

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

HELIOS STREAMING, LLC, and
IDEAHUB, INC.,

Plaintiffs,

v.

VUDU, INC.,

Defendant.

**Civil Action No. 1:19-cv-01792-
CFC/SRF**

JURY TRIAL DEMANDED

FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT

Plaintiffs Helios Streaming, LLC (“Helios”), and Ideahub, Inc. (“Ideahub”), (collectively “Plaintiffs”), for its First Amended Complaint (“Amended Complaint”) against Defendant Vudu, Inc. (referred to herein as “Vudu” or “Defendant”), alleges the following:

NATURE OF THE ACTION

1. This is an action for patent infringement arising under the Patent Laws of the United States, 35 U.S.C. § 1 *et seq.*

THE PARTIES

2. Plaintiff Helios is a limited liability company organized under the laws of the State of Delaware with a place of business at 9880 Irvine Center Drive, Suite 200, Irvine, California 92618.

3. Plaintiff Ideahub is a corporation organized under the laws of the Republic of Korea with a place of business at 7 Heolleungro, Seocho-gu, Seoul 06792 Republic of Korea.

4. Upon information and belief, Vudu is a corporation organized under the laws of the State of Delaware with a place of business at 600 W. California Ave., Sunnyvale, California 94086. Upon information and belief, Vudu sells, offers to sell, and/or uses products and services

throughout the United States, including in this judicial district, and introduces infringing products and services into the stream of commerce knowing that they would be sold and/or used in this judicial district and elsewhere in the United States.

JURISDICTION AND VENUE

5. This is an action for patent infringement arising under the Patent Laws of the United States, Title 35 of the United States Code.

6. This Court has subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1338(a).

7. Venue is proper in this judicial district under 28 U.S.C. § 1400(b).

8. This Court has personal jurisdiction over Vudu under the laws of the State of Delaware, due at least to their substantial business in Delaware and in this judicial district, directly or through intermediaries, including: (i) at least a portion of the infringements alleged herein; and (ii) regularly doing or soliciting business, engaging in other persistent courses of conduct and/or deriving substantial revenue from goods and services provided to individuals in the State of Delaware. Further, this Court has personal jurisdiction and proper authority to exercise venue over Vudu because it is incorporated in Delaware and by doing so has purposely availed itself of the privileges and benefits of the laws of the State of Delaware.

BACKGROUND

9. This action involves eleven patents, described in detail in the counts below (collectively, the “Asserted Patents”).

10. U.S. Patent No. 10,027,736 (“the ’736 patent”) claims technologies for providing streaming Hypertext Transfer Protocol (“HTTP”) media content using adaptive streaming methods that were developed in the early 2010s by inventors Truong Cong Thang, Jin Young Lee, Seong Jun Bae, Jung Won Kang, Soon Heung Jung, Sang Taick Park, Won Ryu, and Jae Gon Kim.

11. U.S. Patent No. 10,270,830 (“the ’830 patent”) claims technologies for providing adaptive HTTP streaming services using metadata of media content that were developed in the early 2010s by inventors Truong Cong Thang and Jin Young Lee.

12. U.S. Patent No. 10,277,660 (“the ’660 patent”) claims technologies for providing adaptive HTTP streaming services using metadata of media content that were developed in the early 2010s by inventors Truong Cong Thang, Jin Young Lee, Seong Jun Bae, Jung Won Kang, Soon Heung Jung, Sang Taick Park, Won Ryu, and Jae Gon Kim.

13. U.S. Patent No. 10,313,414 (“the ’414 patent”) claims technologies for providing adaptive HTTP streaming services using metadata of media content that were developed in the early 2010s by inventors Truong Cong Thang and Jin Young Lee.

14. U.S. Patent No. 10,356,145 (“the ’145 patent”) claims technologies for providing adaptive HTTP streaming services using metadata of media content that were developed in the early 2010s by inventors Truong Cong Thang, Jin Young Lee, Seong Jun Bae, Jung Won Kang, Soon Heung Jung, Sang Taick Park, and Won Ryu.

15. U.S. Patent No. 10,362,130 (“the ’130 patent”) claims technologies for providing adaptive HTTP streaming services using metadata of media content that were developed in the early 2010s by inventors Truong Cong Thang, Jin Young Lee, Seong Jun Bae, Jung Won Kang, Soon Heung Jung, Sang Taick Park, Won Ryu, and Jae Gon Kim.

16. U.S. Patent No. 10,375,373 (“the ’373 patent”) claims technologies for providing adaptive HTTP streaming services using metadata of media content that were developed in the early 2010s by inventors Jin Young Lee and Nam Ho Hur.

17. U.S. Patent No. 8,645,562 (“the ’562 patent”) claims technologies for providing adaptive HTTP streaming services using metadata of media content that were developed in the

early 2010s by inventors Truong Cong Thang, Jin Young Lee, Seong Jun Bae, Jung Won Kang, Soon Heung Jung, Sang Taick Park, Won Ryu, and Jae Gon Kim.

18. U.S. Patent No. 8,909,805 (“the ’805 patent”) claims technologies for providing adaptive HTTP streaming services using metadata of media content that were developed in the early 2010s by inventors Truong Cong Thang, Jin Young Lee, Seong Jun Bae, Jung Won Kang, Soon Heung Jung, Sang Taick Park, Won Ryu, and Jae Gon Kim.

19. U.S. Patent No. 9,325,558 (“the ’558 patent”) claims technologies for providing adaptive HTTP streaming services using metadata of media content that were developed in the early 2010s by inventors Truong Cong Thang, Jin Young Lee, Seong Jun Bae, Jung Won Kang, Soon Heung Jung, Sang Taick Park, Won Ryu, and Jae Gon Kim.

20. U.S. Patent No. 9,467,493 (“the ’493 patent”) claims technologies for providing adaptive HTTP streaming services using metadata of media content that were developed in the early 2010s by inventors Truong Cong Thang, Jin Young Lee, Seong Jun Bae, Jung Won Kang, Soon Heung Jung, Sang Taick Park, Won Ryu, and Jae Gon Kim.

21. Most inventors on the Asserted Patents were researchers of the Electronics and Telecommunications Research Institute (“ETRI”), the national leader in Korea in the research and development of information technologies. Since its inception in 1976, ETRI has developed new technologies in 4M DRAM computer memory, CDMA and 4G LTE cellular phone communications, LCD displays, Video Coding, and Media Transport & Delivery, the technology at issue in this case. ETRI employs over 1,800 research/technical staff, of whom 94% hold a post-graduate degree and 50% have earned a doctoral degree in their technological field. Over the last five years, ETRI produced 1,524 SCI papers and has 467 standard experts, applied for a total of 16,062 patents, has contributed 7,309 proposals that have been adopted by international

and domestic standard organizations (ISO, IEC, ITU, 3GPP, JTC, IEEE etc.). Dr. Truong Cong Thang and Dr. Jae Gon Kim among the inventors were employees of ETRI and currently Professors in the University of Aizu, Japan, and Korea Aerospace University, respectively.

22. The Asserted Patents claim technologies fundamental to Dynamic Adaptive Streaming over HTTP (“DASH”), a media-streaming model for delivering media content.

23. DASH technology has been standardized in the ISO/IEC 23009 standards, which were developed and published by the International Organization for Standardization (“ISO”) and the International Electrotechnical Commission (“IEC”).

24. The claimed inventions of the Asserted Patents have been incorporated into the standard for dynamic adaptive streaming delivery of MPEG media over HTTP, ISO/IEC 23009-1:2014, and subsequent versions of this standard (collectively, these standards are referred to throughout as “MPEG-DASH”). The patents are thus standard essential.

25. MPEG-DASH technologies, including those of the claimed inventions of the Asserted Patents, facilitate high-quality streaming of media content by breaking media content—a movie, for example—into smaller parts that are each made available at a variety of bitrates. As a user plays back downloaded parts of the media content, the user’s device employs an algorithm to select subsequent media parts with the highest possible bitrate that can be downloaded in time for playback without causing delays in the user’s viewing and listening experience.

26. The MPEG-DASH standard, including the claimed inventions of the Asserted Patents, therefore enables high-quality streaming of media content over the internet delivered from conventional HTTP web servers, which was not previously possible on a large scale with prior art techniques and devices.

27. Between approximately June and August of 2018, Plaintiff Ideahub acquired the Asserted Patents.

28. In or about August of 2018, Plaintiff Helios obtained an exclusive license to the Asserted Patents.

29. On September 24, 2019, Plaintiffs filed a complaint for patent infringement (“Original Complaint”).

COUNT I – INFRINGEMENT OF U.S. PATENT NO. 10,027,736

30. The allegations set forth in the foregoing paragraphs 1 through 29 are incorporated into this First Claim for Relief.

31. On July 17, 2018, the ’736 patent was duly and legally issued by the United States Patent and Trademark Office under the title “Apparatus and Method for Providing Streaming Content.” A true and correct copy of the ’736 patent is attached as Exhibit 1.¹

32. Ideahub is the assignee and owner of the right, title, and interest in and to the ’736 patent.

33. Helios holds the exclusive right to assert all causes of action arising under the ’736 patent and the right to collect any remedies for infringement of it.

34. Upon information and belief, Vudu has and continues to directly infringe at least claims 9, 12, 13, 14, 15, and 16, and to induce the direct infringement of at least claims 1, 4, 5, 6, 7, and 8 of the ’736 patent by selling, offering to sell, making, using, and/or providing and causing to be used streaming media content in accordance with the MPEG-DASH standard (the “Accused Instrumentalities”), including one or more videos on demand (“VOD”) such as those

¹ All exhibit numbers in this First Amended Complaint refer to the exhibits filed with the Original Complaint.

available at <https://www.vudu.com/content/movies/home>, as set forth in detail in the preliminary and exemplary claim chart attached as Exhibit 2.

35. Upon information and belief, the Accused Instrumentalities perform methods for providing media content by a server performed by a processor, the method comprising: receiving a request for a segment of the media content using a URL of the segment from a terminal, the URL being generated based on the selected BaseURL element; providing the segment to the terminal, wherein the terminal selects a BaseURL element from the multiple BaseURL elements based on the metadata of the media content, wherein the metadata is Media Presentation Description (MPD), wherein the MPD describes one or more periods, wherein the period includes one or more groups, wherein the group includes one or more representation, wherein the representation includes one or more segments of the media content, wherein the receiver receives identical segments that are accessible at multiple locations indicated by URLs resolved with respect to the respective BaseURL elements, and a first BaseURL element among BaseURL elements is used as a base Universal Resource Indicator (URI).

36. Upon information and belief, the Accused Instrumentalities perform methods for receiving media content in a terminal performed by a processor, the method comprising: receiving metadata of media content, the metadata comprising an attribute with multiple BaseURL elements, selecting a BaseURL element from the multiple BaseURL elements; sending a request for a segment of the media content using a URL of the segment to a server, the URL being generated based on the selected BaseURL element; receiving the segment from the server, wherein the metadata is Media Presentation Description (MPD), wherein the MPD describes one or more periods, wherein the period includes one or more groups, wherein the group includes one or more representation, wherein the representation includes one or more segments of the

media content, wherein the receiver receives identical segments that are accessible at multiple locations indicated by URLs resolved with respect to the respective BaseURL elements, and a first BaseURL element among the BaseURL elements is used as a base Universal Resource Indicator (URI).

37. On information and belief, the Accused Instrumentalities have been used to infringe and continue to directly infringe at least claims 1, 4, 5, 6, 7, 8, 9, 12, 13, 14, 15, and 16 of the '736 patent during the pendency of the '736 patent.

38. Since at least approximately August 23, 2018, Vudu has had actual notice that it is directly infringing and/or inducing others to infringe the '736 patent.

39. On or about August 23, 2018, Helios sent Vudu a notice letter ("Notice Letter") addressed to Ms. Jamie Elizabeth Chung, General Counsel for Walmart. Upon information and belief, as of approximately August 23, 2018, Walmart was the parent company of Vudu, and Ms. Chung had authority to discuss Helios's proposal on Vudu's behalf.

40. On information and belief, Vudu began offering streaming VOD using MPEG-DASH more than two years before receiving the Notice Letter. (*See, e.g.*, <https://castlabs.com/news/vudu-android-app-castlabs-technology/>, Mar. 11, 2016 (last accessed July 15, 2020).) It is therefore reasonable to infer that Vudu had intimate knowledge of MPEG-DASH and how Vudu's streaming VOD complied with MPEG-DASH before receiving the Notice Letter. On information and belief, and also reasonably inferred, Vudu was aware that there were patents essential to the MPEG-DASH standard, as is common with respect to standard-setting organizations and efforts.

41. The Notice Letter identified Helios as "the worldwide exclusive licensee of patents and patent applications relating to [MPEG-DASH] that were researched and developed

by [ETRI],” and noted that “ETRI was a key contributor to the development of [MPEG-DASH], which later led to its adoption as the first international standard for adaptive streaming technology.”

42. The Notice Letter specifically identified ISO/IEC 23009-1 as the relevant MPEG-DASH standard for the Asserted Patents, including the ’736 patent, and as the MPEG-DASH standard utilized by Vudu in its streaming VOD offerings.

43. The Notice Letter identified Vudu’s website, “<https://www.vudu.com/>,” and “apps on various types of electronic devices” as reasons Vudu “would benefit from a license under the DASH patent portfolio.” Because Vudu’s primary offering to consumers is a streaming service, and because its web site and apps are the platforms on which the streaming service is offered, it is reasonable to infer that Vudu understood that the act of offering such services not only necessitated Vudu’s own infringement, but also infringement by its customers.

44. Based on the facts set forth above, it is reasonable to infer that Vudu knew the reason Helios suggested Vudu “would benefit from a license under the DASH patent portfolio” is that Vudu’s website and apps provided DASH-enabled streaming VOD, and Helios was alleging its DASH patents were essential to Vudu’s use of this technology.

45. Helios attached to the Notice Letter a listing of the patents and patent applications comprising Helios’s MPEG-DASH portfolio including, under the heading “DASH Patent Portfolio,” a table titled “U.S. DASH Patents,” which explicitly identified the ’736 patent by patent number, among 11 other U.S. patents. Five of the twelve “U.S. DASH Patents” identified in this table are asserted in this action.

46. In the Notice Letter, Helios also expressed its willingness to offer Vudu “a non-exclusive license of the DASH patent portfolio under fair and reasonable terms.” And, “to

encourage open and frank discussions and to allow [Helios] to provide further information as to the reasons Walmart would benefit under a license of the DASH portfolio,” Helios enclosed a non-disclosure agreement (“NDA”) with the Notice Letter.

47. It is commonly understood in the technology industry, and reasonable to infer that Vudu knew, that a reference to “fair and reasonable terms” relates to so-called FRAND commitments commonly made by contributors of patented technology to standards-setting organizations. This presents another basis for inferring that Vudu understood that Helios was alleging that Vudu’s use of MPEG-DASH technology necessarily infringed Helios’s patents.

48. Based on the facts set forth above, it is reasonable to infer that as of approximately August 23, 2018, Vudu had knowledge of the ’736 patent, had knowledge that Helios was alleging that the ’736 patent was standard-essential for MPEG-DASH, and that Vudu subjectively knew that if the ’736 patent was standard-essential to MPEG-DASH, there was a high likelihood that Vudu’s providing and encouraging its customers to stream DASH-enabled VOD, including VOD offered through Vudu’s website and apps, infringed and induced the infringement of the ’736 patent.

49. Based on the facts set forth above, it is also reasonable to infer that as of approximately August 23, 2018, Vudu knew Helios had further details regarding Vudu’s infringement and regarding the standard essentiality of Helios’s MPEG-DASH patents, which Helios would share with Vudu if Vudu entered into an NDA.

50. Based on the facts set forth above, it is also reasonable to infer that as of approximately August 23, 2018, Vudu knew Helios was willing to offer Vudu a license to Helios’s MPEG-DASH patent portfolio, including the ’736 patent, on allegedly “fair and reasonable terms,” consistent with the licensing of standard-essential patents.

51. On or about September 11, 2018, Helios emailed Vudu and requested confirmation of receipt of Helios's August 23, 2018 letter. Helios further offered to discuss the Notice Letter and reattached the Notice Letter and NDA for Vudu's review.

52. Helios received no reply to its September 11, 2018 email.

53. On or about September 20, 2018, Helios again emailed Vudu and requested confirmation of receipt of Helios's August 23, 2018 letter. Helios again offered to discuss the Notice Letter. Helios further inquired as to whether there was a better point of contact than Ms. Chung with whom Helios could discuss a potential Vudu license to Helios's MPEG-DASH portfolio.

54. On or about October 2, 2018, Mr. Emil Kim of Helios called Ms. Chung and left a voicemail message inquiring whether Vudu had received the Notice Letter and the status of Vudu's investigation.

55. On or about October 12, 2018, Vudu responded with a one-sentence email attaching a letter from Diana Luo, Senior Associate General Counsel of Walmart. Ms. Luo's letter confirmed receipt of the Notice Letter, asked that Helios "[p]lease direct all further communications on this matter to me going forward," and stated Vudu "will investigate the matter and respond in due course."

56. Based on the above facts, it is reasonable to infer that as of at least October 12, 2018 Vudu was investigating the allegations and information in the Notice Letter, including the claims of the U.S. MPEG-DASH patents identified in the Notice Letter (including the '736 patent) and whether Vudu's provision of DASH-enabled streaming VOD via its website and apps infringed and induced the infringement of those MPEG-DASH patents, including the '736 patent.

57. Based on the above facts, to the extent it is not reasonable to draw the inferences set forth in paragraphs 43-44 and 47-50 of this First Amended Complaint as of approximately August 23, 2018, it is reasonable to draw the inferences set forth in paragraphs 43-44 and 47-50 of this First Amended Complaint as of at least October 12, 2018.

58. Based on Ms. Luo's October 12, 2018 letter, it is also reasonable to infer that Helios had been contacting the correct entity since approximately August 23, 2018 regarding Vudu taking a license to Helios's MPEG-DASH patent portfolio, including the '736 patent.

59. On or about October 15, 2018, Helios responded via email to Vudu's October 12, 2018 letter. In its response, Helios again inquired as to the status of the NDA and reiterated that Helios would "be able to provide more details on the license" once the NDA was executed.

60. Helios received no reply to its October 15, 2018 email.

61. On or about October 31, 2018, Helios wrote again to Vudu to inquire about Vudu's investigation. Helios repeated its request that Vudu enter into an NDA with Helios. Helios wrote that "[a]s soon as the NDA is in place, [Helios] can provide more details, including claim charts" to Vudu regarding Vudu's alleged infringement.

62. Helios received no reply to its October 31, 2018 email.

63. Based on the above facts, it is reasonable to infer that at least as of October 31, 2018 Vudu knew Helios had further details regarding Vudu's infringement of the '736 patent, which Helios would share with Vudu if Vudu entered into an NDA.

64. Based on the above facts, it is reasonable to infer that at least as of October 31, 2018 Vudu knew that, if it entered into an NDA with Helios, it would receive claim charts detailing how Vudu directly infringed and induced the infringement of the '736 patent. It is also reasonable to infer that, by not responding to Vudu's October 31, 2018 communication and by

refusing to enter into an NDA with Helios, Vudu was actively avoiding learning additional information about its infringement.

65. On or about February 19, 2019, Helios emailed Vudu and reiterated that Helios was still waiting for the results of Vudu's investigation, which Vudu had represented it began almost four months prior. Helios again identified ISO/IEC 23009-1 as the MPEG-DASH standard to which Helios's MPEG-DASH patent portfolio, including the '736 patent, pertained. Helios also informed Vudu that Helios "confirmed that Vudu utilizes the DASH standard." In support of this point, Helios attached screenshots to the February 19, 2019 email that demonstrated with pictorial evidence Vudu's use of MPEG-DASH in its streaming VOD.

66. In its February 19, 2019 email to Vudu, Helios also repeated its offer to provide "detailed claim charts evidencing that the patents in our portfolios are essential to the DASH . . . standards, as well as other sensitive information, including our licensing terms, but require an NDA (as attached) to be in place first."

67. Based on the above facts, it is reasonable to infer that, as of February 19, 2019, Vudu had either been investigating Helios's MPEG-DASH patents for over four months or had affirmatively misled Helios about its investigation of Helios's MPEG-DASH patents to avoid learning the details of how Vudu's DASH-enabled VOD infringed Helios's MPEG-DASH patents, including the '736 patent.

