broad. Co. v. DISH Network LLC*, 160 F. Supp.3d 1139, 1160 (C.D. Cal. 2015); *Joint Stock Co. Channel One Russia Worldwide v. Infomir LLC*, No. 16-CV-1318, 2017 WL 696126 (S.D.N.Y. Feb. 15, 2017).

THOMAS Y. LU

member states of Europe.²⁵³ The core article in this directive is article 3, entitled “Right of communication to the public of works and right of making available to the public other subject-matter.”²⁵⁴ The directive also includes preambles and recitals which elaborate the purpose and interpretation of all articles in the directive.²⁵⁵ As noted earlier, the Court of Justice in *TVCatchup Ltd* and *Linus Sandberg* cited recitals 7, 23, and 25 to support their arguments for interpretation of article 3.²⁵⁶

Third, the reasoning of the cases was quite distinct.²⁵⁷ With respect to the meaning of “public” or “to the public”, *Aereo* explained the public as “large numbers of paying subscribers who lack any prior relationship to the works.”²⁵⁸ Conversely, *TVCatchup Ltd* and *Filmspeler* interpreted “to the public” as “indeterminate” “residents” and a “pool of users beyond that intended by the authors of those copyrighted works.”²⁵⁹ By comparing the two statements, we can see that the court in *Aereo* determined the meaning of “public” using an objective standard of reasoning, while the courts in *TVCatchup* and *Filmspeler* used both objective and subjective reasoning to determine the meaning of “to the public.”²⁶⁰

Finally, the procedure of cases is different between the two regimes.²⁶¹ The U.S. is a nation with one big market, whereas the EU is composed of several nations trying to operate independently but together as one big market.²⁶² Therefore, it is logical to see how each member state legalizes directives through their own nations’ legislative processes.²⁶³ Conversely, the U.S. regime does not have the issue of adopting legislation that corresponds to a Directive; a company must instead be concerned

253. See Directive 2001/29/EC, of the European Parliament and of the Council of May 22, 2001 on the Harmonization of Certain Aspects of Copyright and Related Rights in the Information Society (L 167).

254. *Id.* at 16.

255. *Id.* at 10–15.

256. Case C-607/11, *ITV Broadcasting Ltd. v. TVCatchup Ltd.*, 2013, ¶ 3 (Mar. 7, 2013), <http://curia.europa.eu>; Case C-279/13, *C More Ent. AB v. Linus Sandberg*, 2015, ¶ 3 (Mar. 26, 2015), <http://curia.europa.eu>.

257. See *supra* Part III.

258. *Am. Broad. Cos., Inc. v. Aereo Inc.*, 134 S.Ct. 2498, 2510 (2014).

259. Case C-607/11, *ITV Broadcasting Ltd. v. TVCatchup Ltd.*, 2013, ¶ 32 (Mar. 7, 2013), <http://curia.europa.eu>; Opinion of Advocate General Sanchez-Bordona, *Stichting Brein v. Wullems*, [2016], E.C.R. I __ (delivered Dec. 8, 2016), ¶ 57.

260. See *Am. Broad. Cos., Inc. v. Aereo Inc.*, 134 S.Ct. 2498 (2014). See also Case C-607/11, *ITV Broadcasting Ltd. v. TVCatchup Ltd.*, 2013, ¶ 23 (Mar. 7, 2013), <http://curia.europa.eu>; Opinion of Advocate General Sanchez-Bordona, *Stichting Brein v. Wullems*, [2016], E.C.R. I __ (delivered Dec. 8, 2016), ¶ 57.

261. See *supra* Part III.

262. See generally *How the EU Works: What is the Single Market*, FULLFACT.ORG, (Mar. 8, 2016), <https://fullfact.org/europe/what-single-market/>.

263. See generally *Applying EU Law*, EUR. COMMISSION, https://ec.europa.eu/info/law/law-making-process/applying-eu-law_en (“Each directive contains a deadline by which EU countries must incorporate its provisions into their national legislation and inform the commission to that effect.”).

UNDERSTANDING STREAMING AND COPYRIGHT

with the factual allegation and evidentiary problem in the pleading stage of an infringement complaint, the core problem in *Infomir LLC*.²⁶⁴

V. RECOMMENDATIONS FOR FUTURE STREAMING BUSINESSES

After thoroughly discussing and comparing cases from the U.S. and European regimes, the next step is to focus on the impact on businesses who desire to develop their online streaming platforms in the future. The core questions for them are: (1) what are the legal risks for companies to develop their online streaming businesses in the U.S. or European market; and (2) how to lower those legal risks when developing the online streaming businesses in those respective markets. Here in Part V we address these two questions.