68. Based on the above facts, to the extent Vudu did not already know Helios was alleging the patents in its MPEG-DASH patent portfolio (including the '736 patent) were standard-essential to MPEG-DASH, it is reasonable to infer Vudu knew this at least as of Helios's February 19, 2019 email.

69. Based on the above facts, including Vudu's extensive experience with MPEG-DASH through its provision of DASH-enabled streaming VOD on its website and apps, it is reasonable to infer that as of February 19, 2019 Vudu subjectively knew that if the '736 patent was standard-essential to MPEG-DASH there was a high likelihood that Vudu's providing and encouraging its customers to stream DASH-enabled VOD, including VOD offered through Vudu's website and apps, infringed and induced the infringement of the '736 patent.

70. On or about February 27, 2019, Vudu responded via email to Helios's multiple communications, and confirmed that Vudu had investigated patents identified in the Notice Letter. Vudu also alleged that Helios's identified patents "appear to be assigned to entities other than Helios" and that "it is not clear to us that Helios Streaming has any standing to engage in these discussions." Vudu also explicitly stated that "Vudu is not interested in receiving any confidential information, and anything you choose to send would be considered nonconfidential."

71. Helios responded the next day, on February 28, 2019, stating that "Helios Streaming was granted an exclusive license from the current assignee, Ideahub, with rights to sublicense the DASH patents." To support these statements, Helios attached screenshots from the publicly available U.S. Patent and Trademark Office website to its email response, and these screenshots showed that all 12 MPEG-DASH patents identified in the Notice Letter, including the '736 patent, were assigned to Ideahub and were exclusively licensed to Helios Streaming.

72. Helios also reiterated in its February 28, 2019 email that it required an NDA to enter into substantive licensing discussions with Vudu in order to "provide [Vudu] with claim charts, licensing terms, and so forth. . . . Without the NDA, we cannot have any meaningful or substantive discussions to determine whether a license is appropriate, thereby foreclosing the

possibility to resolve this matter amicably.” Helios offered times it was available to discuss these issues on the phone with Vudu.

73. Helios received no response to its February 28, 2019 communication.

74. Based on the above facts, it is reasonable to infer that at least as of February 27, 2019, Vudu subjectively believed there was a high probability that Vudu’s providing and encouraging its customers to stream DASH-enabled VOD, including VOD offered through Vudu’s website and apps, infringed and induced the infringement of the ’736 patent. The following facts and inferences, in particular, support this inference: (1) Vudu knew Helios was alleging its MPEG-DASH patents (including the ’736 patent) were standard-essential to MPEG-DASH, (2) Helios had confirmed Vudu’s streaming VOD utilized MPEG-DASH and provided evidence of this confirmation to Vudu via screenshots, and (3) Helios had offered repeatedly to provide confidential claim charts demonstrating how Vudu was directly infringing and inducing the direct infringement of Helios’s MPEG-DASH patents (including the ’736 patent) and how Helios’s patents were standard essential to MPEG-DASH.

75. Based on the above facts, it is also reasonable to infer at least as of February 27, 2019 that Vudu’s refusal to honor the confidentiality of Helios’s offered claim charts was a deliberate act calculated to avoid learning the details of Vudu’s infringement of Helios’s MPEG-DASH patents, including the ’736 patent.

76. On March 6, 2019, Helios emailed Vudu to request that Vudu respond and enter into an NDA by March 15, 2019.

77. Helios received no response to its March 6, 2019 email and was not otherwise contacted by Vudu between February 27, 2019 and Helios’s filing the Original Complaint in this lawsuit.

78. On information and belief, the Accused Instrumentalities have and continue to be used, marketed, provided to, and/or used by or for each of Defendant's partners, clients, customers, and end users across the country and in this District.

79. Upon information and belief, Vudu has induced and continues to induce others to infringe at least claims 1, 4, 5, 6, 7, and 8 of the '736 patent under 35 U.S.C. § 271(b) by, among other things, and with specific intent or willful blindness, actively aiding and abetting others to infringe, including but not limited to Vudu's partners and customers, whose use of the Accused Instrumentalities constitutes direct infringement of at least claims 1, 4, 5, 6, 7, and 8 of the '736 patent. Vudu has induced and continues to induce others to infringe at least claims 1, 4, 5, 6, 7, and 8 of the '736 patent since at least receiving the Notice Letter on or about August 23, 2018; or, if not then, since confirming its receipt of the Notice letter and confirming it was investigating Helios's MPEG-DASH patents on or about October 12, 2018; or, if not then, since on or about February 19, 2019, when Helios emailed screenshots showing that Vudu's streaming VOD utilized MPEG-DASH and Helios reiterated that its MPEG-DASH patents were standard-essential to MPEG-DASH; or, if not then, since receiving the Original Complaint in this matter and Exhibit 2 thereto, which, in combination with Vudu's extensive knowledge of and experience with MPEG-DASH and Vudu's knowledge of how it was encouraging its partners, customers, and users to stream its DASH-enabled VOD and the parties' pre-suit communications regarding the patents and Vudu's website and apps, detailed how Vudu directly infringed and induced the direct infringement of the asserted claims of the '736 patent.

80. In particular, Vudu's actions that aid and abet others such as their partners and customers to infringe include knowingly providing the Accused Instrumentalities with materials and/or services that encourage infringing use of the Accused Instrumentalities, including icons,

instructions, or statements that actively encourage their partners' or customers' infringing use of the Accused Instrumentalities.

81. For example, Vudu has and continues to knowingly and strategically place one-click "Watch" or "Watch Free" buttons with its DASH-enabled VOD content to encourage its customers to stream Vudu's DASH-enabled VOD content, knowing that such streaming constitutes infringement of the '736 patent by the customers. (Ex. 2 at 2, 16-17.) The claimed methods of claims 1, 4, 5, 6, 7, and 8 of the '736 patent are necessarily performed by the customer's terminal upon the customer's clicking the "Watch" or "Watch Free" buttons (*id.* at 2, 16-17), and this constitutes direct infringement as set forth in Exhibit 2.

82. As a further example, Vudu has and continues to actively and knowingly encourage infringement of the '736 patent by, in addition to continuing to provide the "Watch" and "Watch Free" buttons mentioned above, instructing users of Roku streaming devices, smart TVs, PC and Mac devices, Chromecast devices, Android devices, iOS devices, Blu-ray players, Xbox devices, and Windows 10 devices, among others, to stream Vudu's DASH-enabled VOD:



(<https://www.vudu.com/content/movies/aboutus> (last accessed July 15, 2020).)

83. On information and belief, Vudu has engaged and continues to engage in such actions with specific intent to cause infringement or with willful blindness to the resulting infringement because Vudu has had actual knowledge of the '736 patent and that its acts were inducing infringement of the '736 patent since at least the time of receiving the Notice Letter on or about August 23, 2018; or, if not then, since confirming its receipt of the Notice letter and confirming it was investigating Helios's MPEG-DASH patents on or about October 12, 2018; or, if not then, since on or about February 19, 2019, when Helios emailed screenshots showing that Vudu's streaming VOD utilized MPEG-DASH and Helios reiterated that its MPEG-DASH patents were standard-essential to MPEG-DASH; or, if not then, since receiving the Original Complaint in this matter and Exhibit 2 thereto, which, in combination with Vudu's extensive knowledge of and experience with MPEG-DASH and Vudu's knowledge of how it was encouraging its partners, customers, and users to stream its DASH-enabled VOD and the parties' pre-suit communications regarding the patents and Vudu's website and apps, detailed how Vudu directly infringed and induced the direct infringement of the asserted claims of the '736 patent.

84. Alternatively, to the extent Vudu claims it did not have actual knowledge that its acts were inducing the infringement of the '736 patent, Vudu was willfully blind to the fact that its acts were inducing the infringement of the '736 patent.

85. Vudu subjectively believed that there was a high probability that the DASH-enabled streaming VOD offered through Vudu's website and apps were infringing or inducing the infringement of the '736 patent. On information and belief, Vudu had been offering DASH-enabled streaming VOD since at least 2016, and therefore Vudu had extensive knowledge of the MPEG-DASH standard and how its VOD was utilizing MPEG-DASH before being contacted by Helios. Helios identified the '736 patent as a "U.S. DASH Patent" within its "DASH Patent

Portfolio” and clearly and consistently identified MPEG-DASH as the standard to which its MPEG-DASH patents (including the ’736 patent) pertained since at least approximately August 23, 2018. Helios explicitly stated that its MPEG-DASH patents were essential to MPEG-DASH and provided proof that it knew Vudu was utilizing the MPEG-DASH standard in providing streaming VOD via its website and apps. And Vudu knew that if a patent was standard-essential to MPEG-DASH, that patent was necessarily being infringed by streaming VOD utilizing MPEG-DASH.

86. Despite the facts set forth in paragraph 85 above, Vudu actively and deliberately avoided learning the details of its infringement and/or induced infringement of the ’736 patent. Vudu informed Helios that Vudu was investigating Helios’s MPEG-DASH patents, but this was a deliberate attempt to mislead Helios. When confronted with additional information and evidence that its DASH-enabled streaming VOD was infringing Helios’s MPEG-DASH patents, and presented with the opportunity to review more detailed confidential information regarding Vudu’s infringement, Vudu stated that “Vudu is not interested in receiving any confidential information” and then cut off all further communication to avoid learning of its infringement.

87. On information and belief, based on the facts and inferences set forth in paragraphs 30-86 above, Vudu’s infringement has been and continues to be willful.

88. Plaintiffs have been harmed by Vudu’s infringing activities.

COUNT II – INFRINGEMENT OF U.S. PATENT NO. 10,270,830

89. The allegations set forth in the foregoing paragraphs 1 through 88 are incorporated into this Second Claim for Relief.

90. On April 23, 2019, the ’830 patent was duly and legally issued by the United States Patent and Trademark Office under the title “Apparatus and Method for Providing

Streaming Content Using Representations.” A true and correct copy of the ’830 patent is attached as Exhibit 3.

91. Ideahub is the assignee and owner of the right, title, and interest in and to the ’830 patent.

92. Helios holds the exclusive right to assert all causes of action arising under the ’830 patent and the right to collect any remedies for infringement of it.

93. Upon information and belief, Vudu has and continues to directly infringe at least claims 8, 12, and 13, and to induce the direct infringement of at least claims 1, 5, 6, 15, and 18 of the ’830 patent by selling, offering to sell, making, using, and/or providing and causing to be used streaming media content in accordance with the MPEG-DASH standard (the “Accused Instrumentalities”), including one or more videos on demand (“VOD”) such as those available at <https://www.vudu.com/content/movies/home>, as set forth in detail in the preliminary and exemplary claim chart attached as Exhibit 4.

94. Upon information and belief, the Accused Instrumentalities perform methods of providing media content performed by a server or multiple servers, comprising: transmitting a Media Presentation Description (MPD) of a media content to a client; receiving a request, from the client, for a segment of the media content; transmitting the media content to the client, wherein the MPD includes one or more periods, wherein each of the periods includes one or more adaptation sets, wherein each of the adaptation sets includes one or more representations, wherein each of the representations includes one or more segments, wherein the MPD includes one or more attributes or elements that are common to each of the periods, each of the adaptation sets, each of the representations, and each of the segments, wherein the period includes one or more attributes or elements that are common to each of the adaptation sets, each of the

representations, and each of the segments for that period, wherein the adaptation set includes one or more attributes or elements that are common to each of the representations and each of the segments for that adaptation set, and wherein the representation includes one or more attributes or elements that are common to each of the segments for that representation.

95. Upon information and belief, the Accused Instrumentalities perform methods of providing media content performed by a DASH (Dynamic Adaptive Streaming over HTTP) client, the method comprising: receiving a Media Presentation Description (MPD) of a media content; and accessing segments of the media content based on information provided by the MPD, wherein the MPD includes one or more periods, wherein each of the periods includes one or more adaptation sets, wherein each of the adaptation sets includes one or more representations, wherein each of the representations includes one or more segments, wherein the MPD includes one or more attributes or elements that are common to each of the periods, each of the adaptation sets, each of the representations, and each of the segments, wherein the period includes one or more attributes or elements that are common to each of the adaptation sets, each of the representations, and each of the segments for that period, wherein the adaptation set includes one or more attributes or elements that are common to each of the representations and each of the segments for that adaptation set, and wherein the representation includes one or more attributes or elements that are common to each of the segments for that representation.

96. On information and belief, the Accused Instrumentalities have been used to infringe and continue to directly infringe at least claims 1, 5, 6, 8, 12, 13, 15, and 18 of the '830 patent during the pendency of the '830 patent.

97. Since at least the time of receiving the Original Complaint, Vudu has had actual notice that it is directly infringing and/or inducing others to infringe the '830 patent.

98. On or about August 23, 2018, Helios sent Vudu a notice letter addressed to Ms. Jamie Elizabeth Chung, General Counsel for Walmart. Upon information and belief, as of approximately August 23, 2018, Walmart was the parent company of Vudu, and Ms. Chung had authority to discuss Helios's proposal on Vudu's behalf.

99. On information and belief, Vudu began offering streaming VOD using MPEG-DASH more than two years before receiving the Notice Letter. (*See, e.g.*, <https://castlabs.com/news/vudu-android-app-castlabs-technology/>, Mar. 11, 2016 (last accessed July 15, 2020).) It is therefore reasonable to infer that Vudu had intimate knowledge of MPEG-DASH and how Vudu's streaming VOD complied with MPEG-DASH before receiving the Notice Letter. On information and belief, and also reasonably inferred, Vudu was aware that there were patents essential to the MPEG-DASH standard, as is common with respect to standard-setting organizations and efforts.

100. The Notice Letter identified Helios as "the worldwide exclusive licensee of patents and patent applications relating to [MPEG-DASH] that were researched and developed by [ETRI]," and noted that "ETRI was a key contributor to the development of [MPEG-DASH], which later led to its adoption as the first international standard for adaptive streaming technology."

101. The Notice Letter specifically identified ISO/IEC 23009-1 as the relevant MPEG-DASH standard for the Asserted Patents, and as the MPEG-DASH standard utilized by Vudu in its streaming VOD offerings.

102. The Notice Letter identified Vudu's website, "<https://www.vudu.com/>," and "apps on various types of electronic devices" as reasons Vudu "would benefit from a license under the DASH patent portfolio." Because Vudu's primary offering to consumers is a streaming service,

and because its web site and apps are the platforms on which the streaming service is offered, it is reasonable to infer that Vudu understood that the act of offering such services not only necessitated Vudu's own infringement, but also infringement by its customers.

103. Based on the facts set forth above, it is reasonable to infer that Vudu knew the reason Helios suggested Vudu "would benefit from a license under the DASH patent portfolio" is that Vudu's website and apps provided DASH-enabled streaming VOD, and Helios was alleging its DASH patents and applications claimed this technology.

104. Helios attached to the Notice Letter a listing of the patents and patent applications comprising Helios's MPEG-DASH portfolio including, under the heading "U.S. DASH Patent Portfolio," a table titled "U.S. DASH Pending Patent Applications," which explicitly identified U.S. Patent Application No. 15/834,702 that issued through a continuation as the '830 patent, among eight other U.S. patent applications. Five of the eight "U.S. DASH Pending Patent Applications" identified in this table issued, directly or through continuation applications, as patents asserted in this action.

105. In the Notice Letter, Helios also expressed its willingness to offer Vudu "a non-exclusive license of the DASH patent portfolio under fair and reasonable terms." And, "to encourage open and frank discussions and to allow [Helios] to provide further information as to the reasons Walmart would benefit under a license of the DASH portfolio," Helios enclosed a non-disclosure agreement ("NDA") with the Notice Letter.

106. It is commonly understood in the technology industry, and reasonable to infer that Vudu knew, that a reference to "fair and reasonable terms" relates to so-called FRAND commitments commonly made by contributors of patented technology to standards-setting

organizations. This presents another basis for inferring that Vudu understood that Helios was alleging that Vudu's use of MPEG-DASH technology necessarily infringed Helios's patents.

107. Based on the facts set forth above, it is reasonable to infer that as of approximately August 23, 2018, Vudu had knowledge of the patent application that issued through a continuation as the '830 patent, Vudu had knowledge that Helios was alleging that the application that issued through a continuation as the '830 patent claimed technology that was standard-essential for MPEG-DASH, and that Vudu subjectively knew that if the application that issued through a continuation as the '830 patent claimed technology that was standard-essential to MPEG-DASH, there was a high likelihood that Vudu's providing and encouraging its customers to stream DASH-enabled VOD, including VOD offered through Vudu's website and apps, would infringe and induce the infringement of the claims of the '830 patent once those claims issued.

108. Based on the facts set forth above, it is also reasonable to infer that as of approximately August 23, 2018, Vudu knew Helios had further details regarding Vudu's likely infringement and regarding the standard essentiality of Helios's MPEG-DASH patents and applications, which Helios would share with Vudu if Vudu entered into an NDA.

109. Based on the facts set forth above, it is also reasonable to infer that as of approximately August 23, 2018, Vudu knew Helios was willing to offer Vudu a license to Helios's MPEG-DASH patent portfolio on allegedly "fair and reasonable terms," consistent with the licensing of standard-essential patents.

110. On or about September 11, 2018, Helios emailed Vudu and requested confirmation of receipt of Helios's August 23, 2018 letter. Helios further offered to discuss the Notice Letter and reattached the Notice Letter and NDA for Vudu's review.

111. Helios received no reply to its September 11, 2018 email.

112. On or about September 20, 2018, Helios again emailed Vudu and requested confirmation of receipt of Helios's August 23, 2018 letter. Helios again offered to discuss the Notice Letter. Helios further inquired as to whether there was a better point of contact than Ms. Chung with whom Helios could discuss a potential Vudu license to Helios's MPEG-DASH portfolio.

113. On or about October 2, 2018, Mr. Emil Kim of Helios called Ms. Chung and left a voicemail message inquiring whether Vudu had received the Notice Letter and the status of Vudu's investigation.

114. On or about October 12, 2018, Vudu responded with a one-sentence email attaching a letter from Diana Luo, Senior Associate General Counsel of Walmart. Ms. Luo's letter confirmed receipt of the Notice Letter, asked that Helios "[p]lease direct all further communications on this matter to me going forward," and stated Vudu "will investigate the matter and respond in due course."

115. Based on the above facts, it is reasonable to infer that as of at least October 12, 2018 Vudu was investigating the allegations and information in the Notice Letter, including the claims of the U.S. MPEG-DASH patent applications identified in the Notice Letter (including the patent application that issued through a continuation as the '830 patent) and whether Vudu's provision of DASH-enabled streaming VOD via its website and apps would infringe and induce the infringement of the claims of those MPEG-DASH patent applications once they issued.

116. Based on Ms. Luo's October 12, 2018 letter, it is also reasonable to infer that Helios had been contacting the correct entity since approximately August 23, 2018 regarding

Vudu taking a license to Helios's MPEG-DASH patent portfolio, including the patent application that issued through a continuation as the '830 patent.

117. On or about October 15, 2018, Helios responded via email to Vudu's October 12, 2018 letter. In its response, Helios again inquired as to the status of the NDA and reiterated that Helios would "be able to provide more details on the license" once the NDA was executed.

118. Helios received no reply to its October 15, 2018 email.

119. On or about October 31, 2018, Helios wrote again to Vudu to inquire about Vudu's investigation. Helios repeated its request that Vudu enter into an NDA with Helios. Helios wrote that "[a]s soon as the NDA is in place, [Helios] can provide more details, including claim charts" to Vudu regarding Vudu's alleged infringement.

120. Helios received no reply to its October 31, 2018 email.

121. Based on the above facts, it is reasonable to infer that at least as of October 31, 2018, Vudu knew Helios had further details regarding Vudu's likely infringement of the claims of the patent application that issued through a continuation as the '830 patent, including claim charts, which Helios would share with Vudu if Vudu entered into an NDA.

122. Based on the above facts, it is reasonable to infer that at least as of October 31, 2018 Vudu knew that, if it entered into an NDA with Helios, it would receive claim charts detailing how Vudu would directly infringe and induce the infringement of the claims of the patent application that issued through a continuation as the '830 patent. It is also reasonable to infer that, by not responding to Vudu's October 31, 2018 communication and by refusing to enter into an NDA with Helios, Vudu was actively avoiding learning about its likely infringement.

123. On or about February 19, 2019, Helios emailed Vudu and reiterated that Helios was still waiting for the results of Vudu's investigation, which Vudu had represented it began almost four months prior. Helios again identified ISO/IEC 23009-1 as the MPEG-DASH standard to which Helios's MPEG-DASH patent portfolio, including the patent application that issued through a continuation as the '830 patent, pertained. Helios also informed Vudu that Helios "confirmed that Vudu utilizes the DASH standard." In support of this point, Helios attached screenshots to the February 19, 2019 email that demonstrated with pictorial evidence Vudu's use of MPEG-DASH in its streaming VOD.

124. In its February 19, 2019 email to Vudu, Helios also repeated its offer to provide "detailed claim charts evidencing that the patents in our portfolios are essential to the DASH . . . standards, as well as other sensitive information, including our licensing terms, but require an NDA (as attached) to be in place first."

125. Based on the above facts, to the extent Vudu did not already know Helios was alleging the patents and applications in its MPEG-DASH patent portfolio were standard-essential to MPEG-DASH, it is reasonable to infer Vudu knew this at least as of Helios's February 19, 2019 email.

126. Based on the above facts, including Vudu's extensive experience with MPEG-DASH through its provision of DASH-enabled streaming VOD on its website and apps, it is reasonable to infer that as of February 19, 2019 Vudu subjectively knew if the application that issued through a continuation as the '830 patent claimed technology that was standard-essential to MPEG-DASH, there was a high likelihood that Vudu's providing and encouraging its customers to stream DASH-enabled VOD, including VOD offered through Vudu's website and

apps, would infringe and induce the infringement of the claims of the '830 patent once those claims issued.

127. On or about February 27, 2019, Vudu responded via email to Helios's multiple communications, and explicitly stated that "Vudu is not interested in receiving any confidential information, and anything you choose to send would be considered nonconfidential."

128. Helios responded the next day, on February 28, 2019, and reiterated that it required an NDA to enter into substantive licensing discussions with Vudu in order to "provide [Vudu] with claim charts, licensing terms, and so forth. . . . Without the NDA, we cannot have any meaningful or substantive discussions to determine whether a license is appropriate, thereby foreclosing the possibility to resolve this matter amicably." Helios offered times it was available to discuss these issues on the phone with Vudu.

129. Helios received no response to its February 28, 2019 communication.

130. Based on the above facts, it is reasonable to infer that at least as of February 27, 2019, Vudu subjectively believed there was a high probability that Vudu's providing and encouraging its customers to stream DASH-enabled VOD, including VOD offered through Vudu's website and apps, would infringe and induce the infringement of the claims of the application that issued through a continuation as the '830 patent once those claims issued. The following facts and inferences, in particular, support this inference: (1) Vudu knew Helios was alleging its MPEG-DASH patent applications were standard-essential to MPEG-DASH, (2) Helios had confirmed Vudu's streaming VOD utilized MPEG-DASH and provided evidence of this confirmation to Vudu via screenshots, and (3) Helios had offered repeatedly to provide confidential claim charts demonstrating how Vudu would directly infringe and induce the direct infringement of Helios's MPEG-DASH patent applications (including the application that issued

through a continuation as the '830 patent) and how Helios's patents and patent applications were standard essential to MPEG-DASH.

131. Based on the above facts, it is also reasonable to infer at least as of February 27, 2019 that Vudu's refusal to honor the confidentiality of Helios's offered claim charts was a deliberate act calculated to avoid learning the details of Vudu's infringement of Helios's MPEG-DASH patents and soon-to-issue claims from Helios's MPEG-DASH patent applications, including the application that issued through a continuation as the '830 patent.

132. On March 6, 2019, Helios emailed Vudu to request that Vudu respond and enter into an NDA by March 15, 2019.

133. Helios received no response to its March 6, 2019 email and was not otherwise contacted by Vudu between February 27, 2019 and Helios's filing the Original Complaint in this lawsuit.

134. On April 23, 2019, the '830 patent issued.

135. At least as of April 23, 2019, Vudu should have had knowledge of the '830 patent and knowledge of how Vudu was infringing and inducing infringement of the '830 patent. Since at least approximately August 23, 2018, however, Vudu consistently and deliberately acted to avoid learning of its likely infringement and induced infringement of the claims in the application that issued through a continuation as the '830 patent, despite Vudu's subjective belief that there was a high probability that its providing and causing to be used DASH-enabled streaming VOD would infringe and induce the infringement of the claims that issued in the '830 patent.

136. On information and belief, the Accused Instrumentalities have and continue to be used, marketed, provided to, and/or used by or for each of Defendant's partners, clients, customers, and end users across the country and in this District.

137. Upon information and belief, Vudu has induced and continues to induce others to infringe at least claims 1, 5, 6, 15, and 18 of the '830 patent under 35 U.S.C. § 271(b) by, among other things, and with specific intent or willful blindness, actively aiding and abetting others to infringe, including but not limited to Vudu's partners and customers, whose use of the Accused Instrumentalities constitutes direct infringement of at least claims 1, 5, 6, 15, and 18 of the '830 patent. Vudu has induced and continues to induce others to infringe at least claims 1, 5, 6, 15, and 18 of the '830 patent since at least the April 23, 2019 issue date of the '830 patent; or, if not then, since at least the time of receiving the Original Complaint in this matter and Exhibit 4 thereto, which, in combination with Vudu's extensive knowledge of and experience with MPEG-DASH and Vudu's knowledge of how it was encouraging its partners, customers, and users to stream its DASH-enabled VOD and the parties' pre-suit communications regarding the patents and Vudu's website and apps, detailed how Vudu directly infringed and induced the direct infringement of the asserted claims of the '830 patent.

138. In particular, Vudu's actions that aid and abet others such as their partners and customers to infringe include knowingly providing the Accused Instrumentalities with materials and/or services that encourage infringing use of the Accused Instrumentalities, including icons, instructions, or statements that actively encourage their partners' or customers' infringing use of the Accused Instrumentalities.

139. For example, Vudu has and continues to knowingly and strategically place one-click "Watch" or "Watch Free" buttons with its DASH-enabled VOD content to encourage its

customers to stream Vudu’s DASH-enabled VOD content, knowing that such streaming constitutes infringement of the ’830 patent by the customers. (Ex. 4 at 2, 12, and 22.) The claimed methods of claims 1, 5, 6, 15, and 18 of the ’830 patent are necessarily performed by the customer’s terminal upon the customer’s clicking the “Watch” or “Watch Free” buttons (*id.* at 2, 12-22), and this constitutes direct infringement as set forth in Exhibit 4.

140. As a further example, Vudu has and continues to actively and knowingly encourage infringement of the ’830 patent by, in addition to continuing to provide the “Watch” and “Watch Free” buttons mentioned above, instructing users of Roku streaming devices, smart TVs, PC and Mac devices, Chromecast devices, Android devices, iOS devices, Blu-ray players, Xbox devices, and Windows 10 devices, among others, to stream Vudu’s DASH-enabled VOD:



(<https://www.vudu.com/content/movies/aboutus> (last accessed July 15, 2020).)

141. On information and belief, Vudu has engaged and continues to engage in such actions with specific intent to cause infringement or with willful blindness to the resulting infringement because Vudu has had actual knowledge of or should have had actual knowledge of the ’830 patent and that its acts were inducing infringement of the ’830 patent since at least the

April 23, 2019 issue date of the '830 patent; or, if not then, since at least the time of receiving the Original Complaint in this matter and Exhibit 4 thereto, which, in combination with Vudu's extensive knowledge of and experience with MPEG-DASH and Vudu's knowledge of how it was encouraging its partners, customers, and users to stream its DASH-enabled VOD and the parties' pre-suit communications regarding the patents and Vudu's website and apps, detailed how Vudu directly infringed and induced the direct infringement of the asserted claims of the '830 patent.

142. Alternatively, to the extent Vudu claims it did not have actual knowledge that its acts were inducing the infringement of the '830 patent, Vudu was willfully blind to the fact that its acts were inducing the infringement of the '830 patent.

143. Vudu subjectively believed that there was a high probability that the DASH-enabled streaming VOD offered through Vudu's website and apps were infringing or inducing the infringement of the '830 patent. On information and belief, Vudu had been offering DASH-enabled streaming VOD since at least 2016, and therefore Vudu had extensive knowledge of the MPEG-DASH standard and how its VOD was utilizing MPEG-DASH before being contacted by Helios. Helios identified the application that issued through a continuation as the '830 patent as one of Helios's "U.S. DASH Pending Patent Applications" within its "DASH Patent Portfolio" and clearly and consistently identified MPEG-DASH as the standard to which its MPEG-DASH patent applications pertained since at least approximately August 23, 2018. Helios explicitly stated that its MPEG-DASH patents and applications were essential to MPEG-DASH and provided proof that it knew Vudu was utilizing the MPEG-DASH standard in providing streaming VOD via its website and apps. And Vudu knew that if a patent was standard-essential

to MPEG-DASH, that patent was necessarily being infringed by streaming VOD utilizing MPEG-DASH.

144. Despite the facts set forth in paragraph 143 above, Vudu actively and deliberately avoided learning the details of its infringement and/or induced infringement of the '830 patent. Vudu informed Helios that Vudu was investigating Helios's MPEG-DASH patents and applications, but this was a deliberate attempt to mislead Helios. When confronted with additional information and evidence that its DASH-enabled streaming VOD was infringing Helios's MPEG-DASH patents, and presented with the opportunity to review more detailed confidential information regarding Vudu's infringement, Vudu stated that "Vudu is not interested in receiving any confidential information" and then cut off all further communication to avoid learning of its infringement.

145. On information and belief, based on the facts and inferences set forth in paragraphs 89-144 above, Vudu's infringement has been and continues to be willful.

146. Plaintiffs have been harmed by Vudu's infringing activities.

COUNT III – INFRINGEMENT OF U.S. PATENT NO. 10,277,660

147. The allegations set forth in the foregoing paragraphs 1 through 146 are incorporated into this Third Claim for Relief.

148. On April 30, 2019, the '660 patent was duly and legally issued by the United States Patent and Trademark Office under the title "Apparatus and Method for Providing Streaming Content." A true and correct copy of the '660 patent is attached as Exhibit 5.

149. Ideahub is the assignee and owner of the right, title, and interest in and to the '660 patent.

150. Helios holds the exclusive right to assert all causes of action arising under the '660 patent and the right to collect any remedies for infringement of it.

151. Upon information and belief, Vudu has and continues to directly infringe at least claims 1, 2, 3, 4, 8, 10, 20, and 21 and to induce the direct infringement of at least claims 11, 12, 13, 14, and 18 of the '660 patent by selling, offering to sell, making, using, and/or providing and causing to be used streaming media content in accordance with the MPEG-DASH standard (the "Accused Instrumentalities"), including one or more videos on demand ("VOD") such as those available at <https://www.vudu.com/content/movies/home>, as set forth in detail in the preliminary and exemplary claim chart attached as Exhibit 6.

152. Upon information and belief, the Accused Instrumentalities perform methods for providing a media content performed by a server or multiple servers, comprising: receiving, from a client, a Uniform Resource Locator (URL) request for a segment of the media content based on metadata of the media content, wherein the metadata comprises multiple BaseURL elements and wherein identical segments are accessible at locations indicated by URLs resolved with respect to the multiple BaseURL elements; and sending the requested segment of the media content to the client, wherein the URL of the requested segment is generated based on a selected BaseURL element among the multiple BaseURL elements.

153. Upon information and belief, the Accused Instrumentalities perform methods of providing a media content performed by a client, comprising: transmitting to a server, a request for a segment of the media content based on a metadata, wherein the metadata comprises multiple BaseURL elements and wherein identical segments are accessible at locations indicated by URLs resolved with respect to the multiple BaseURL elements; and receiving the requested segment of the media content from the server, wherein the URL of the requested segment is generated based on a selected BaseURL element among the multiple BaseURL elements.

154. On information and belief, the Accused Instrumentalities have been used to infringe and continue to directly infringe at least claims 1, 2, 3, 4, 8, 10, 11, 12, 13, 14, 18, 20, and 21 of the '660 patent during the pendency of the '660 patent.

155. Since at least the time of receiving the Original Complaint, Vudu has had actual notice that it is directly infringing and/or inducing others to infringe the '660 patent.

156. On or about August 23, 2018, Helios sent Vudu a notice letter (“Notice Letter”) addressed to Ms. Jamie Elizabeth Chung, General Counsel for Walmart. Upon information and belief, as of approximately August 23, 2018, Walmart was the parent company of Vudu, and Ms. Chung had authority to discuss Helios’s proposal on Vudu’s behalf.

157. On information and belief, Vudu began offering streaming VOD using MPEG-DASH more than two years before receiving the Notice Letter. (*See, e.g.*, <https://castlabs.com/news/vudu-android-app-castlabs-technology/>, Mar. 11, 2016 (last accessed July 15, 2020).) It is therefore reasonable to infer that Vudu had intimate knowledge of MPEG-DASH and how Vudu’s streaming VOD complied with MPEG-DASH before receiving the Notice Letter. On information and belief, and also reasonably inferred, Vudu was aware that there were patents essential to the MPEG-DASH standard, as is common with respect to standard-setting organizations and efforts.

158. The Notice Letter identified Helios as “the worldwide exclusive licensee of patents and patent applications relating to [MPEG-DASH] that were researched and developed by [ETRI],” and noted that “ETRI was a key contributor to the development of [MPEG-DASH], which later led to its adoption as the first international standard for adaptive streaming technology.”

159. The Notice Letter specifically identified ISO/IEC 23009-1 as the relevant MPEG-DASH standard for the Asserted Patents, and as the MPEG-DASH standard utilized by Vudu in its streaming VOD offerings.

160. The Notice Letter identified Vudu's website, "https://www.vudu.com/," and "apps on various types of electronic devices" as reasons Vudu "would benefit from a license under the DASH patent portfolio." Because Vudu's primary offering to consumers is a streaming service, and because its web site and apps are the platforms on which the streaming service is offered, it is reasonable to infer that Vudu understood that the act of offering such services not only necessitated Vudu's own infringement, but also infringement by its customers.

161. Based on the facts set forth above, it is reasonable to infer that Vudu knew the reason Helios suggested Vudu "would benefit from a license under the DASH patent portfolio" is that Vudu's website and apps provided DASH-enabled streaming VOD, and Helios was alleging its DASH patents and applications claimed this technology.

162. Helios attached to the Notice Letter a listing of the patents and patent applications comprising Helios's MPEG-DASH portfolio including, under the heading "U.S. DASH Patent Portfolio," a table titled "U.S. DASH Pending Patent Applications," which explicitly identified U.S. Patent Application No. 16/036,703 that issued through a continuation as the '660 patent, among eight other U.S. patent applications. Five of the eight "U.S. DASH Pending Patent Applications" identified in this table issued, directly or through continuation applications, as patents asserted in this action.

163. In the Notice Letter, Helios also expressed its willingness to offer Vudu "a non-exclusive license of the DASH patent portfolio under fair and reasonable terms." And, "to encourage open and frank discussions and to allow [Helios] to provide further information as to

the reasons Walmart would benefit under a license of the DASH portfolio,” Helios enclosed a non-disclosure agreement (“NDA”) with the Notice Letter.

164. It is commonly understood in the technology industry, and reasonable to infer that Vudu knew, that a reference to “fair and reasonable terms” relates to so-called FRAND commitments commonly made by contributors of patented technology to standards-setting organizations. This presents another basis for inferring that Vudu understood that Helios was alleging that Vudu’s use of MPEG-DASH technology necessarily infringed Helios’s patents.

165. Based on the facts set forth above, it is reasonable to infer that as of approximately August 23, 2018, Vudu had knowledge of the patent application that through a continuation issued as the ’660 patent, Vudu had knowledge that Helios was alleging that the application that issued through a continuation as the ’660 patent claimed technology that was standard-essential for MPEG-DASH, and that Vudu subjectively knew that if the application that issued through a continuation as the ’660 patent claimed technology that was standard-essential to MPEG-DASH, there was a high likelihood that Vudu’s providing and encouraging its customers to stream DASH-enabled VOD, including VOD offered through Vudu’s website and apps, would infringe and induce the infringement of the claims of the ’660 patent once those claims issued.

166. Based on the facts set forth above, it is also reasonable to infer that as of approximately August 23, 2018, Vudu knew Helios had further details regarding Vudu’s likely infringement and regarding the standard essentiality of Helios’s MPEG-DASH patents and applications, which Helios would share with Vudu if Vudu entered into an NDA.

167. Based on the facts set forth above, it is also reasonable to infer that as of approximately August 23, 2018, Vudu knew Helios was willing to offer Vudu a license to

Helios's MPEG-DASH patent portfolio on allegedly "fair and reasonable terms," consistent with the licensing of standard-essential patents.

168. On or about September 11, 2018, Helios emailed Vudu and requested confirmation of receipt of Helios's August 23, 2018 letter. Helios further offered to discuss the Notice Letter and reattached the Notice Letter and NDA for Vudu's review.

169. Helios received no reply to its September 11, 2018 email.

170. On or about September 20, 2018, Helios again emailed Vudu and requested confirmation of receipt of Helios's August 23, 2018 letter. Helios again offered to discuss the Notice Letter. Helios further inquired as to whether there was a better point of contact than Ms. Chung with whom Helios could discuss a potential Vudu license to Helios's MPEG-DASH portfolio.

171. On or about October 2, 2018, Mr. Emil Kim of Helios called Ms. Chung and left a voicemail message inquiring whether Vudu had received the Notice Letter and the status of Vudu's investigation.

172. On or about October 12, 2018, Vudu responded with a one-sentence email attaching a letter from Diana Luo, Senior Associate General Counsel of Walmart. Ms. Luo's letter confirmed receipt of the Notice Letter, asked that Helios "[p]lease direct all further communications on this matter to me going forward," and stated Vudu "will investigate the matter and respond in due course."

173. Based on the above facts, it is reasonable to infer that as of at least October 12, 2018 Vudu was investigating the allegations and information in the Notice Letter, including the claims of the U.S. MPEG-DASH patent applications identified in the Notice Letter (including the patent application that issued through a continuation as the '660 patent) and whether Vudu's

provision of DASH-enabled streaming VOD via its website and apps would infringe and induce the infringement of the claims of those MPEG-DASH patent applications once they issued.

174. Based on Ms. Luo's October 12, 2018 letter, it is also reasonable to infer that Helios had been contacting the correct entity since approximately August 23, 2018 regarding Vudu taking a license to Helios's MPEG-DASH patent portfolio, including the patent application that issued through a continuation as the '660 patent.

175. On or about October 15, 2018, Helios responded via email to Vudu's October 12, 2018 letter. In its response, Helios again inquired as to the status of the NDA and reiterated that Helios would "be able to provide more details on the license" once the NDA was executed.

176. Helios received no reply to its October 15, 2018 email.

177. On or about October 31, 2018, Helios wrote again to Vudu to inquire about Vudu's investigation. Helios repeated its request that Vudu enter into an NDA with Helios. Helios wrote that "[a]s soon as the NDA is in place, [Helios] can provide more details, including claim charts" to Vudu regarding Vudu's alleged infringement.

178. Helios received no reply to its October 31, 2018 email.

179. Based on the above facts, it is reasonable to infer that at least as of October 31, 2018, Vudu knew Helios had further details regarding Vudu's likely infringement of the claims of the patent application that issued through a continuation as the '660 patent, including claim charts, which Helios would share with Vudu if Vudu entered into an NDA.

180. Based on the above facts, it is reasonable to infer that at least as of October 31, 2018 Vudu knew that, if it entered into an NDA with Helios, it would receive claim charts detailing how Vudu would directly infringe and induce the infringement of the claims of the patent application that issued through a continuation as the '660 patent. It is also reasonable to

infer that, by not responding to Vudu's October 31, 2018 communication and by refusing to enter into an NDA with Helios, Vudu was actively avoiding learning about its likely infringement.

181. On or about February 19, 2019, Helios emailed Vudu and reiterated that Helios was still waiting for the results of Vudu's investigation, which Vudu had represented it began almost four months prior. Helios again identified ISO/IEC 23009-1 as the MPEG-DASH standard to which Helios's MPEG-DASH patent portfolio, including the patent application that issued through a continuation as the '660 patent, pertained. Helios also informed Vudu that Helios "confirmed that Vudu utilizes the DASH standard." In support of this point, Helios attached screenshots to the February 19, 2019 email that demonstrated with pictorial evidence Vudu's use of MPEG-DASH in its streaming VOD.