A. Legal Risks in both U.S. and European Markets

In the comparisons between the U.S. and E.U. regimes on the issue of “public performance” right and “communication to the public,” we find that the legal risks are shifted to online streaming businesses—broad-scope protection for copyright holders.²⁶⁵ To be more specific, there are two kinds of business models that an online streaming business can adopt. One is to build a platform with a mechanism with a selection for customers.²⁶⁶ The other is to build a platform without any mechanism so that customers can use the platform to stream their content.²⁶⁷ Although these business models may violate “public performance” or “communication to the public right under different reasonings,” the results are the same: they both are liable for the violation for those rights in the two markets.²⁶⁸

In the U.S., the online streaming business may be directly liable if its business model involves a selection or assortment for customers.²⁶⁹ Moreover, the business might have secondary liability if the business materially contributes to or induces customers to infringe on a copyright holder’s content, as we see in the cases of *Aereo* and *DISH Network LLC*.²⁷⁰ Conversely, in the European regime, even though secondary liability is still debatable, the broad-scope interpretation of Directive 2001/29/EC might also cover secondary infringement, and the online streaming

264. *Joint Stock Co. Channel One Russia Worldwide v. Infomir LLC*, No. 16-CV-1318, 2017 WL 696126 (S.D.N.Y. Feb. 15, 2017).

265. *See Am. Broad. Cos., Inc. v. Aereo, Inc.*, 134 S.Ct. 2498 (2014). *See also* Case C-607/11, *ITV Broadcasting Ltd. v. TVCatchup Ltd.*, 2013, ¶ 23 (Mar. 7, 2013), <http://curia.europa.eu>; Opinion of Advocate General Sanchez-Bordona, *Stichting Brein v. Wullems*, [2016], E.C.R. I __ (delivered Dec. 8, 2016), ¶ 57.

266. *Am. Broad. Cos., Inc. v. Aereo, Inc.*, 134 S.Ct. 2498, 2513 (2014).

267. *Id.*

268. *See supra* Part III.

269. *See supra* Part III.A.2.

270. *Am. Broad. Cos., Inc. v. Aereo, Inc.*, 134 S.Ct. 2498, 2512 (2014); *Fox Broad. Co. v. DISH Network LLC*, 160 F. Supp.3d 1139, 1162 (C.D. Cal. 2015).

THOMAS Y. LU

business is still liable if the business does not acquire licenses from copyright holders, as we see in the cases of *TVCatchup* and *Filmspelers*.²⁷¹ From the perspective of the online streaming business, these legal risks have to be minimized or absorbed by themselves. Finally, the procedural-issue risks are different in the two regimes.²⁷² From the perspective of the online streaming business, the business has to care about the evidentiary problem in the pleading stage in the U.S. and the trivial legislative differences between different member states in Europe.²⁷³

B. Methods to Lower Legal Risks in both U.S. and European Markets

As discussed earlier, an online streaming business bears legal risks in both European and U.S. regimes, no matter which business model is adopted.²⁷⁴ However, how can one lower these legal risks in two different markets? As a legal counsel or developer of an online streaming business, it is easy to think of hiring local lawyers to deal with issues rather than dealing with issues through managers themselves because of the different court procedures. What other things can managers do for their streaming businesses before hiring local lawyers? The following three policies based on the case law discussed could be helpful.

1. Understand and monitor the laws and cases

As legal counsel, it is mandatory to monitor the change of laws and cases in both regimes. By doing thorough comparative analysis and continuing to monitor cases, it will be clear not only how Judges or Justices applied the law, but also what next steps an online streaming business should take. For example, we can understand that after 2015 an online streaming business cannot use any other technological measures, such as stealing or intercepting signals, that escape mandatory licenses from copyright holders.²⁷⁵ Moreover, we can understand that the distribution to “the public” is now broadly interpreted.²⁷⁶ Therefore, once adopting illegal technological measures to stream the contents, the online streaming business would be adjudicated as illegal, no matter how customers access the content.²⁷⁷

271. *ITV Broadcasting Ltd. v. TVCatchup Ltd.*, 2013, ¶ 40 (Mar. 7, 2013), <http://curia.europa.eu>; *Opinion of Advocate General Sanchez-Bordona, Stichting Brein v. Wullems*, [2016], E.C.R. I ___ (delivered Dec. 8, 2016), ¶ 83.

272. *Compare Joint Stock Co. Channel One Russ. Worldwide v. Infomir LLC*, No. 16-CV-1318, 2017 WL 696126, at *12 (S.D.N.Y. Feb. 15, 2017), *with C More Ent. AB v. Linus Sandberg*, 2015, ¶ 29–31 (Mar. 26, 2015), <http://curia.europa.eu>.