182. In its February 19, 2019 email to Vudu, Helios also repeated its offer to provide "detailed claim charts evidencing that the patents in our portfolios are essential to the DASH . . . standards, as well as other sensitive information, including our licensing terms, but require an NDA (as attached) to be in place first."

183. Based on the above facts, to the extent Vudu did not already know Helios was alleging the patents and applications in its MPEG-DASH patent portfolio were standard-essential to MPEG-DASH, it is reasonable to infer Vudu knew this at least as of Helios's February 19, 2019 email.

184. Based on the above facts, including Vudu's extensive experience with MPEG-DASH through its provision of DASH-enabled streaming VOD on its website and apps, it is reasonable to infer that as of February 19, 2019 Vudu subjectively knew if the application that issued through a continuation as the '660 patent claimed technology that was standard-essential

to MPEG-DASH, there was a high likelihood that Vudu's providing and encouraging its customers to stream DASH-enabled VOD, including VOD offered through Vudu's website and apps, would infringe and induce the infringement of the claims of the '660 patent once those claims issued.

185. On or about February 27, 2019, Vudu responded via email to Helios's multiple communications, and explicitly stated that "Vudu is not interested in receiving any confidential information, and anything you choose to send would be considered nonconfidential."

186. Helios responded the next day, on February 28, 2019, and reiterated that it required an NDA to enter into substantive licensing discussions with Vudu in order to "provide [Vudu] with claim charts, licensing terms, and so forth. . . . Without the NDA, we cannot have any meaningful or substantive discussions to determine whether a license is appropriate, thereby foreclosing the possibility to resolve this matter amicably." Helios offered times it was available to discuss these issues on the phone with Vudu.

187. Helios received no response to its February 28, 2019 communication.

188. Based on the above facts, it is reasonable to infer that at least as of February 27, 2019, Vudu subjectively believed there was a high probability that Vudu's providing and encouraging its customers to stream DASH-enabled VOD, including VOD offered through Vudu's website and apps, would infringe and induce the infringement of the claims of the application that issued through a continuation as the '660 patent once those claims issued. The following facts and inferences, in particular, support this inference: (1) Vudu knew Helios was alleging its MPEG-DASH patent applications were standard-essential to MPEG-DASH, (2) Helios had confirmed Vudu's streaming VOD utilized MPEG-DASH and provided evidence of this confirmation to Vudu via screenshots, and (3) Helios had offered repeatedly to provide

confidential claim charts demonstrating how Vudu would directly infringe and induce the direct infringement of Helios's MPEG-DASH patent applications (including the application that issued through a continuation as the '660 patent) and how Helios's patents and patent applications were standard essential to MPEG-DASH.

189. Based on the above facts, it is also reasonable to infer at least as of February 27, 2019 that Vudu's refusal to honor the confidentiality of Helios's offered claim charts was a deliberate act calculated to avoid learning the details of Vudu's infringement of Helios's MPEG-DASH patents and soon-to-issue claims from Helios's MPEG-DASH patent applications, including the application that issued through a continuation as the '660 patent.

190. On March 6, 2019, Helios emailed Vudu to request that Vudu respond and enter into an NDA by March 15, 2019.

191. Helios received no response to its March 6, 2019 email and was not otherwise contacted by Vudu between February 27, 2019 and Helios's filing the Original Complaint in this lawsuit.

192. On April 30, 2019, the '660 patent issued.

193. At least as of April 30, 2019, Vudu should have had knowledge of the '660 patent and knowledge of how Vudu was infringing and inducing infringement of the '660 patent. Since at least approximately August 23, 2018, however, Vudu consistently and deliberately acted to avoid learning of its likely infringement and induced infringement of the claims in the application that issued through a continuation as the '660 patent, despite Vudu's subjective belief that there was a high probability that its providing and causing to be used DASH-enabled streaming VOD would infringe and induce the infringement of the claims that issued in the '660 patent.

194. On information and belief, the Accused Instrumentalities have and continue to be used, marketed, provided to, and/or used by or for each of Defendant's partners, clients, customers, and end users across the country and in this District.

195. Upon information and belief, Vudu has induced and continues to induce others to infringe at least claims 11, 12, 13, 14, and 18 of the '660 patent under 35 U.S.C. § 271(b) by, among other things, and with specific intent or willful blindness, actively aiding and abetting others to infringe, including but not limited to Vudu's partners and customers, whose use of the Accused Instrumentalities constitutes direct infringement of at least claims 11, 12, 13, 14, and 18 of the '660 patent. Vudu has induced and continues to induce others to infringe at least claims 11, 12, 13, 14, and 18 of the '660 patent since at least the April 30, 2019 issue date of the '660 patent; or, if not then, since at least the time of receiving the Original Complaint in this matter and Exhibit 6 thereto, which, in combination with Vudu's extensive knowledge of and experience with MPEG-DASH and Vudu's knowledge of how it was encouraging its partners, customers, and users to stream its DASH-enabled VOD and the parties' pre-suit communications regarding the patents and Vudu's website and apps, detailed how Vudu directly infringed and induced the direct infringement of the asserted claims of the '660 patent.

196. In particular, Vudu's actions that aid and abet others such as their partners and customers to infringe include knowingly providing the Accused Instrumentalities with materials and/or services that encourage infringing use of the Accused Instrumentalities, including icons, instructions, or statements that actively encourage their partners' or customers' infringing use of the Accused Instrumentalities.

197. For example, Vudu has and continues to knowingly and strategically place one-click "Watch" or "Watch Free" buttons with its DASH-enabled VOD content to encourage its

customers to stream Vudu’s DASH-enabled VOD content, knowing that such streaming constitutes infringement of the ’660 patent by the customers. (Ex. 6 at 2, 10, 17, and 21.) The claimed methods of claims 11, 12, 13, 14, and 18 of the ’660 patent are necessarily performed by the customer’s terminal upon the customer’s clicking the “Watch” or “Watch Free” buttons (*id.* at 2, 10, 17, and 21), and this constitutes direct infringement as set forth in Exhibit 6.

198. As a further example, Vudu has and continues to actively and knowingly encourage infringement of the ’660 patent by, in addition to continuing to provide the “Watch” and “Watch Free” buttons mentioned above, instructing users of Roku streaming devices, smart TVs, PC and Mac devices, Chromecast devices, Android devices, iOS devices, Blu-ray players, Xbox devices, and Windows 10 devices, among others, to stream Vudu’s DASH-enabled VOD:



(<https://www.vudu.com/content/movies/aboutus> (last accessed July 15, 2020).)

199. On information and belief, Vudu has engaged and continues to engage in such actions with specific intent to cause infringement or with willful blindness to the resulting infringement because Vudu has had actual knowledge of or should have had actual knowledge of the ’660 patent and that its acts were inducing infringement of the ’660 patent since at least the

April 30, 2019 issue date of the '660 patent; or, if not then, since at least the time of receiving the Original Complaint in this matter and Exhibit 6 thereto, which, in combination with Vudu's extensive knowledge of and experience with MPEG-DASH and Vudu's knowledge of how it was encouraging its partners, customers, and users to stream its DASH-enabled VOD and the parties' pre-suit communications regarding the patents and Vudu's website and apps, detailed how Vudu directly infringed and induced the direct infringement of the asserted claims of the '660 patent.

200. Alternatively, to the extent Vudu claims it did not have actual knowledge that its acts were inducing the infringement of the '660 patent, Vudu was willfully blind to the fact that its acts were inducing the infringement of the '660 patent.

201. Vudu subjectively believed that there was a high probability that the DASH-enabled streaming VOD offered through Vudu's website and apps were infringing or inducing the infringement of the '660 patent. On information and belief, Vudu had been offering DASH-enabled streaming VOD since at least 2016, and therefore Vudu had extensive knowledge of the MPEG-DASH standard and how its VOD was utilizing MPEG-DASH before being contacted by Helios. Helios identified the application that issued through a continuation as the '660 patent as one of Helios's "U.S. DASH Pending Patent Applications" within its "DASH Patent Portfolio" and clearly and consistently identified MPEG-DASH as the standard to which its MPEG-DASH patent applications pertained since at least approximately August 23, 2018. Helios explicitly stated that its MPEG-DASH patents and applications were essential to MPEG-DASH and provided proof that it knew Vudu was utilizing the MPEG-DASH standard in providing streaming VOD via its website and apps. And Vudu knew that if a patent was standard-essential

to MPEG-DASH, that patent was necessarily being infringed by streaming VOD utilizing MPEG-DASH.

202. Despite the facts set forth in paragraph 201 above, Vudu actively and deliberately avoided learning the details of its infringement and/or induced infringement of the '660 patent. Vudu informed Helios that Vudu was investigating Helios's MPEG-DASH patents and applications, but this was a deliberate attempt to mislead Helios. When confronted with additional information and evidence that its DASH-enabled streaming VOD was infringing Helios's MPEG-DASH patents, and presented with the opportunity to review more detailed confidential information regarding Vudu's infringement, Vudu stated that "Vudu is not interested in receiving any confidential information" and then cut off all further communication to avoid learning of its infringement.

203. On information and belief, based on the facts and inferences set forth in paragraphs 147-202 above, Vudu's infringement has been and continues to be willful.

204. Plaintiffs have been harmed by Vudu's infringing activities.

COUNT IV – INFRINGEMENT OF U.S. PATENT NO. 10,313,414

205. The allegations set forth in the foregoing paragraphs 1 through 204 are incorporated into this Fourth Claim for Relief.

206. On June 4, 2019, the '414 patent was duly and legally issued by the United States Patent and Trademark Office under the title "Apparatus and Method for Providing Streaming Content Using Representations." A true and correct copy of the '414 patent is attached as Exhibit 7.

207. Ideahub is the assignee and owner of the right, title, and interest in and to the '414 patent.

208. Helios holds the exclusive right to assert all causes of action arising under the '414 patent and the right to collect any remedies for infringement of it.

209. Upon information and belief, Vudu has and continues to directly infringe at least claims 11, 12, 17, 18, 19, and 20 and to induce the direct infringement of at least claims 1, 2, 7, 8, 9, and 10 of the '414 patent by selling, offering to sell, making, using, and/or providing and causing to be used streaming media content in accordance with the MPEG-DASH standard (the "Accused Instrumentalities"), including one or more videos on demand ("VOD") such as those available at <https://www.vudu.com/content/movies/home>, as set forth in detail in the preliminary and exemplary claim chart attached as Exhibit 8.

210. Upon information and belief, the Accused Instrumentalities perform methods of providing media content performed by a server or multiple servers, comprising: transmitting a Media Presentation Description (MPD) of a media content to a client; receiving a request, from the client, for a segment of the media content; transmitting the media content to the client, wherein the MPD includes one or more periods, wherein each of the periods includes one or more adaptation sets, wherein each of the adaptation sets includes one or more representations, wherein each of the representations includes one or more segments, wherein the MPD, the period, the adaptation set, the representation or the segments includes one or more attributes or elements, and, wherein the adaptation set includes one or more attributes or elements that are common to each of the representations for that adaptation set.

211. Upon information and belief, the Accused Instrumentalities perform methods of providing media content performed by a DASH (Dynamic Adaptive Streaming over HTTP) client, the method comprising: receiving a Media Presentation Description (MPD) of a media content; and accessing segments of the media content based on information provided by the

MPD, wherein the MPD includes one or more periods, wherein each of the periods includes one or more adaptation sets, wherein each of the adaptation sets includes one or more representations, wherein each of the representations includes one or more segments, wherein the MPD, the period, the adaptation set, the representation, or the segments includes one or more attributes or elements, and wherein the adaptation set includes one or more attributes or elements that are common to each of the representations for that adaptation set.

212. On information and belief, the Accused Instrumentalities have been used to infringe and continue to directly infringe at least claims 1, 2, 7, 8, 9, 10, 11, 12, 17, 18, 19, and 20 of the '414 patent during the pendency of the '414 patent.

213. Since at least the time of receiving the Original Complaint, Vudu has had actual notice that it is directly infringing and/or inducing the infringement of the '414 patent.

214. On or about August 23, 2018, Helios sent Vudu a notice letter ("Notice Letter") addressed to Ms. Jamie Elizabeth Chung, General Counsel for Walmart. Upon information and belief, as of approximately August 23, 2018, Walmart was the parent company of Vudu, and Ms. Chung had authority to discuss Helios's proposal on Vudu's behalf.

215. On information and belief, Vudu began offering streaming VOD using MPEG-DASH more than two years before receiving the Notice Letter. (*See, e.g.*, <https://castlabs.com/news/vudu-android-app-castlabs-technology/>, Mar. 11, 2016 (last accessed July 15, 2020).) It is therefore reasonable to infer that Vudu had intimate knowledge of MPEG-DASH and how Vudu's streaming VOD complied with MPEG-DASH before receiving the Notice Letter. On information and belief, and also reasonably inferred, Vudu was aware that there were patents essential to the MPEG-DASH standard, as is common with respect to standard-setting organizations and efforts.

216. The Notice Letter identified Helios as “the worldwide exclusive licensee of patents and patent applications relating to [MPEG-DASH] that were researched and developed by [ETRI],” and noted that “ETRI was a key contributor to the development of [MPEG-DASH], which later led to its adoption as the first international standard for adaptive streaming technology.”

217. The Notice Letter specifically identified ISO/IEC 23009-1 as the relevant MPEG-DASH standard for the Asserted Patents, and as the MPEG-DASH standard utilized by Vudu in its streaming VOD offerings.

218. The Notice Letter identified Vudu’s website, “<https://www.vudu.com/>,” and “apps on various types of electronic devices” as reasons Vudu “would benefit from a license under the DASH patent portfolio.” Because Vudu’s primary offering to consumers is a streaming service, and because its web site and apps are the platforms on which the streaming service is offered, it is reasonable to infer that Vudu understood that the act of offering such services not only necessitated Vudu’s own infringement, but also infringement by its customers.

219. Based on the facts set forth above, it is reasonable to infer that Vudu knew the reason Helios suggested Vudu “would benefit from a license under the DASH patent portfolio” is that Vudu’s website and apps provided DASH-enabled streaming VOD, and Helios was alleging its DASH patents and applications claimed this technology.

220. Helios attached to the Notice Letter a listing of the patents and patent applications comprising Helios’s MPEG-DASH portfolio including, under the heading “U.S. DASH Patent Portfolio,” a table titled “U.S. DASH Pending Patent Applications,” which explicitly identified U.S. Patent Application No. 15/834,702 that issued through continuations as the ’414 patent, among eight other U.S. patent applications. Five of the eight “U.S. DASH Pending Patent

Applications” identified in this table issued, directly or through continuation applications, as patents asserted in this action.

221. In the Notice Letter, Helios also expressed its willingness to offer Vudu “a non-exclusive license of the DASH patent portfolio under fair and reasonable terms.” And, “to encourage open and frank discussions and to allow [Helios] to provide further information as to the reasons Walmart would benefit under a license of the DASH portfolio,” Helios enclosed a non-disclosure agreement (“NDA”) with the Notice Letter.

222. It is commonly understood in the technology industry, and reasonable to infer that Vudu knew, that a reference to “fair and reasonable terms” relates to so-called FRAND commitments commonly made by contributors of patented technology to standards-setting organizations. This presents another basis for inferring that Vudu understood that Helios was alleging that Vudu’s use of MPEG-DASH technology necessarily infringed Helios’s patents.

223. Based on the facts set forth above, it is reasonable to infer that as of approximately August 23, 2018, Vudu had knowledge of the patent application that issued through continuations as the ’414 patent, Vudu had knowledge that Helios was alleging that the application that issued through continuations as the ’414 patent claimed technology that was standard-essential for MPEG-DASH, and that Vudu subjectively knew that if the application that issued through continuations as the ’414 patent claimed technology that was standard-essential to MPEG-DASH, there was a high likelihood that Vudu’s providing and encouraging its customers to stream DASH-enabled VOD, including VOD offered through Vudu’s website and apps, would infringe and induce the infringement of the claims of the ’414 patent once those claims issued.

224. Based on the facts set forth above, it is also reasonable to infer that as of approximately August 23, 2018, Vudu knew Helios had further details regarding Vudu’s likely

infringement and regarding the standard essentiality of Helios's MPEG-DASH patents and applications, which Helios would share with Vudu if Vudu entered into an NDA.

225. Based on the facts set forth above, it is also reasonable to infer that as of approximately August 23, 2018, Vudu knew Helios was willing to offer Vudu a license to Helios's MPEG-DASH patent portfolio on allegedly "fair and reasonable terms," consistent with the licensing of standard-essential patents.

226. On or about September 11, 2018, Helios emailed Vudu and requested confirmation of receipt of Helios's August 23, 2018 letter. Helios further offered to discuss the Notice Letter and reattached the Notice Letter and NDA for Vudu's review.

227. Helios received no reply to its September 11, 2018 email.

228. On or about September 20, 2018, Helios again emailed Vudu and requested confirmation of receipt of Helios's August 23, 2018 letter. Helios again offered to discuss the Notice Letter. Helios further inquired as to whether there was a better point of contact than Ms. Chung with whom Helios could discuss a potential Vudu license to Helios's MPEG-DASH portfolio.

229. On or about October 2, 2018, Mr. Emil Kim of Helios called Ms. Chung and left a voicemail message inquiring whether Vudu had received the Notice Letter and the status of Vudu's investigation.

230. On or about October 12, 2018, Vudu responded with a one-sentence email attaching a letter from Diana Luo, Senior Associate General Counsel of Walmart. Ms. Luo's letter confirmed receipt of the Notice Letter, asked that Helios "[p]lease direct all further communications on this matter to me going forward," and stated Vudu "will investigate the matter and respond in due course."

231. Based on the above facts, it is reasonable to infer that as of at least October 12, 2018 Vudu was investigating the allegations and information in the Notice Letter, including the claims of the U.S. MPEG-DASH patent applications identified in the Notice Letter (including the patent application that issued through continuations as the '414 patent) and whether Vudu's provision of DASH-enabled streaming VOD via its website and apps would infringe and induce the infringement of the claims of those MPEG-DASH patent applications once they issued.

232. Based on Ms. Luo's October 12, 2018 letter, it is also reasonable to infer that Helios had been contacting the correct entity since approximately August 23, 2018 regarding Vudu taking a license to Helios's MPEG-DASH patent portfolio, including the patent application that issued through continuations as the '414 patent.

233. On or about October 15, 2018, Helios responded via email to Vudu's October 12, 2018 letter. In its response, Helios again inquired as to the status of the NDA and reiterated that Helios would "be able to provide more details on the license" once the NDA was executed.

234. Helios received no reply to its October 15, 2018 email.

235. On or about October 31, 2018, Helios wrote again to Vudu to inquire about Vudu's investigation. Helios repeated its request that Vudu enter into an NDA with Helios. Helios wrote that "[a]s soon as the NDA is in place, [Helios] can provide more details, including claim charts" to Vudu regarding Vudu's alleged infringement.

236. Helios received no reply to its October 31, 2018 email.

237. Based on the above facts, it is reasonable to infer that at least as of October 31, 2018, Vudu knew Helios had further details regarding Vudu's likely infringement of the claims of the patent application that issued through continuations as the '414 patent, including claim charts, which Helios would share with Vudu if Vudu entered into an NDA.

238. Based on the above facts, it is reasonable to infer that at least as of October 31, 2018 Vudu knew that, if it entered into an NDA with Helios, it would receive claim charts detailing how Vudu would directly infringe and induce the infringement of the claims of the patent application that issued through continuations as the '414 patent. It is also reasonable to infer that, by not responding to Vudu's October 31, 2018 communication and by refusing to enter into an NDA with Helios, Vudu was actively avoiding learning about its likely infringement.

239. On or about February 19, 2019, Helios emailed Vudu and reiterated that Helios was still waiting for the results of Vudu's investigation, which Vudu had represented it began almost four months prior. Helios again identified ISO/IEC 23009-1 as the MPEG-DASH standard to which Helios's MPEG-DASH patent portfolio, including the patent application that issued through continuations as the '414 patent, pertained. Helios also informed Vudu that Helios "confirmed that Vudu utilizes the DASH standard." In support of this point, Helios attached screenshots to the February 19, 2019 email that demonstrated with pictorial evidence Vudu's use of MPEG-DASH in its streaming VOD.

240. In its February 19, 2019 email to Vudu, Helios also repeated its offer to provide "detailed claim charts evidencing that the patents in our portfolios are essential to the DASH . . . standards, as well as other sensitive information, including our licensing terms, but require an NDA (as attached) to be in place first."

241. Based on the above facts, to the extent Vudu did not already know Helios was alleging the patents and applications in its MPEG-DASH patent portfolio were standard-essential to MPEG-DASH, it is reasonable to infer Vudu knew this at least as of Helios's February 19, 2019 email.

242. Based on the above facts, including Vudu's extensive experience with MPEG-DASH through its provision of DASH-enabled streaming VOD on its website and apps, it is reasonable to infer that as of February 19, 2019 Vudu subjectively knew if the application that issued through continuations as the '414 patent claimed technology that was standard-essential to MPEG-DASH, there was a high likelihood that Vudu's providing and encouraging its customers to stream DASH-enabled VOD, including VOD offered through Vudu's website and apps, would infringe and induce the infringement of the claims of the '414 patent once those claims issued.

243. On or about February 27, 2019, Vudu responded via email to Helios's multiple communications, and explicitly stated that "Vudu is not interested in receiving any confidential information, and anything you choose to send would be considered nonconfidential."

244. Helios responded the next day, on February 28, 2019, and reiterated that it required an NDA to enter into substantive licensing discussions with Vudu in order to "provide [Vudu] with claim charts, licensing terms, and so forth. . . . Without the NDA, we cannot have any meaningful or substantive discussions to determine whether a license is appropriate, thereby foreclosing the possibility to resolve this matter amicably." Helios offered times it was available to discuss these issues on the phone with Vudu.

245. Helios received no response to its February 28, 2019 communication.

246. Based on the above facts, it is reasonable to infer that at least as of February 27, 2019, Vudu subjectively believed there was a high probability that Vudu's providing and encouraging its customers to stream DASH-enabled VOD, including VOD offered through Vudu's website and apps, would infringe and induce the infringement of the claims of the application that issued through continuations as the '414 patent once those claims issued. The following facts and inferences, in particular, support this inference: (1) Vudu knew Helios was

alleging its MPEG-DASH patent applications were standard-essential to MPEG-DASH, (2) Helios had confirmed Vudu's streaming VOD utilized MPEG-DASH and provided evidence of this confirmation to Vudu via screenshots, and (3) Helios had offered repeatedly to provide confidential claim charts demonstrating how Vudu would directly infringe and induce the direct infringement of Helios's MPEG-DASH patent applications (including the application that issued through continuations as the '414 patent) and how Helios's patents and patent applications were standard essential to MPEG-DASH.

247. Based on the above facts, it is also reasonable to infer at least as of February 27, 2019 that Vudu's refusal to honor the confidentiality of Helios's offered claim charts was a deliberate act calculated to avoid learning the details of Vudu's infringement of Helios's MPEG-DASH patents and soon-to-issue claims from Helios's MPEG-DASH patent applications, including the application that issued through continuations as the '414 patent.

248. On March 6, 2019, Helios emailed Vudu to request that Vudu respond and enter into an NDA by March 15, 2019.

249. Helios received no response to its March 6, 2019 email and was not otherwise contacted by Vudu between February 27, 2019 and Helios's filing the Original Complaint in this lawsuit.

250. On June 4, 2019, the '414 patent issued.

251. At least as of June 4, 2019, Vudu should have had knowledge of the '414 patent and knowledge of how Vudu was infringing and inducing infringement of the '414 patent. Since at least approximately August 23, 2018, however, Vudu consistently and deliberately acted to avoid learning of its likely infringement and induced infringement of the claims in the application that issued through continuations as the '414 patent, despite Vudu's subjective belief

that there was a high probability that its providing and causing to be used DASH-enabled streaming VOD would infringe and induce the infringement of the claims that issued in the '414 patent.

252. On information and belief, the Accused Instrumentalities have and continue to be used, marketed, provided to, and/or used by or for each of Defendant's partners, clients, customers, and end users across the country and in this District.

253. Upon information and belief, Vudu has induced and continues to induce others to infringe at least claims 1, 2, 7, 8, 9, and 10 of the '414 patent under 35 U.S.C. § 271(b) by, among other things, and with specific intent or willful blindness, actively aiding and abetting others to infringe, including but not limited to Vudu's partners and customers, whose use of the Accused Instrumentalities constitutes direct infringement of at least claims 1, 2, 7, 8, 9, and 10 of the '414 patent. Vudu has induced and continues to induce others to infringe at least claims 1, 2, 7, 8, 9, and 10 of the '414 patent since at least the June 4, 2019 issue date of the '414 patent; or, if not then, since at least the time of receiving the Original Complaint in this matter and Exhibit 8 thereto, which, in combination with Vudu's extensive knowledge of and experience with MPEG-DASH and Vudu's knowledge of how it was encouraging its partners, customers, and users to stream its DASH-enabled VOD and the parties' pre-suit communications regarding the patents and Vudu's website and apps, detailed how Vudu directly infringed and induced the direct infringement of the asserted claims of the '414 patent.

254. In particular, Vudu's actions that aid and abet others such as their partners and customers to infringe include knowingly providing the Accused Instrumentalities with materials and/or services that encourage infringing use of the Accused Instrumentalities, including icons,

instructions, or statements that actively encourage their partners' or customers' infringing use of the Accused Instrumentalities.

255. For example, Vudu has and continues to knowingly and strategically place one-click "Watch" or "Watch Free" buttons with its DASH-enabled VOD content to encourage its customers to stream Vudu's DASH-enabled VOD content, knowing that such streaming constitutes infringement of the '414 patent by the customers. (Ex. 8 at 3, 13.) The claimed methods of claims 1, 2, 7, 8, 9, and 10 of the '414 patent are necessarily performed by the customer's terminal upon the customer's clicking the "Watch" or "Watch Free" buttons (*id.* at 3, 13), and this constitutes direct infringement as set forth in Exhibit 8.

256. As a further example, Vudu has and continues to actively and knowingly encourage infringement of the '414 patent by, in addition to continuing to provide the "Watch" and "Watch Free" buttons mentioned above, instructing users of Roku streaming devices, smart TVs, PC and Mac devices, Chromecast devices, Android devices, iOS devices, Blu-ray players, Xbox devices, and Windows 10 devices, among others, to stream Vudu's DASH-enabled VOD:



(<https://www.vudu.com/content/movies/aboutus> (last accessed July 15, 2020).)

257. On information and belief, Vudu has engaged and continues to engage in such actions with specific intent to cause infringement or with willful blindness to the resulting infringement because Vudu has had actual knowledge of or should have had actual knowledge of the '414 patent and that its acts were inducing infringement of the '414 patent since at least the June 4, 2019 issue date of the '414 patent; or, if not then, since at least the time of receiving the Original Complaint in this matter and Exhibit 8 thereto, which, in combination with Vudu's extensive knowledge of and experience with MPEG-DASH and Vudu's knowledge of how it was encouraging its partners, customers, and users to stream its DASH-enabled VOD and the parties' pre-suit communications regarding the patents and Vudu's website and apps, detailed how Vudu directly infringed and induced the direct infringement of the asserted claims of the '414 patent.

258. Alternatively, to the extent Vudu claims it did not have actual knowledge that its acts were inducing the infringement of the '414 patent, Vudu was willfully blind to the fact that its acts were inducing the infringement of the '414 patent.

259. Vudu subjectively believed that there was a high probability that the DASH-enabled streaming VOD offered through Vudu's website and apps were infringing or inducing the infringement of the '414 patent. On information and belief, Vudu had been offering DASH-enabled streaming VOD since at least 2016, and therefore Vudu had extensive knowledge of the MPEG-DASH standard and how its VOD was utilizing MPEG-DASH before being contacted by Helios. Helios identified the application that issued through continuations as the '414 patent as one of Helios's "U.S. DASH Pending Patent Applications" within its "DASH Patent Portfolio" and clearly and consistently identified MPEG-DASH as the standard to which its MPEG-DASH patent applications pertained since at least approximately August 23, 2018. Helios explicitly

stated that its MPEG-DASH patents and applications were essential to MPEG-DASH and provided proof that it knew Vudu was utilizing the MPEG-DASH standard in providing streaming VOD via its website and apps. And Vudu knew that if a patent was standard-essential to MPEG-DASH, that patent was necessarily being infringed by streaming VOD utilizing MPEG-DASH.

260. Despite the facts set forth in paragraph 259 above, Vudu actively and deliberately avoided learning the details of its infringement and/or induced infringement of the '414 patent. Vudu informed Helios that Vudu was investigating Helios's MPEG-DASH patents and applications, but this was a deliberate attempt to mislead Helios. When confronted with additional information and evidence that its DASH-enabled streaming VOD was infringing Helios's MPEG-DASH patents, and presented with the opportunity to review more detailed confidential information regarding Vudu's infringement, Vudu stated that "Vudu is not interested in receiving any confidential information" and then cut off all further communication to avoid learning of its infringement.

261. On information and belief, based on the facts and inferences set forth in paragraphs 205-260 above, Vudu's infringement has been and continues to be willful.

262. Plaintiffs have been harmed by Vudu's infringing activities.

COUNT V – INFRINGEMENT OF U.S. PATENT NO. 10,356,145

263. The allegations set forth in the foregoing paragraphs 1 through 262 are incorporated into this Fifth Claim for Relief.

264. On July 16, 2019, the '145 Patent was duly and legally issued by the United States Patent and Trademark Office under the title "Method and Device for Providing Streaming Content." A true and correct copy of the '145 patent is attached as Exhibit 9.

265. Ideahub is the assignee and owner of the right, title, and interest in and to the '145 patent.

266. Helios holds the exclusive right to assert all causes of action arising under the '145 patent and the right to collect any remedies for infringement of it.

267. Upon information and belief, Vudu has and continues to directly infringe at least claims 1, 2, 11, 12, 13, 14, 15, and 16, and to induce the direct infringement of at least claims 3, 4, 5, 6, 7, 8, 9, and 10 of the '145 patent by selling, offering to sell, making, using, and/or providing and causing to be used streaming media content (the "Accused Instrumentalities"), including one or more videos on demand ("VOD") such as those available at <https://www.vudu.com/content/movies/home>, as set forth in detail in the preliminary and exemplary claim chart attached as Exhibit 10.

268. Upon information and belief, the Accused Instrumentalities perform methods of providing media content performed by a server or multiple servers, comprising: receiving a request for the media content from a client based on a media presentation description (MPD) with respect to the media content; and providing a segment of media content through streaming to the client in response to the request, wherein the MPD includes one or more periods, wherein the period includes one or more groups, wherein the group includes one or more representations, wherein the representation includes one or more segments, wherein the group includes one or more group elements for each of the groups, and wherein a group element provides a summary of values of all representations with a group.

269. Upon information and belief, the Accused Instrumentalities perform methods of providing media content performed by a client, the method comprising: transmitting a request for the media content to a server based on a media presentation description (MPD) with respect to

the media content; and receiving a segment of media content through streaming from the server in response to the request, wherein the MPD includes one or more periods, wherein the period includes one or more groups, wherein the group includes one or more representations, wherein the representation includes one or more segments, wherein the group includes one or more group elements for each of the groups, and wherein a group element provides a summary of values of all representations within a group.

270. On information and belief, the Accused Instrumentalities have been used to infringe and continue to directly infringe at least claims 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, and 16 of the '145 patent during the pendency of the '145 patent.

271. On or about August 23, 2018, Helios sent Vudu a notice letter (“Notice Letter”) addressed to Ms. Jamie Elizabeth Chung, General Counsel for Walmart. Upon information and belief, as of approximately August 23, 2018, Walmart was the parent company of Vudu, and Ms. Chung had authority to discuss Helios’s proposal on Vudu’s behalf.

272. On information and belief, Vudu began offering streaming VOD using MPEG-DASH more than two years before receiving the Notice Letter. (*See, e.g.*, <https://castlabs.com/news/vudu-android-app-castlabs-technology/>, Mar. 11, 2016 (last accessed July 15, 2020).) It is therefore reasonable to infer that Vudu had intimate knowledge of MPEG-DASH and how Vudu’s streaming VOD complied with MPEG-DASH before receiving the Notice Letter. On information and belief, and also reasonably inferred, Vudu was aware that there were patents essential to the MPEG-DASH standard, as is common with respect to standard-setting organizations and efforts.

273. The Notice Letter identified Helios as “the worldwide exclusive licensee of patents and patent applications relating to [MPEG-DASH] that were researched and developed

by [ETRI],” and noted that “ETRI was a key contributor to the development of [MPEG-DASH], which later led to its adoption as the first international standard for adaptive streaming technology.”

274. The Notice Letter specifically identified ISO/IEC 23009-1 as the relevant MPEG-DASH standard for the Asserted Patents, and as the MPEG-DASH standard utilized by Vudu in its streaming VOD offerings.

275. The Notice Letter identified Vudu’s website, “<https://www.vudu.com/>,” and “apps on various types of electronic devices” as reasons Vudu “would benefit from a license under the DASH patent portfolio.” Because Vudu’s primary offering to consumers is a streaming service, and because its web site and apps are the platforms on which the streaming service is offered, it is reasonable to infer that Vudu understood that the act of offering such services not only necessitated Vudu’s own infringement, but also infringement by its customers.

276. Based on the facts set forth above, it is reasonable to infer that Vudu knew the reason Helios suggested Vudu “would benefit from a license under the DASH patent portfolio” is that Vudu’s website and apps provided DASH-enabled streaming VOD, and Helios was alleging its DASH patents and applications claimed this technology.

277. Helios attached to the Notice Letter a listing of the patents and patent applications comprising Helios’s MPEG-DASH portfolio including, under the heading “U.S. DASH Patent Portfolio,” a table titled “U.S. DASH Pending Patent Applications,” which explicitly identified U.S. Patent Application No. 15/785,275 that issued through a continuation as the ’145 patent, among eight other U.S. patent applications. Five of the eight “U.S. DASH Pending Patent Applications” identified in this table issued, directly or through continuation applications, as patents asserted in this action.

278. In the Notice Letter, Helios also expressed its willingness to offer Vudu “a non-exclusive license of the DASH patent portfolio under fair and reasonable terms.” And, “to encourage open and frank discussions and to allow [Helios] to provide further information as to the reasons Walmart would benefit under a license of the DASH portfolio,” Helios enclosed a non-disclosure agreement (“NDA”) with the Notice Letter.

279. It is commonly understood in the technology industry, and reasonable to infer that Vudu knew, that a reference to “fair and reasonable terms” relates to so-called FRAND commitments commonly made by contributors of patented technology to standards-setting organizations. This presents another basis for inferring that Vudu understood that Helios was alleging that Vudu’s use of MPEG-DASH technology necessarily infringed Helios’s patents.

280. Based on the facts set forth above, it is reasonable to infer that as of approximately August 23, 2018, Vudu had knowledge of the patent application that issued through a continuation as the ’145 patent, Vudu had knowledge that Helios was alleging that the application that issued through a continuation as the ’145 patent claimed technology that was standard-essential for MPEG-DASH, and that Vudu subjectively knew that if the application that issued through a continuation as the ’145 patent claimed technology that was standard-essential to MPEG-DASH, there was a high likelihood that Vudu’s providing and encouraging its customers to stream DASH-enabled VOD, including VOD offered through Vudu’s website and apps, would infringe and induce the infringement of the claims of the ’145 patent once those claims issued.

281. Based on the facts set forth above, it is also reasonable to infer that as of approximately August 23, 2018, Vudu knew Helios had further details regarding Vudu’s likely

infringement and regarding the standard essentiality of Helios's MPEG-DASH patents and applications, which Helios would share with Vudu if Vudu entered into an NDA.

282. Based on the facts set forth above, it is also reasonable to infer that as of approximately August 23, 2018, Vudu knew Helios was willing to offer Vudu a license to Helios's MPEG-DASH patent portfolio on allegedly "fair and reasonable terms," consistent with the licensing of standard-essential patents.

283. On or about September 11, 2018, Helios emailed Vudu and requested confirmation of receipt of Helios's August 23, 2018 letter. Helios further offered to discuss the Notice Letter and reattached the Notice Letter and NDA for Vudu's review.

284. Helios received no reply to its September 11, 2018 email.

285. On or about September 20, 2018, Helios again emailed Vudu and requested confirmation of receipt of Helios's August 23, 2018 letter. Helios again offered to discuss the Notice Letter. Helios further inquired as to whether there was a better point of contact than Ms. Chung with whom Helios could discuss a potential Vudu license to Helios's MPEG-DASH portfolio.

286. On or about October 2, 2018, Mr. Emil Kim of Helios called Ms. Chung and left a voicemail message inquiring whether Vudu had received the Notice Letter and the status of Vudu's investigation.

287. On or about October 12, 2018, Vudu responded with a one-sentence email attaching a letter from Diana Luo, Senior Associate General Counsel of Walmart. Ms. Luo's letter confirmed receipt of the Notice Letter, asked that Helios "[p]lease direct all further communications on this matter to me going forward," and stated Vudu "will investigate the matter and respond in due course."

288. Based on the above facts, it is reasonable to infer that as of at least October 12, 2018 Vudu was investigating the allegations and information in the Notice Letter, including the claims of the U.S. MPEG-DASH patent applications identified in the Notice Letter (including the patent application that issued through a continuation as the '145 patent) and whether Vudu's provision of DASH-enabled streaming VOD via its website and apps would infringe and induce the infringement of the claims of those MPEG-DASH patent applications once they issued.

289. Based on Ms. Luo's October 12, 2018 letter, it is also reasonable to infer that Helios had been contacting the correct entity since approximately August 23, 2018 regarding Vudu taking a license to Helios's MPEG-DASH patent portfolio, including the patent application that issued through a continuation as the '145 patent.

290. On or about October 15, 2018, Helios responded via email to Vudu's October 12, 2018 letter. In its response, Helios again inquired as to the status of the NDA and reiterated that Helios would "be able to provide more details on the license" once the NDA was executed.

291. Helios received no reply to its October 15, 2018 email.

292. On or about October 31, 2018, Helios wrote again to Vudu to inquire about Vudu's investigation. Helios repeated its request that Vudu enter into an NDA with Helios. Helios wrote that "[a]s soon as the NDA is in place, [Helios] can provide more details, including claim charts" to Vudu regarding Vudu's alleged infringement.

293. Helios received no reply to its October 31, 2018 email.

294. Based on the above facts, it is reasonable to infer that at least as of October 31, 2018, Vudu knew Helios had further details regarding Vudu's likely infringement of the claims of the patent application that issued through a continuation as the '145 patent, including claim charts, which Helios would share with Vudu if Vudu entered into an NDA.

295. Based on the above facts, it is reasonable to infer that at least as of October 31, 2018 Vudu knew that, if it entered into an NDA with Helios, it would receive claim charts detailing how Vudu would directly infringe and induce the infringement of the claims of the patent application that issued through a continuation as the '145 patent. It is also reasonable to infer that, by not responding to Vudu's October 31, 2018 communication and by refusing to enter into an NDA with Helios, Vudu was actively avoiding learning about its likely infringement.

296. On or about February 19, 2019, Helios emailed Vudu and reiterated that Helios was still waiting for the results of Vudu's investigation, which Vudu had represented it began almost four months prior. Helios again identified ISO/IEC 23009-1 as the MPEG-DASH standard to which Helios's MPEG-DASH patent portfolio, including the patent application that issued through a continuation as the '145 patent, pertained. Helios also informed Vudu that Helios "confirmed that Vudu utilizes the DASH standard." In support of this point, Helios attached screenshots to the February 19, 2019 email that demonstrated with pictorial evidence Vudu's use of MPEG-DASH in its streaming VOD.

297. In its February 19, 2019 email to Vudu, Helios also repeated its offer to provide "detailed claim charts evidencing that the patents in our portfolios are essential to the DASH . . . standards, as well as other sensitive information, including our licensing terms, but require an NDA (as attached) to be in place first."

298. Based on the above facts, to the extent Vudu did not already know Helios was alleging the patents and applications in its MPEG-DASH patent portfolio were standard-essential to MPEG-DASH, it is reasonable to infer Vudu knew this at least as of Helios's February 19, 2019 email.