273. *See supra* Part III.A.3.

274. *See supra* Part V.A.

275. *See Fox Broad. Co. v. DISH Network LLC.*, 160 F. Supp. 3d 1139, 1176 (C.D. Cal. 2015).

276. *See Cartoon Network, LP v. CSC Holdings, Inc.*, 536 F.3d 121, 134 (2d Cir. 2008).

277. *Lions Gate Films Inc. v. Saleh*, No. Case No. 2:14-CV-06033-ODW-AGR, 2016 WL 6822748, at *3–4 (C.D. Cal. Mar. 24, 2016).

UNDERSTANDING STREAMING AND COPYRIGHT

2. Develop a business model for all parties to win

Ideally, a developer can create a platform that attracts both copyright holders and customers to use the online streaming services legally. For instance, Netflix is a frontier platform that provides online movie streaming services.²⁷⁸ The business not only licenses from movie producers to distribute the movie through its subscription, but also produces its own movies.²⁷⁹ For customers, once they subscribe to Netflix and pay fees, the platform itself selects and suggests movies or TV shows for customers based on their interests.²⁸⁰ This mechanism enhances customer loyalty.²⁸¹ The more customers that use the streaming services, the more movies or TV shows that Netflix can license or produce for customers. This is a great example to illustrate that a successful online streaming business can cater to both customers and content producers.

3. Terms of Use

Finally, when developing an online streaming service, it is important to “educate” customers on how to use the platform and ensure that customers know their rights. These conditions are written in the terms of use.²⁸² Every online streaming service has their own slightly varied version of a terms of use contract.²⁸³ For example, Spotify, a music online streaming platform, has a section termed “user guidelines.”²⁸⁴ The first point of these guidelines reveals the principle:

The following is not permitted for any reason whatsoever: copying, redistributing, reproducing, “ripping”, recording, transferring, performing or displaying to the public, broadcasting, or making available to the public any part of the Spotify Service or the Content, or otherwise making any use of the Spotify Service or the Content which is not expressly permitted under the Agreements or applicable law or which otherwise infringes the

278. Ashley Rodriguez, *Ten years ago, Netflix launched streaming video and changed the way we watch everything*, QUARTZ (Jan. 17, 2017), <https://qz.com/887010/netflix-nflx-launched-streaming-video-10-years-ago-and-changed-the-way-we-watch-everything/>.

279. *Id.*

280. See *Netflix Ratings & Recommendations*, NETFLIX, <https://help.netflix.com/en/node/9898?ba=SwifttypeResultClick&q=suggestions> (last visited Feb. 14, 2018).

281. Tom Vanderbilt, *The Science Behind The Netflix Algorithms That Decide What You'll Watch Next*, WIRED (Aug. 7, 2013, 6:30 a.m.), https://www.wired.com/2013/08/qq_netflix-algorithm/.

282. See Jan André BlackBurn-Cabrera, *Streaming Movies Online: The E! True Hollywood Story*, 5 P.R. BUS. L.J. 59, 81 (2014).

283. See, e.g., *Spotify User Guidelines*, SPOTIFY (July 6, 2017), <https://www.spotify.com/us/legal/end-user-agreement/#s8>; *Netflix Guides Terms of Use*, NETFLIX GUIDES (2018), <https://netflixguides.com/terms-of-use/>.

284. *Spotify User Guidelines*, SPOTIFY (July 6, 2017), <https://www.spotify.com/us/legal/end-user-agreement/#s8>.

THOMAS Y. LU

*intellectual property rights (such as copyright) in the Spotify Service or the Content or any part of it...*²⁸⁵

Netflix provides a similar condition to its subscribers in its terms of use:

*You mustn't use, collect, copy, reproduce, distribute, alter or create derivative works based upon, sell, publicly display, sell or otherwise exploit any content or information displayed on our site for any commercial aims or to the extent of such actions constituting copyright violations, injure or otherwise violate intellectual property of other proprietary rights of our website or any third party, except with a prior written consent from NetflixGuides.com or the respective third party. In some situations, NetflixGuides.com may allow you to print or download materials from the website. In such moments, you may only download or print such content only for personal, non-commercial use. By doing so, you agree and acknowledge that you do not have or acquire any ownership rights.*²⁸⁶

When comparing these two clauses, we can find some differences and similarities. The differences are plentiful. First, the clause in Spotify does not explicitly address the exception of the use by the customers that Netflix does.²⁸⁷ For instance, Netflix provides some channels to print or download materials from Netflix's website.²⁸⁸ Second, the clause in Spotify does not mention the issue of derivative works but Netflix does.²⁸⁹ This might create some controversies if Spotify's customers embed its music into other works such as motion pictures or other types of music.²⁹⁰ In regard to their similarities, these two clauses clearly address the principle: customers cannot have infringing use of the contents.²⁹¹ Moreover, these two clauses do not physically exclude potential infringers. They lower the risk of

285. *Id.*

286. *Netflix Guides Terms of Use*, NETFLIX GUIDES (2018), <https://netflixguides.com/terms-of-use/>.