299. Based on the above facts, including Vudu's extensive experience with MPEG-DASH through its provision of DASH-enabled streaming VOD on its website and apps, it is reasonable to infer that as of February 19, 2019 Vudu subjectively knew if the application that issued through a continuation as the '145 patent claimed technology that was standard-essential to MPEG-DASH, there was a high likelihood that Vudu's providing and encouraging its customers to stream DASH-enabled VOD, including VOD offered through Vudu's website and apps, would infringe and induce the infringement of the claims of the '145 patent once those claims issued.

300. On or about February 27, 2019, Vudu responded via email to Helios's multiple communications, and explicitly stated that "Vudu is not interested in receiving any confidential information, and anything you choose to send would be considered nonconfidential."

301. Helios responded the next day, on February 28, 2019, and reiterated that it required an NDA to enter into substantive licensing discussions with Vudu in order to "provide [Vudu] with claim charts, licensing terms, and so forth. . . . Without the NDA, we cannot have any meaningful or substantive discussions to determine whether a license is appropriate, thereby foreclosing the possibility to resolve this matter amicably." Helios offered times it was available to discuss these issues on the phone with Vudu.

302. Helios received no response to its February 28, 2019 communication.

303. Based on the above facts, it is reasonable to infer that at least as of February 27, 2019, Vudu subjectively believed there was a high probability that Vudu's providing and encouraging its customers to stream DASH-enabled VOD, including VOD offered through Vudu's website and apps, would infringe and induce the infringement of the claims of the application that issued through a continuation as the '145 patent once those claims issued. The

following facts and inferences, in particular, support this inference: (1) Vudu knew Helios was alleging its MPEG-DASH patent applications were standard-essential to MPEG-DASH, (2) Helios had confirmed Vudu's streaming VOD utilized MPEG-DASH and provided evidence of this confirmation to Vudu via screenshots, and (3) Helios had offered repeatedly to provide confidential claim charts demonstrating how Vudu would directly infringe and induce the direct infringement of Helios's MPEG-DASH patent applications (including the application that issued through a continuation as the '145 patent) and how Helios's patents and patent applications were standard essential to MPEG-DASH.

304. Based on the above facts, it is also reasonable to infer at least as of February 27, 2019 that Vudu's refusal to honor the confidentiality of Helios's offered claim charts was a deliberate act calculated to avoid learning the details of Vudu's infringement of Helios's MPEG-DASH patents and soon-to-issue claims from Helios's MPEG-DASH patent applications, including the application that issued through a continuation as the '145 patent.

305. On March 6, 2019, Helios emailed Vudu to request that Vudu respond and enter into an NDA by March 15, 2019.

306. Helios received no response to its March 6, 2019 email and was not otherwise contacted by Vudu between February 27, 2019 and Helios's filing the Original Complaint in this lawsuit.

307. On July 16, 2019, the '145 patent issued.

308. At least as of July 19, 2019, Vudu should have had knowledge of the '145 patent and knowledge of how Vudu was infringing and inducing infringement of the '145 patent. Since at least approximately August 23, 2018, however, Vudu consistently and deliberately acted to avoid learning of its likely infringement and induced infringement of the claims in the

application that issued through a continuation as the '145 patent, despite Vudu's subjective belief that there was a high probability that its providing and causing to be used DASH-enabled streaming VOD would infringe and induce the infringement of the claims that issued in the '145 patent.

309. On information and belief, the Accused Instrumentalities have and continue to be used, marketed, provided to, and/or used by or for each of Defendant's partners, clients, customers, and end users across the country and in this District.

310. Upon information and belief, Vudu has induced and continues to induce others to infringe at least claims 3, 4, 5, 6, 7, 8, 9, and 10 of the '145 patent under 35 U.S.C. § 271(b) by, among other things, and with specific intent or willful blindness, actively aiding and abetting others to infringe, including but not limited to Vudu's partners and customers, whose use of the Accused Instrumentalities constitutes direct infringement of at least claims 3, 4, 5, 6, 7, 8, 9, and 10 of the '145 patent. Vudu has induced and continues to induce others to infringe at least claims 3, 4, 5, 6, 7, 8, 9, and 10 of the '145 patent since at least the July 16, 2019 issue date of the '145 patent; or, if not then, since at least the time of receiving the Original Complaint in this matter and Exhibit 6 thereto, which, in combination with Vudu's extensive knowledge of and experience with MPEG-DASH and Vudu's knowledge of how it was encouraging its partners, customers, and users to stream its DASH-enabled VOD and the parties' pre-suit communications regarding the patents and Vudu's website and apps, detailed how Vudu directly infringed and induced the direct infringement of the asserted claims of the '145 patent.

311. In particular, Vudu's actions that aid and abet others such as their partners and customers to infringe include knowingly providing the Accused Instrumentalities with materials and/or services that encourage infringing use of the Accused Instrumentalities, including icons,

instructions, or statements that actively encourage their partners' or customers' infringing use of the Accused Instrumentalities.

312. For example, Vudu has and continues to knowingly and strategically place one-click "Watch" or "Watch Free" buttons with its DASH-enabled VOD content to encourage its customers to stream Vudu's DASH-enabled VOD content, knowing that such streaming constitutes infringement of the '145 patent by the customers. (Ex. 10 at 2, 16, 30, and 65.) The claimed methods of claims 3, 4, 5, 6, 7, 8, 9, and 10 of the '145 patent are necessarily performed by the customer's terminal upon the customer's clicking the "Watch" or "Watch Free" buttons (*id.* at 2, 16, 30, and 65), and this constitutes direct infringement as set forth in Exhibit 10.

313. As a further example, Vudu has and continues to actively and knowingly encourage infringement of the '145 patent by, in addition to continuing to provide the "Watch" and "Watch Free" buttons mentioned above, instructing users of Roku streaming devices, smart TVs, PC and Mac devices, Chromecast devices, Android devices, iOS devices, Blu-ray players, Xbox devices, and Windows 10 devices, among others, to stream Vudu's DASH-enabled VOD:



(<https://www.vudu.com/content/movies/aboutus> (last accessed July 15, 2020).)

314. On information and belief, Vudu has engaged and continues to engage in such actions with specific intent to cause infringement or with willful blindness to the resulting infringement because Vudu has had actual knowledge of or should have had actual knowledge of the '145 patent and that its acts were inducing infringement of the '145 patent since at least the July 16, 2019 issue date of the '145 patent; or, if not then, since at least the time of receiving the Original Complaint in this matter and Exhibit 10 thereto, which, in combination with Vudu's extensive knowledge of and experience with MPEG-DASH and Vudu's knowledge of how it was encouraging its partners, customers, and users to stream its DASH-enabled VOD and the parties' pre-suit communications regarding the patents and Vudu's website and apps, detailed how Vudu directly infringed and induced the direct infringement of the asserted claims of the '145 patent.

315. Alternatively, to the extent Vudu claims it did not have actual knowledge that its acts were inducing the infringement of the '145 patent, Vudu was willfully blind to the fact that its acts were inducing the infringement of the '145 patent.

316. Vudu subjectively believed that there was a high probability that the DASH-enabled streaming VOD offered through Vudu's website and apps were infringing or inducing the infringement of the '145 patent. On information and belief, Vudu had been offering DASH-enabled streaming VOD since at least 2016, and therefore Vudu had extensive knowledge of the MPEG-DASH standard and how its VOD was utilizing MPEG-DASH before being contacted by Helios. Helios identified the application that issued through a continuation as the '145 patent as one of Helios's "U.S. DASH Pending Patent Applications" within its "DASH Patent Portfolio" and clearly and consistently identified MPEG-DASH as the standard to which its MPEG-DASH patent applications pertained since at least approximately August 23, 2018. Helios explicitly

stated that its MPEG-DASH patents and applications were essential to MPEG-DASH and provided proof that it knew Vudu was utilizing the MPEG-DASH standard in providing streaming VOD via its website and apps. And Vudu knew that if a patent was standard-essential to MPEG-DASH, that patent was necessarily being infringed by streaming VOD utilizing MPEG-DASH.

317. Despite the facts set forth in paragraph 316 above, Vudu actively and deliberately avoided learning the details of its infringement and/or induced infringement of the '145 patent. Vudu informed Helios that Vudu was investigating Helios's MPEG-DASH patents and applications, but this was a deliberate attempt to mislead Helios. When confronted with additional information and evidence that its DASH-enabled streaming VOD was infringing Helios's MPEG-DASH patents, and presented with the opportunity to review more detailed confidential information regarding Vudu's infringement, Vudu stated that "Vudu is not interested in receiving any confidential information" and then cut off all further communication to avoid learning of its infringement.

318. On information and belief, based on the facts and inferences set forth in paragraphs 263-317 above, Vudu's infringement has been and continues to be willful.

319. Plaintiffs have been harmed by Vudu's infringing activities.

COUNT VI – INFRINGEMENT OF U.S. PATENT NO. 10,362,130

320. The allegations set forth in the foregoing paragraphs 1 through 319 are incorporated into this Sixth Claim for Relief.

321. On July 23, 2019, the '130 patent was duly and legally issued by the United States Patent and Trademark Office under the title "Apparatus and Method for Providing Streaming Contents." A true and correct copy of the '130 patent is attached as Exhibit 11.

322. Ideahub is the assignee and owner of the right, title, and interest in and to the '130 patent.

323. Helios holds the exclusive right to assert all causes of action arising under the '130 patent and the right to collect any remedies for infringement of it.

324. Upon information and belief, Vudu has and continues to directly infringe at least claims 1, 2, 4, and 5 of the '130 patent by selling, offering to sell, making, using, and/or providing and causing to be used streaming media content in accordance with the MPEG-DASH standard (the "Accused Instrumentalities"), including one or more videos on demand ("VOD") such as those available at <https://www.vudu.com/content/movies/home>, as set forth in detail in the preliminary and exemplary claim chart attached as Exhibit 12.

325. Upon information and belief, the Accused Instrumentalities perform methods of providing media content performed by a processor in a server, the method comprising: receiving a request for the media content from a client; transmitting the media to the client based on a Media Presentation Description (MPD) of the media content, wherein the MPD comprises one or more periods, wherein the period comprises one or more groups, wherein the group comprises one or more representations, wherein the representation comprises one or more segments, wherein the representation includes bandwidth attribute related to bandwidth for a hypothetical constant bitrate channel in bits per second (bps), wherein the client is assured of having enough data continuously playout after buffering for minbuffertime, when the representation is delivered to the client, wherein the segment includes sub-segments indexed by segment index, wherein the MPD includes at least one of (i) frame rate, or (ii) timescale describing the number of time units in one second.

326. On information and belief, the Accused Instrumentalities have infringed and continue to directly infringe at least claims 1, 2, 4, and 5 of the '130 patent during the pendency of the '130 patent.

327. Since at least the time of receiving the Original Complaint, Vudu has had actual notice that it is directly infringing and/or inducing others to infringe the '130 patent.

328. On information and belief, the Accused Instrumentalities have and continue to be used, marketed, provided to, and/or used by or for each of Defendant's partners, clients, customers, and end users across the country and in this District.

329. On or about August 23, 2018, Helios sent Vudu a notice letter ("Notice Letter") addressed to Ms. Jamie Elizabeth Chung, General Counsel for Walmart. Upon information and belief, as of approximately August 23, 2018, Walmart was the parent company of Vudu, and Ms. Chung had authority to discuss Helios's proposal on Vudu's behalf.

330. On information and belief, Vudu began offering streaming VOD using MPEG-DASH more than two years before receiving the Notice Letter. (*See, e.g.*, <https://castlabs.com/news/vudu-android-app-castlabs-technology/>, Mar. 11, 2016 (last accessed July 15, 2020).) It is therefore reasonable to infer that Vudu had intimate knowledge of MPEG-DASH and how Vudu's streaming VOD complied with MPEG-DASH before receiving the Notice Letter. On information and belief, and also reasonably inferred, Vudu was aware that there were patents essential to the MPEG-DASH standard, as is common with respect to standard-setting organizations and efforts.

331. The Notice Letter identified Helios as "the worldwide exclusive licensee of patents and patent applications relating to [MPEG-DASH] that were researched and developed by [ETRI]," and noted that "ETRI was a key contributor to the development of [MPEG-DASH],

which later led to its adoption as the first international standard for adaptive streaming technology.”

332. The Notice Letter specifically identified ISO/IEC 23009-1 as the relevant MPEG-DASH standard for the Asserted Patents, and as the MPEG-DASH standard utilized by Vudu in its streaming VOD offerings.

333. The Notice Letter identified Vudu’s website, “<https://www.vudu.com/>,” and “apps on various types of electronic devices” as reasons Vudu “would benefit from a license under the DASH patent portfolio.” Because Vudu’s primary offering to consumers is a streaming service, and because its web site and apps are the platforms on which the streaming service is offered, it is reasonable to infer that Vudu understood that the act of offering such services not only necessitated Vudu’s own infringement, but also infringement by its customers.

334. Based on the facts set forth above, it is reasonable to infer that Vudu knew the reason Helios suggested Vudu “would benefit from a license under the DASH patent portfolio” is that Vudu’s website and apps provided DASH-enabled streaming VOD, and Helios was alleging its DASH patents and applications claimed this technology.

335. Helios attached to the Notice Letter a listing of the patents and patent applications comprising Helios’s MPEG-DASH portfolio including, under the heading “U.S. DASH Patent Portfolio,” a table titled “U.S. DASH Pending Patent Applications,” which explicitly identified U.S. Patent Application No. 15/069,443 that issued as the ’130 patent, among eight other U.S. patent applications. Five of the eight “U.S. DASH Pending Patent Applications” identified in this table issued, directly or through continuation applications, as patents asserted in this action.

336. In the Notice Letter, Helios also expressed its willingness to offer Vudu “a non-exclusive license of the DASH patent portfolio under fair and reasonable terms.” And, “to

encourage open and frank discussions and to allow [Helios] to provide further information as to the reasons Walmart would benefit under a license of the DASH portfolio,” Helios enclosed a non-disclosure agreement (“NDA”) with the Notice Letter.

337. It is commonly understood in the technology industry, and reasonable to infer that Vudu knew, that a reference to “fair and reasonable terms” relates to so-called FRAND commitments commonly made by contributors of patented technology to standards-setting organizations. This presents another basis for inferring that Vudu understood that Helios was alleging that Vudu’s use of MPEG-DASH technology necessarily infringed Helios’s patents.

338. Based on the facts set forth above, it is reasonable to infer that as of approximately August 23, 2018, Vudu had knowledge of the patent application that issued as the ’130 patent, Vudu had knowledge that Helios was alleging that the application that issued as the ’130 patent claimed technology that was standard-essential for MPEG-DASH, and that Vudu subjectively knew that if the application that issued as the ’130 patent claimed technology that was standard-essential to MPEG-DASH, there was a high likelihood that Vudu’s Accused Instrumentalities, including VOD offered through Vudu’s website and apps, would infringe claims of the ’130 patent once those claims issued.

339. Based on the facts set forth above, it is also reasonable to infer that as of approximately August 23, 2018, Vudu knew Helios had further details regarding Vudu’s likely infringement and regarding the standard essentiality of Helios’s MPEG-DASH patents and applications, which Helios would share with Vudu if Vudu entered into an NDA.

340. Based on the facts set forth above, it is also reasonable to infer that as of approximately August 23, 2018, Vudu knew Helios was willing to offer Vudu a license to

Helios's MPEG-DASH patent portfolio on allegedly "fair and reasonable terms," consistent with the licensing of standard-essential patents.

341. On or about September 11, 2018, Helios emailed Vudu and requested confirmation of receipt of Helios's August 23, 2018 letter. Helios further offered to discuss the Notice Letter and reattached the Notice Letter and NDA for Vudu's review.

342. Helios received no reply to its September 11, 2018 email.

343. On or about September 20, 2018, Helios again emailed Vudu and requested confirmation of receipt of Helios's August 23, 2018 letter. Helios again offered to discuss the Notice Letter. Helios further inquired as to whether there was a better point of contact than Ms. Chung with whom Helios could discuss a potential Vudu license to Helios's MPEG-DASH portfolio.

344. On or about October 2, 2018, Mr. Emil Kim of Helios called Ms. Chung and left a voicemail message inquiring whether Vudu had received the Notice Letter and the status of Vudu's investigation.

345. On or about October 12, 2018, Vudu responded with a one-sentence email attaching a letter from Diana Luo, Senior Associate General Counsel of Walmart. Ms. Luo's letter confirmed receipt of the Notice Letter, asked that Helios "[p]lease direct all further communications on this matter to me going forward," and stated Vudu "will investigate the matter and respond in due course."

346. Based on the above facts, it is reasonable to infer that as of at least October 12, 2018 Vudu was investigating the allegations and information in the Notice Letter, including the claims of the U.S. MPEG-DASH patent applications identified in the Notice Letter (including the patent application that issued as the '130 patent) and whether Vudu's provision of DASH-

enabled streaming VOD via its website and apps would infringe the claims of those MPEG-DASH patent applications once they issued.

347. Based on Ms. Luo's October 12, 2018 letter, it is also reasonable to infer that Helios had been contacting the correct entity since approximately August 23, 2018 regarding Vudu taking a license to Helios's MPEG-DASH patent portfolio, including the patent application that issued as the '130 patent.

348. On or about October 15, 2018, Helios responded via email to Vudu's October 12, 2018 letter. In its response, Helios again inquired as to the status of the NDA and reiterated that Helios would "be able to provide more details on the license" once the NDA was executed.

349. Helios received no reply to its October 15, 2018 email.

350. On or about October 31, 2018, Helios wrote again to Vudu to inquire about Vudu's investigation. Helios repeated its request that Vudu enter into an NDA with Helios. Helios wrote that "[a]s soon as the NDA is in place, [Helios] can provide more details, including claim charts" to Vudu regarding Vudu's alleged infringement.

351. Helios received no reply to its October 31, 2018 email.

352. Based on the above facts, it is reasonable to infer that at least as of October 31, 2018, Vudu knew Helios had further details regarding Vudu's likely infringement of the claims of the patent application that issued as the '130 patent, including claim charts, which Helios would share with Vudu if Vudu entered into an NDA.

353. Based on the above facts, it is reasonable to infer that at least as of October 31, 2018 Vudu knew that, if it entered into an NDA with Helios, it would receive claim charts detailing how Vudu would directly infringe the claims of the patent application that issued as the '130 patent. It is also reasonable to infer that, by not responding to Vudu's October 31, 2018

communication and by refusing to enter into an NDA with Helios, Vudu was actively avoiding learning about its likely infringement.

354. On or about February 19, 2019, Helios emailed Vudu and reiterated that Helios was still waiting for the results of Vudu's investigation, which Vudu had represented it began almost four months prior. Helios again identified ISO/IEC 23009-1 as the MPEG-DASH standard to which Helios's MPEG-DASH patent portfolio, including the patent application that issued as the '130 patent, pertained. Helios also informed Vudu that Helios "confirmed that Vudu utilizes the DASH standard." In support of this point, Helios attached screenshots to the February 19, 2019 email that demonstrated with pictorial evidence Vudu's use of MPEG-DASH in its streaming VOD.

355. In its February 19, 2019 email to Vudu, Helios also repeated its offer to provide "detailed claim charts evidencing that the patents in our portfolios are essential to the DASH . . . standards, as well as other sensitive information, including our licensing terms, but require an NDA (as attached) to be in place first."

356. Based on the above facts, to the extent Vudu did not already know Helios was alleging the patents and applications in its MPEG-DASH patent portfolio were standard-essential to MPEG-DASH, it is reasonable to infer Vudu knew this at least as of Helios's February 19, 2019 email.

357. Based on the above facts, including Vudu's extensive experience with MPEG-DASH through its provision of DASH-enabled streaming VOD on its website and apps, it is reasonable to infer that as of February 19, 2019 Vudu subjectively knew if the application that issued as the '130 patent claimed technology that was standard-essential to MPEG-DASH, there was a high likelihood that Vudu's Accused Instrumentalities, including VOD offered through

Vudu's website and apps, would infringe and induce the infringement of the claims of the '130 patent once those claims issued.

358. On or about February 27, 2019, Vudu responded via email to Helios's multiple communications, and explicitly stated that "Vudu is not interested in receiving any confidential information, and anything you choose to send would be considered nonconfidential."

359. Helios responded the next day, on February 28, 2019, and reiterated that it required an NDA to enter into substantive licensing discussions with Vudu in order to "provide [Vudu] with claim charts, licensing terms, and so forth. . . . Without the NDA, we cannot have any meaningful or substantive discussions to determine whether a license is appropriate, thereby foreclosing the possibility to resolve this matter amicably." Helios offered times it was available to discuss these issues on the phone with Vudu.

360. Helios received no response to its February 28, 2019 communication.

361. Based on the above facts, it is reasonable to infer that at least as of February 27, 2019, Vudu subjectively believed there was a high probability that Vudu's providing and encouraging its customers to stream DASH-enabled VOD, including VOD offered through Vudu's website and apps, would infringe claims of the application that issued as the '130 patent once those claims issued. The following facts and inferences, in particular, support this inference: (1) Vudu knew Helios was alleging its MPEG-DASH patent applications were standard-essential to MPEG-DASH, (2) Helios had confirmed Vudu's streaming VOD utilized MPEG-DASH and provided evidence of this confirmation to Vudu via screenshots, and (3) Helios had offered repeatedly to provide confidential claim charts demonstrating how Vudu would directly infringe Helios's MPEG-DASH patent applications (including the application that

issued as the '130 patent) and how Helios's patents and patent applications were standard essential to MPEG-DASH.

362. Based on the above facts, it is also reasonable to infer at least as of February 27, 2019, that Vudu's refusal to honor the confidentiality of Helios's offered claim charts was a deliberate act calculated to avoid learning the details of Vudu's infringement of Helios's MPEG-DASH patents and soon-to-issue claims from Helios's MPEG-DASH patent applications, including the application that issued as the '130 patent.

363. On March 6, 2019, Helios emailed Vudu to request that Vudu respond and enter into an NDA by March 15, 2019.

364. Helios received no response to its March 6, 2019 email and was not otherwise contacted by Vudu between February 27, 2019 and Helios's filing the Original Complaint in this lawsuit.

365. On July 23, 2019, the '130 patent issued.

366. At least as of July 23, 2019, Vudu should have had knowledge of the '130 patent and knowledge of how Vudu was infringing the '130 patent. Since at least approximately August 23, 2018, however, Vudu consistently and deliberately acted to avoid learning of its likely infringement of the claims in the application that issued as the '130 patent, despite Vudu's subjective belief that there was a high probability that its providing and causing to be used DASH-enabled streaming VOD would infringe the claims that issued in the '130 patent.

367. On information and belief, based on the facts and inferences set forth in paragraphs 320-366 above, Vudu's infringement has been and continues to be willful.

368. Plaintiffs have been harmed by Vudu's infringing activities.

COUNT VII – INFRINGEMENT OF U.S. PATENT NO. 10,375,373

369. The allegations set forth in the foregoing paragraphs 1 through 368 are incorporated into this Seventh Claim for Relief.

370. On August 6, 2019, the '373 patent was duly and legally issued by the United States Patent and Trademark Office under the title "Method and Apparatus for Encoding Three-Dimensional (3D) Content." A true and correct copy of the '373 patent is attached as Exhibit 13.

371. Ideahub is the assignee and owner of the right, title, and interest in and to the '373 patent.

372. Helios holds the exclusive right to assert all causes of action arising under the '373 patent and the right to collect any remedies for infringement of it.

373. Upon information and belief, Vudu has and continues to directly infringe at least claims 1, 2, 5, 6, 7, 8, 9, 10, 13, 14, 15, and 16, and to induce the direct infringement of at least claims 17, 18, 21, 22, 23, and 24 of the '373 patent by selling, offering to sell, making, using, and/or providing and causing to be used streaming media content in accordance with the MPEG-DASH standard (the "Accused Instrumentalities"), including one or more videos on demand ("VOD") such as those available at <https://www.vudu.com/content/movies/home>, as set forth in detail in the preliminary and exemplary claim chart attached as Exhibit 14.

374. Upon information and belief, the Accused Instrumentalities perform methods of adaptive streaming service performed by a server or multiple servers, the method comprising: receiving a request, from a client, for a segment of a media content based on metadata of the media content, wherein the metadata is a Media Presentation Description (MPD), and wherein the MPD is a description of a media presentation related to the media content; and providing the media content based on the request, wherein the MPD includes at least one period, wherein each period includes at least one adaptation set comprising a media content component, wherein each

adaptation set includes at least one representation, wherein each representation includes at least one segment, and wherein the MPD provides information that enables the client to switch from one representation to another representation to adapt to a network condition.

375. Upon information and belief, the Accused Instrumentalities perform methods of providing adaptive streaming services performed by a client, the methods comprising: transmitting a request, to a server or multiple servers, for a segment of a media content based on metadata of the media content, wherein the metadata is a Media Presentation Description (MPD), and wherein the MPD is a description of a media presentation related to the media content; and receiving the media content, based on the request, from the server or multiple servers, wherein the MPD includes at least one period, wherein each period includes at least one adaptation set comprising a media content component, wherein each adaptation set includes at least one representation, wherein each representation includes at least one segment, and wherein the MPD provides information that enables the client to switch from one representation to another representation to adapt to a network condition.

376. On information and belief, the Accused Instrumentalities have been used to infringe and continue to directly infringe at least claims 1, 2, 5, 6, 7, 8, 9, 10, 13, 14, 15, 16, 17, 18, 21, 22, 23, and 24 of the '373 patent during the pendency of the '373 patent.

377. Since at least the time of receiving the Original Complaint, Vudu has had actual notice that it is directly infringing and/or inducing others to infringe the '373 patent.

378. On or about August 23, 2018, Helios sent Vudu a notice letter ("Notice Letter") addressed to Ms. Jamie Elizabeth Chung, General Counsel for Walmart. Upon information and belief, as of approximately August 23, 2018, Walmart was the parent company of Vudu, and Ms. Chung had authority to discuss Helios's proposal on Vudu's behalf.

379. On information and belief, Vudu began offering streaming VOD using MPEG-DASH more than two years before receiving the Notice Letter. (*See, e.g.*, <https://castlabs.com/news/vudu-android-app-castlabs-technology/>, Mar. 11, 2016 (last accessed July 15, 2020).) It is therefore reasonable to infer that Vudu had intimate knowledge of MPEG-DASH and how Vudu’s streaming VOD complied with MPEG-DASH before receiving the Notice Letter. On information and belief, and also reasonably inferred, Vudu was aware that there were patents essential to the MPEG-DASH standard, as is common with respect to standard-setting organizations and efforts.

380. The Notice Letter identified Helios as “the worldwide exclusive licensee of patents and patent applications relating to [MPEG-DASH] that were researched and developed by [ETRI],” and noted that “ETRI was a key contributor to the development of [MPEG-DASH], which later led to its adoption as the first international standard for adaptive streaming technology.”

381. The Notice Letter specifically identified ISO/IEC 23009-1 as the relevant MPEG-DASH standard for the Asserted Patents, and as the MPEG-DASH standard utilized by Vudu in its streaming VOD offerings.

382. The Notice Letter identified Vudu’s website, “<https://www.vudu.com/>,” and “apps on various types of electronic devices” as reasons Vudu “would benefit from a license under the DASH patent portfolio.” Because Vudu’s primary offering to consumers is a streaming service, and because its web site and apps are the platforms on which the streaming service is offered, it is reasonable to infer that Vudu understood that the act of offering such services not only necessitated Vudu’s own infringement, but also infringement by its customers.

383. Based on the facts set forth above, it is reasonable to infer that Vudu knew the reason Helios suggested Vudu “would benefit from a license under the DASH patent portfolio” is that Vudu’s website and apps provided DASH-enabled streaming VOD, and Helios was alleging its DASH patents and applications claimed this technology.

384. Helios attached to the Notice Letter a listing of the patents and patent applications comprising Helios’s MPEG-DASH portfolio including, under the heading “U.S. DASH Patent Portfolio,” a table titled “U.S. DASH Pending Patent Applications,” which explicitly identified U.S. Patent Application No. 15/977,218 that issued as the ’373 patent, among eight other U.S. patent applications. Five of the eight “U.S. DASH Pending Patent Applications” identified in this table issued, directly or through continuation applications, as patents asserted in this action.

385. In the Notice Letter, Helios also expressed its willingness to offer Vudu “a non-exclusive license of the DASH patent portfolio under fair and reasonable terms.” And, “to encourage open and frank discussions and to allow [Helios] to provide further information as to the reasons Walmart would benefit under a license of the DASH portfolio,” Helios enclosed a non-disclosure agreement (“NDA”) with the Notice Letter.

386. It is commonly understood in the technology industry, and reasonable to infer that Vudu knew, that a reference to “fair and reasonable terms” relates to so-called FRAND commitments commonly made by contributors of patented technology to standards-setting organizations. This presents another basis for inferring that Vudu understood that Helios was alleging that Vudu’s use of MPEG-DASH technology necessarily infringed Helios’s patents.

387. Based on the facts set forth above, it is reasonable to infer that as of approximately August 23, 2018, Vudu had knowledge of the patent application that issued as the ’373 patent, Vudu had knowledge that Helios was alleging that the application that issued as the

'373 patent claimed technology that was standard-essential for MPEG-DASH, and that Vudu subjectively knew that if the application that issued as the '373 patent claimed technology that was standard-essential to MPEG-DASH, there was a high likelihood that Vudu's providing and encouraging its customers to stream DASH-enabled VOD, including VOD offered through Vudu's website and apps, would infringe and induce the infringement of the claims of the '373 patent once those claims issued.

388. Based on the facts set forth above, it is also reasonable to infer that as of approximately August 23, 2018, Vudu knew Helios had further details regarding Vudu's likely infringement and regarding the standard essentiality of Helios's MPEG-DASH patents and applications, which Helios would share with Vudu if Vudu entered into an NDA.

389. Based on the facts set forth above, it is also reasonable to infer that as of approximately August 23, 2018, Vudu knew Helios was willing to offer Vudu a license to Helios's MPEG-DASH patent portfolio on allegedly "fair and reasonable terms," consistent with the licensing of standard-essential patents.

390. On or about September 11, 2018, Helios emailed Vudu and requested confirmation of receipt of Helios's August 23, 2018 letter. Helios further offered to discuss the Notice Letter and reattached the Notice Letter and NDA for Vudu's review.

391. Helios received no reply to its September 11, 2018 email.

392. On or about September 20, 2018, Helios again emailed Vudu and requested confirmation of receipt of Helios's August 23, 2018 letter. Helios again offered to discuss the Notice Letter. Helios further inquired as to whether there was a better point of contact than Ms. Chung with whom Helios could discuss a potential Vudu license to Helios's MPEG-DASH portfolio.

393. On or about October 2, 2018, Mr. Emil Kim of Helios called Ms. Chung and left a voicemail message inquiring whether Vudu had received the Notice Letter and the status of Vudu's investigation.

394. On or about October 12, 2018, Vudu responded with a one-sentence email attaching a letter from Diana Luo, Senior Associate General Counsel of Walmart. Ms. Luo's letter confirmed receipt of the Notice Letter, asked that Helios "[p]lease direct all further communications on this matter to me going forward," and stated Vudu "will investigate the matter and respond in due course."

395. Based on the above facts, it is reasonable to infer that as of at least October 12, 2018 Vudu was investigating the allegations and information in the Notice Letter, including the claims of the U.S. MPEG-DASH patent applications identified in the Notice Letter (including the patent application that issued as the '373 patent) and whether Vudu's provision of DASH-enabled streaming VOD via its website and apps would infringe and induce the infringement of the claims of those MPEG-DASH patent applications once they issued.

396. Based on Ms. Luo's October 12, 2018 letter, it is also reasonable to infer that Helios had been contacting the correct entity since approximately August 23, 2018 regarding Vudu taking a license to Helios's MPEG-DASH patent portfolio, including the patent application that issued as the '373 patent.

397. On or about October 15, 2018, Helios responded via email to Vudu's October 12, 2018 letter. In its response, Helios again inquired as to the status of the NDA and reiterated that Helios would "be able to provide more details on the license" once the NDA was executed.

398. Helios received no reply to its October 15, 2018 email.

399. On or about October 31, 2018, Helios wrote again to Vudu to inquire about Vudu's investigation. Helios repeated its request that Vudu enter into an NDA with Helios. Helios wrote that "[a]s soon as the NDA is in place, [Helios] can provide more details, including claim charts" to Vudu regarding Vudu's alleged infringement.

400. Helios received no reply to its October 31, 2018 email.

401. Based on the above facts, it is reasonable to infer that at least as of October 31, 2018, Vudu knew Helios had further details regarding Vudu's likely infringement of the claims of the patent application that issued as the '373 patent, including claim charts, which Helios would share with Vudu if Vudu entered into an NDA.

402. Based on the above facts, it is reasonable to infer that at least as of October 31, 2018 Vudu knew that, if it entered into an NDA with Helios, it would receive claim charts detailing how Vudu would directly infringe and induce the infringement of the claims of the patent application that issued as the '373 patent. It is also reasonable to infer that, by not responding to Vudu's October 31, 2018 communication and by refusing to enter into an NDA with Helios, Vudu was actively avoiding learning about its likely infringement.

403. On or about February 19, 2019, Helios emailed Vudu and reiterated that Helios was still waiting for the results of Vudu's investigation, which Vudu had represented it began almost four months prior. Helios again identified ISO/IEC 23009-1 as the MPEG-DASH standard to which Helios's MPEG-DASH patent portfolio, including the patent application that issued as the '373 patent, pertained. Helios also informed Vudu that Helios "confirmed that Vudu utilizes the DASH standard." In support of this point, Helios attached screenshots to the February 19, 2019 email that demonstrated with pictorial evidence Vudu's use of MPEG-DASH in its streaming VOD.

404. In its February 19, 2019 email to Vudu, Helios also repeated its offer to provide “detailed claim charts evidencing that the patents in our portfolios are essential to the DASH . . . standards, as well as other sensitive information, including our licensing terms, but require an NDA (as attached) to be in place first.”

405. Based on the above facts, to the extent Vudu did not already know Helios was alleging the patents and applications in its MPEG-DASH patent portfolio were standard-essential to MPEG-DASH, it is reasonable to infer Vudu knew this at least as of Helios’s February 19, 2019 email.

406. Based on the above facts, including Vudu’s extensive experience with MPEG-DASH through its provision of DASH-enabled streaming VOD on its website and apps, it is reasonable to infer that as of February 19, 2019 Vudu subjectively knew if the application that issued as the ’373 patent claimed technology that was standard-essential to MPEG-DASH, there was a high likelihood that Vudu’s providing and encouraging its customers to stream DASH-enabled VOD, including VOD offered through Vudu’s website and apps, would infringe and induce the infringement of the claims of the ’373 patent once those claims issued.

407. On or about February 27, 2019, Vudu responded via email to Helios’s multiple communications, and explicitly stated that “Vudu is not interested in receiving any confidential information, and anything you choose to send would be considered nonconfidential.”

408. Helios responded the next day, on February 28, 2019, and reiterated that it required an NDA to enter into substantive licensing discussions with Vudu in order to “provide [Vudu] with claim charts, licensing terms, and so forth. . . . Without the NDA, we cannot have any meaningful or substantive discussions to determine whether a license is appropriate, thereby

foreclosing the possibility to resolve this matter amicably.” Helios offered times it was available to discuss these issues on the phone with Vudu.

409. Helios received no response to its February 28, 2019 communication.

410. Based on the above facts, it is reasonable to infer that at least as of February 27, 2019, Vudu subjectively believed there was a high probability that Vudu’s providing and encouraging its customers to stream DASH-enabled VOD, including VOD offered through Vudu’s website and apps, would infringe and induce the infringement of the claims of the application that issued as the ’373 patent once those claims issued. The following facts and inferences, in particular, support this inference: (1) Vudu knew Helios was alleging its MPEG-DASH patent applications were standard-essential to MPEG-DASH, (2) Helios had confirmed Vudu’s streaming VOD utilized MPEG-DASH and provided evidence of this confirmation to Vudu via screenshots, and (3) Helios had offered repeatedly to provide confidential claim charts demonstrating how Vudu would directly infringe and induce the direct infringement of Helios’s MPEG-DASH patent applications (including the application that issued as the ’373 patent) and how Helios’s patents and patent applications were standard essential to MPEG-DASH.

411. Based on the above facts, it is also reasonable to infer at least as of February 27, 2019 that Vudu’s refusal to honor the confidentiality of Helios’s offered claim charts was a deliberate act calculated to avoid learning the details of Vudu’s infringement of Helios’s MPEG-DASH patents and soon-to-issue claims from Helios’s MPEG-DASH patent applications, including the application that issued as the ’373 patent.

412. On March 6, 2019, Helios emailed Vudu to request that Vudu respond and enter into an NDA by March 15, 2019.

413. Helios received no response to its March 6, 2019 email and was not otherwise contacted by Vudu between February 27, 2019 and Helios's filing the Original Complaint in this lawsuit.

414. On August 6, 2019, the '373 patent issued.

415. At least as of August 6, 2019, Vudu should have had knowledge of the '373 patent and knowledge of how Vudu was infringing and inducing infringement of the '373 patent. Since at least approximately August 23, 2018, however, Vudu consistently and deliberately acted to avoid learning of its likely infringement and induced infringement of the claims in the application that issued as the '373 patent, despite Vudu's subjective belief that there was a high probability that its providing and causing to be used DASH-enabled streaming VOD would infringe and induce the infringement of the claims that issued in the '373 patent.

416. On information and belief, the Accused Instrumentalities have and continue to be used, marketed, provided to, and/or used by or for each of Defendant's partners, clients, customers, and end users across the country and in this District.

417. Upon information and belief, Vudu has induced and continues to induce others to infringe at least claims 17, 18, 21, 22, 23, and 24 of the '373 patent under 35 U.S.C. § 271(b) by, among other things, and with specific intent or willful blindness, actively aiding and abetting others to infringe, including but not limited to Vudu's partners and customers, whose use of the Accused Instrumentalities constitutes direct infringement of at least claims 17, 18, 21, 22, 23, and 24 of the '373 patent. Vudu has induced and continues to induce others to infringe at least claims 17, 18, 21, 22, 23, and 24 of the '373 patent since at least the August 6, 2019 issue date of the '373 patent; or, if not then, since at least the time of receiving the Original Complaint in this matter and Exhibit 14 thereto, which, in combination with Vudu's extensive knowledge of and

experience with MPEG-DASH and Vudu's knowledge of how it was encouraging its partners, customers, and users to stream its DASH-enabled VOD and the parties' pre-suit communications regarding the patents and Vudu's website and apps, detailed how Vudu directly infringed and induced the direct infringement of the asserted claims of the '373 patent.

418. In particular, Vudu's actions that aid and abet others such as their partners and customers to infringe include knowingly providing the Accused Instrumentalities with materials and/or services that encourage infringing use of the Accused Instrumentalities, including icons, instructions, or statements that actively encourage their partners' or customers' infringing use of the Accused Instrumentalities.

419. For example, Vudu has and continues to knowingly and strategically place one-click "Watch" or "Watch Free" buttons with its DASH-enabled VOD content to encourage its customers to stream Vudu's DASH-enabled VOD content, knowing that such streaming constitutes infringement of the '373 patent by the customers. (Ex. 14 at 2, 16, and 30.) The claimed methods of claims 17, 18, 21, 22, 23, and 24 of the '373 patent are necessarily performed by the customer's terminal upon the customer's clicking the "Watch" or "Watch Free" buttons (*id.* at 2, 16, and 30), and this constitutes direct infringement as set forth in Exhibit 14.

420. As a further example, Vudu has and continues to actively and knowingly encourage infringement of the '373 patent by, in addition to continuing to provide the "Watch" and "Watch Free" buttons mentioned above, instructing users of Roku streaming devices, smart TVs, PC and Mac devices, Chromecast devices, Android devices, iOS devices, Blu-ray players, Xbox devices, and Windows 10 devices, among others, to stream Vudu's DASH-enabled VOD:



(<https://www.vudu.com/content/movies/aboutus> (last accessed July 15, 2020).)