287. *Compare Spotify Terms and Conditions of Use*, SPOTIFY (July 6, 2017), <https://www.spotify.com/us/legal/end-user-agreement/>, with *Netflix Guides Terms of Use*, NETFLIX GUIDES (2018), <https://netflixguides.com/terms-of-use/>.

288. *Netflix Guides Terms of Use*, NETFLIX GUIDES (2018), <https://netflixguides.com/terms-of-use/>.

289. *Compare Spotify Terms and Conditions of Use*, SPOTIFY (July 6, 2017), <https://www.spotify.com/us/legal/end-user-agreement/>, with *Netflix Guides Terms of Use*, NETFLIX GUIDES (2018), <https://netflixguides.com/terms-of-use/>.

290. Robert Brauneis, *Musical Work Copyright for the Era of Digital Sound Technology*, 17 TUL. J. OF TECH. & INTELL. PROP. 1, 4, 11 (2014).

291. *Compare Spotify Terms and Conditions of Use*, SPOTIFY (July 6, 2017), <https://www.spotify.com/us/legal/end-user-agreement/>, with *Netflix Guides Terms of Use*, NETFLIX GUIDES (2018), <https://netflixguides.com/terms-of-use/>.

UNDERSTANDING STREAMING AND COPYRIGHT

being sued by copyright holders by making clear that they are not condoning or inciting such activity.²⁹²

VI. CONCLUSION

Running an online streaming business can be profitable, but also risky. How to adequately manage and lower the risks from different markets and to make profits in those markets is the primary issue for managers and legal counsels in the online streaming business. In the U.S., the online streaming business may be directly liable if its business model involves creating a selection for customers.²⁹³ Moreover, the business may also have secondary liability if its streaming service is highly possible to attract unlawful uses, as we see in the cases of *Aereo* and *DISH Network LLC*.²⁹⁴ Conversely, in the European regime, even though secondary liability is still debatable, the broad-scope interpretation of Directive 2001/29/EC might also cover secondary infringement and the online streaming business is still liable if the business does not acquire licenses from copyright holders, as we see in the cases of *TVCatchup* and *Filmspelers*.²⁹⁵

Finally, the business must consider the evidentiary problem in the pleading stage in the U.S. and then the differences in legislative adoption of the E.U. directives by member states.²⁹⁶ Through thorough investigations and comparisons of the two big markets' case law and reasoning, people who desire to develop their own online streaming businesses in the future have a clear roadmap of how to lower risks and remain within the law. Technological innovation holds some interesting possibility in this regard. For example, whether the transmission of augmented reality to consumers is a "public performance" or "communication to the public" remains open for debate. Hopefully, the analysis here may help to serve as a roadmap for that debate.

292. Compare *Spotify Terms and Conditions of Use*, SPOTIFY (July 6, 2017), <https://www.spotify.com/us/legal/end-user-agreement/>, with *Netflix Guides Terms of Use*, NETFLIX GUIDES (2018), <https://netflixguides.com/terms-of-use/>.

293. See *Am. Broad. Cos., Inc. v. Aereo, Inc.*, 134 S.Ct. 2498, 2513 (2014).

294. See *Am. Broad. Cos., Inc. v. Aereo Inc.*, 134 S.Ct. 2498 (2014); *Fox Broad. Co. v. DISH Network, LLC.*, 160 F.Supp.3d 1139 (C.D. Cal. 2015).

295. *ITV Broadcasting Ltd. v. TVCatchup Ltd.*, 2013, ¶ 23–24 (Mar. 7, 2013), <http://curia.europa.eu>; *Opinion of Advocate General Sanchez-Bordona, Stichting Brein v. Wullems*, [2016], E.C.R. I __ (delivered Dec. 8, 2016), ¶ 53, 72.

296. Compare *Joint Stock Co. Channel One Russ. Worldwide v. Infomir LLC*, No. 16-CV-1318, 2017 WL 696126, at *12 (S.D.N.Y. Feb. 15, 2017), with *C More Ent. AB v. Linus Sandberg*, 2015, ¶ 29–31 (Mar. 26, 2015), <http://curia.europa.eu>.