421. On information and belief, Vudu has engaged and continues to engage in such actions with specific intent to cause infringement or with willful blindness to the resulting infringement because Vudu has had actual knowledge of or should have had actual knowledge of the '373 patent and that its acts were inducing infringement of the '373 patent since at least the August 6, 2019 issue date of the '373 patent; or, if not then, since at least the time of receiving the Original Complaint in this matter and Exhibit 14 thereto, which, in combination with Vudu's extensive knowledge of and experience with MPEG-DASH and Vudu's knowledge of how it was encouraging its partners, customers, and users to stream its DASH-enabled VOD and the parties' pre-suit communications regarding the patents and Vudu's website and apps, detailed how Vudu directly infringed and induced the direct infringement of the asserted claims of the '373 patent.

422. Alternatively, to the extent Vudu claims it did not have actual knowledge that its acts were inducing the infringement of the '373 patent, Vudu was willfully blind to the fact that its acts were inducing the infringement of the '373 patent.

423. Vudu subjectively believed that there was a high probability that the DASH-enabled streaming VOD offered through Vudu's website and apps were infringing or inducing the infringement of the '373 patent. On information and belief, Vudu had been offering DASH-enabled streaming VOD since at least 2016, and therefore Vudu had extensive knowledge of the MPEG-DASH standard and how its VOD was utilizing MPEG-DASH before being contacted by Helios. Helios identified the application that issued as the '373 patent as one of Helios's "U.S. DASH Pending Patent Applications" within its "DASH Patent Portfolio" and clearly and consistently identified MPEG-DASH as the standard to which its MPEG-DASH patent applications pertained since at least approximately August 23, 2018. Helios explicitly stated that its MPEG-DASH patents and applications were essential to MPEG-DASH and provided proof that it knew Vudu was utilizing the MPEG-DASH standard in providing streaming VOD via its website and apps. And Vudu knew that if a patent was standard-essential to MPEG-DASH, that patent was necessarily being infringed by streaming VOD utilizing MPEG-DASH.

424. Despite the facts set forth in paragraph 423 above, Vudu actively and deliberately avoided learning the details of its infringement and/or induced infringement of the '373 patent. Vudu informed Helios that Vudu was investigating Helios's MPEG-DASH patents and applications, but this was a deliberate attempt to mislead Helios. When confronted with additional information and evidence that its DASH-enabled streaming VOD was infringing Helios's MPEG-DASH patents, and presented with the opportunity to review more detailed confidential information regarding Vudu's infringement, Vudu stated that "Vudu is not interested in receiving any confidential information" and then cut off all further communication to avoid learning of its infringement.

425. On information and belief, based on the facts and inferences set forth in paragraphs 369-424 above, Vudu's infringement has been and continues to be willful.

426. Plaintiffs have been harmed by Vudu's infringing activities.

COUNT VIII – INFRINGEMENT OF U.S. PATENT NO. 8,645,562

427. The allegations set forth in the foregoing paragraphs 1 through 426 are incorporated into this Eighth Claim for Relief.

428. On February 4, 2014, the '562 patent was duly and legally issued by the United States Patent and Trademark Office under the title "Apparatus and Method for Providing Streaming Content." A true and correct copy of the '562 patent is attached as Exhibit 15.

429. Ideahub is the assignee and owner of the right, title, and interest in and to the '562 patent.

430. Helios holds the exclusive right to assert all causes of action arising under the '562 patent and the right to collect any remedies for infringement of it.

431. Upon information and belief, Vudu has and continues to induce the direct infringement of at least claims 1, 2, 4, 5, 7, and 8 of the '562 patent by selling, offering to sell, making, using, and/or providing and causing to be used streaming media content in accordance with the MPEG-DASH standard (the "Accused Instrumentalities"), including one or more videos on demand ("VOD") such as those available at <https://www.vudu.com/content/movies/home>. The preliminary claim chart attached as Exhibit 16 sets forth an exemplary instance of such direct infringement.

432. Upon information and belief, the Accused Instrumentalities are used to perform methods for providing media, the method comprising: receiving metadata of media, the metadata comprising one or more BaseURL elements; sending a request for a segment of the media using a Uniform Resource Locator (URL) of the segment, the URL being resolved with respect to a

BaseURL element; receiving the segment; and decoding and rendering data of the media that is included in the segment, wherein the request is sent using an HTTP GET method, the BaseURL element specifies one or more common locations for segments, and the segment is one of the segments.

433. On information and belief, the Accused Instrumentalities have been used to infringe and continue to directly infringe at least claims 1, 2, 4, 5, 7, and 8 of the '562 patent during the pendency of the '562 patent.

434. Since at least approximately August 23, 2018, Vudu has had actual notice that it is inducing others to infringe the '562 patent.

435. On or about August 23, 2018, Helios sent Vudu a notice letter addressed to Ms. Jamie Elizabeth Chung, General Counsel for Walmart. Upon information and belief, as of approximately August 23, 2018, Walmart was the parent company of Vudu, and Ms. Chung had authority to discuss Helios's proposal on Vudu's behalf.

436. On information and belief, Vudu began offering streaming VOD using MPEG-DASH more than two years before receiving the Notice Letter. (*See, e.g.*, <https://castlabs.com/news/vudu-android-app-castlabs-technology/>, Mar. 11, 2016 (last accessed July 15, 2020).) It is therefore reasonable to infer that Vudu had intimate knowledge of MPEG-DASH and how Vudu's streaming VOD complied with MPEG-DASH before receiving the Notice Letter. On information and belief, and also reasonably inferred, Vudu was aware that there were patents essential to the MPEG-DASH standard, as is common with respect to standard-setting organizations and efforts.

437. The Notice Letter identified Helios as "the worldwide exclusive licensee of patents and patent applications relating to [MPEG-DASH] that were researched and developed

by [ETRI],” and noted that “ETRI was a key contributor to the development of [MPEG-DASH], which later led to its adoption as the first international standard for adaptive streaming technology.”

438. The Notice Letter specifically identified ISO/IEC 23009-1 as the relevant MPEG-DASH standard for the Asserted Patents, including the ’562 patent, and as the MPEG-DASH standard utilized by Vudu in its streaming VOD offerings.

439. The Notice Letter identified Vudu’s website, “<https://www.vudu.com/>,” and “apps on various types of electronic devices” as reasons Vudu “would benefit from a license under the DASH patent portfolio.” Because Vudu’s primary offering to consumers is a streaming service, and because its web site and apps are the platforms on which the streaming service is offered, it is reasonable to infer that Vudu understood that the act of offering such services not only necessitated Vudu’s own infringement, but also infringement by its customers.

440. Based on the facts set forth above, it is reasonable to infer that Vudu knew the reason Helios suggested Vudu “would benefit from a license under the DASH patent portfolio” is that Vudu’s website and apps provided DASH-enabled streaming VOD, and Helios was alleging its DASH patents were essential to Vudu’s use of this technology.

441. Helios attached to the Notice Letter a listing of the patents and patent applications comprising Helios’s MPEG-DASH portfolio including, under the heading “DASH Patent Portfolio,” a table titled “U.S. DASH Patents,” which explicitly identified the ’562 patent by patent number, among 11 other U.S. patents. Five of the twelve “U.S. DASH Patents” identified in this table are asserted in this action.

442. In the Notice Letter, Helios also expressed its willingness to offer Vudu “a non-exclusive license of the DASH patent portfolio under fair and reasonable terms.” And, “to

encourage open and frank discussions and to allow [Helios] to provide further information as to the reasons Walmart would benefit under a license of the DASH portfolio,” Helios enclosed a non-disclosure agreement (“NDA”) with the Notice Letter.

443. It is commonly understood in the technology industry, and reasonable to infer that Vudu knew, that a reference to “fair and reasonable terms” relates to so-called FRAND commitments commonly made by contributors of patented technology to standards-setting organizations. This presents another basis for inferring that Vudu understood that Helios was alleging that Vudu’s use of MPEG-DASH technology necessarily infringed Helios’s patents.

444. Based on the facts set forth above, it is reasonable to infer that as of approximately August 23, 2018, Vudu had knowledge of the ’562 patent, had knowledge that Helios was alleging that the ’562 patent was standard-essential for MPEG-DASH, and that Vudu subjectively knew that if the ’562 patent was standard-essential to MPEG-DASH, there was a high likelihood that Vudu’s providing and encouraging its customers to stream DASH-enabled VOD, including VOD offered through Vudu’s website and apps, infringed and induced the infringement of the ’562 patent.

445. Based on the facts set forth above, it is also reasonable to infer that as of approximately August 23, 2018, Vudu knew Helios had further details regarding Vudu’s infringement and regarding the standard essentiality of Helios’s MPEG-DASH patents, which Helios would share with Vudu if Vudu entered into an NDA.

446. Based on the facts set forth above, it is also reasonable to infer that as of approximately August 23, 2018, Vudu knew Helios was willing to offer Vudu a license to Helios’s MPEG-DASH patent portfolio, including the ’562 patent, on allegedly “fair and reasonable terms,” consistent with the licensing of standard-essential patents.

447. On or about September 11, 2018, Helios emailed Vudu and requested confirmation of receipt of Helios's August 23, 2018 letter. Helios further offered to discuss the Notice Letter and reattached the Notice Letter and NDA for Vudu's review.

448. Helios received no reply to its September 11, 2018 email.

449. On or about September 20, 2018, Helios again emailed Vudu and requested confirmation of receipt of Helios's August 23, 2018 letter. Helios again offered to discuss the Notice Letter. Helios further inquired as to whether there was a better point of contact than Ms. Chung with whom Helios could discuss a potential Vudu license to Helios's MPEG-DASH portfolio.

450. On or about October 2, 2018, Mr. Emil Kim of Helios called Ms. Chung and left a voicemail message inquiring whether Vudu had received the Notice Letter and the status of Vudu's investigation.

451. On or about October 12, 2018, Vudu responded with a one-sentence email attaching a letter from Diana Luo, Senior Associate General Counsel of Walmart. Ms. Luo's letter confirmed receipt of the Notice Letter, asked that Helios "[p]lease direct all further communications on this matter to me going forward," and stated Vudu "will investigate the matter and respond in due course."

452. Based on the above facts, it is reasonable to infer that as of at least October 12, 2018 Vudu was investigating the allegations and information in the Notice Letter, including the claims of the U.S. MPEG-DASH patents identified in the Notice Letter (including the '562 patent) and whether Vudu's provision of DASH-enabled streaming VOD via its website and apps infringed and induced the infringement of those MPEG-DASH patents, including the '562 patent.

453. Based on the above facts, to the extent it is not reasonable to draw the inferences set forth in paragraphs 439-440 and 443-446 of this First Amended Complaint as of approximately August 23, 2018, it is reasonable to draw the inferences set forth in paragraphs 439-440 and 443-446 of this First Amended Complaint as of at least October 12, 2018.

454. Based on Ms. Luo's October 12, 2018 letter, it is also reasonable to infer that Helios had been contacting the correct entity since approximately August 23, 2018 regarding Vudu taking a license to Helios's MPEG-DASH patent portfolio, including the '562 patent.

455. On or about October 15, 2018, Helios responded via email to Vudu's October 12, 2018 letter. In its response, Helios again inquired as to the status of the NDA and reiterated that Helios would "be able to provide more details on the license" once the NDA was executed.

456. Helios received no reply to its October 15, 2018 email.

457. On or about October 31, 2018, Helios wrote again to Vudu to inquire about Vudu's investigation. Helios repeated its request that Vudu enter into an NDA with Helios. Helios wrote that "[a]s soon as the NDA is in place, [Helios] can provide more details, including claim charts" to Vudu regarding Vudu's alleged infringement.

458. Helios received no reply to its October 31, 2018 email.

459. Based on the above facts, it is reasonable to infer that at least as of October 31, 2018 Vudu knew Helios had further details regarding Vudu's infringement of the '562 patent, which Helios would share with Vudu if Vudu entered into an NDA.

460. Based on the above facts, it is reasonable to infer that at least as of October 31, 2018 Vudu knew that, if it entered into an NDA with Helios, it would receive claim charts detailing how Vudu directly infringed and induced the infringement of the '562 patent. It is also reasonable to infer that, by not responding to Vudu's October 31, 2018 communication and by

refusing to enter into an NDA with Helios, Vudu was actively avoiding learning additional information about its infringement.

461. On or about February 19, 2019, Helios emailed Vudu and reiterated that Helios was still waiting for the results of Vudu's investigation, which Vudu had represented it began almost four months prior. Helios again identified ISO/IEC 23009-1 as the MPEG-DASH standard to which Helios's MPEG-DASH patent portfolio, including the '562 patent, pertained. Helios also informed Vudu that Helios "confirmed that Vudu utilizes the DASH standard." In support of this point, Helios attached screenshots to the February 19, 2019 email that demonstrated with pictorial evidence Vudu's use of MPEG-DASH in its streaming VOD.

462. In its February 19, 2019 email to Vudu, Helios also repeated its offer to provide "detailed claim charts evidencing that the patents in our portfolios are essential to the DASH . . . standards, as well as other sensitive information, including our licensing terms, but require an NDA (as attached) to be in place first."

463. Based on the above facts, it is reasonable to infer that, as of February 19, 2019, Vudu had either been investigating Helios's MPEG-DASH patents for over four months or had affirmatively misled Helios about its investigation of Helios's MPEG-DASH patents to avoid learning the details of how Vudu's DASH-enabled VOD infringed Helios's MPEG-DASH patents, including the '562 patent.

464. Based on the above facts, to the extent Vudu did not already know Helios was alleging the patents in its MPEG-DASH patent portfolio (including the '562 patent) were standard-essential to MPEG-DASH, it is reasonable to infer Vudu knew this at least as of Helios's February 19, 2019 email.

465. Based on the above facts, including Vudu's extensive experience with MPEG-DASH through its provision of DASH-enabled streaming VOD on its website and apps, it is reasonable to infer that as of February 19, 2019 Vudu subjectively knew that if the '562 patent was standard-essential to MPEG-DASH there was a high likelihood that Vudu's providing and encouraging its customers to stream DASH-enabled VOD, including VOD offered through Vudu's website and apps, infringed and induced the infringement of the '562 patent.

466. On or about February 27, 2019, Vudu responded via email to Helios's multiple communications, and confirmed that Vudu had investigated patents identified in the Notice Letter. Vudu also alleged that Helios's identified patents "appear to be assigned to entities other than Helios" and that "it is not clear to us that Helios Streaming has any standing to engage in these discussions." Vudu also explicitly stated that "Vudu is not interested in receiving any confidential information, and anything you choose to send would be considered nonconfidential."

467. Helios responded the next day, on February 28, 2019, stating that "Helios Streaming was granted an exclusive license from the current assignee, Ideahub, with rights to sublicense the DASH patents." To support these statements, Helios attached screenshots from the publicly available U.S. Patent and Trademark Office website to its email response, and these screenshots showed that all 12 MPEG-DASH patents identified in the Notice Letter, including the '562 patent, were assigned to Ideahub and were exclusively licensed to Helios Streaming.

468. Helios also reiterated in its February 28, 2019 email that it required an NDA to enter into substantive licensing discussions with Vudu in order to "provide [Vudu] with claim charts, licensing terms, and so forth. . . . Without the NDA, we cannot have any meaningful or substantive discussions to determine whether a license is appropriate, thereby foreclosing the

possibility to resolve this matter amicably.” Helios offered times it was available to discuss these issues on the phone with Vudu.

469. Helios received no response to its February 28, 2019 communication.

470. Based on the above facts, it is reasonable to infer that at least as of February 27, 2019, Vudu subjectively believed there was a high probability that Vudu’s providing and encouraging its customers to stream DASH-enabled VOD, including VOD offered through Vudu’s website and apps, infringed and induced the infringement of the ’562 patent. The following facts and inferences, in particular, support this inference: (1) Vudu knew Helios was alleging its MPEG-DASH patents (including the ’562 patent) were standard-essential to MPEG-DASH, (2) Helios had confirmed Vudu’s streaming VOD utilized MPEG-DASH and provided evidence of this confirmation to Vudu via screenshots, and (3) Helios had offered repeatedly to provide confidential claim charts demonstrating how Vudu was directly infringing and inducing the direct infringement of Helios’s MPEG-DASH patents (including the ’562 patent) and how Helios’s patents were standard essential to MPEG-DASH.

471. Based on the above facts, it is also reasonable to infer at least as of February 27, 2019 that Vudu’s refusal to honor the confidentiality of Helios’s offered claim charts was a deliberate act calculated to avoid learning the details of Vudu’s infringement of Helios’s MPEG-DASH patents, including the ’562 patent.

472. On March 6, 2019, Helios emailed Vudu to request that Vudu respond and enter into an NDA by March 15, 2019.

473. Helios received no response to its March 6, 2019 email and was not otherwise contacted by Vudu between February 27, 2019 and Helios’s filing the Original Complaint in this lawsuit.

474. On information and belief, the Accused Instrumentalities have and continue to be used, marketed, provided to, and/or used by or for each of Defendant's partners, clients, customers, and end users across the country and in this District.

475. Upon information and belief, Vudu has induced and continues to induce others to infringe at least claims 1, 2, 4, 5, 7, and 8 of the '562 patent under 35 U.S.C. § 271(b) by, among other things, and with specific intent or willful blindness, actively aiding and abetting others to infringe, including but not limited to Vudu's partners and customers, whose use of the Accused Instrumentalities constitutes direct infringement of at least claims 1, 2, 4, 5, 7, and 8 of the '562 patent. Vudu has induced and continues to induce others to infringe at least claims 1, 2, 4, 5, 7, and 8 of the '562 patent since at least receiving the Notice Letter on or about August 23, 2018; or, if not then, since confirming its receipt of the Notice letter and confirming it was investigating Helios's MPEG-DASH patents on or about October 12, 2018; or, if not then, since on or about February 19, 2019, when Helios emailed screenshots showing that Vudu's streaming VOD utilized MPEG-DASH and Helios reiterated that its MPEG-DASH patents were standard-essential to MPEG-DASH; or, if not then, since receiving the Original Complaint in this matter and Exhibit 16 thereto, which, in combination with Vudu's extensive knowledge of and experience with MPEG-DASH and Vudu's knowledge of how it was encouraging its partners, customers, and users to stream its DASH-enabled VOD and the parties' pre-suit communications regarding the patents and Vudu's website and apps, detailed how Vudu directly infringed and induced the direct infringement of the asserted claims of the '562 patent.

476. In particular, Vudu's actions that aid and abet others such as their partners and customers to infringe include knowingly providing the Accused Instrumentalities with materials and/or services that encourage infringing use of the Accused Instrumentalities, including icons,

instructions, or statements that actively encourage their partners' or customers' infringing use of the Accused Instrumentalities.

477. For example, Vudu has and continues to knowingly and strategically place one-click "Watch" or "Watch Free" buttons with its DASH-enabled VOD content to encourage its customers to stream Vudu's DASH-enabled VOD content, knowing that such streaming constitutes infringement of the '562 patent by the customers. (Ex. 16 at 2, 8 and 15.) The claimed methods of claims 1, 2, 4, 5, 7, and 8 of the '562 patent are necessarily performed by the customer's terminal upon the customer's clicking the "Watch" or "Watch Free" buttons (*id.* at 2, 8, and 15), and this constitutes direct infringement as set forth in Exhibit 16.

478. As a further example, Vudu has and continues to actively and knowingly encourage infringement of the '562 patent by, in addition to continuing to provide the "Watch" and "Watch Free" buttons mentioned above, instructing users of Roku streaming devices, smart TVs, PC and Mac devices, Chromecast devices, Android devices, iOS devices, Blu-ray players, Xbox devices, and Windows 10 devices, among others, to stream Vudu's DASH-enabled VOD:



(<https://www.vudu.com/content/movies/aboutus> (last accessed July 15, 2020).)

479. On information and belief, Vudu has engaged and continues to engage in such actions with specific intent specific intent to cause infringement or with willful blindness to the resulting infringement because Vudu has had actual knowledge of or should have had actual knowledge of the '562 patent and that its acts were inducing infringement of the '562 patent since at least the time of receiving the Notice Letter on or about August 23, 2018; or, if not then, since confirming its receipt of the Notice letter and confirming it was investigating Helios's MPEG-DASH patents on or about October 12, 2018; or, if not then, since on or about February 19, 2019, when Helios emailed screenshots showing that Vudu's streaming VOD utilized MPEG-DASH and Helios reiterated that its MPEG-DASH patents were standard-essential to MPEG-DASH; or, if not then, since receiving the Original Complaint in this matter and Exhibit 16 thereto, which, in combination with Vudu's extensive knowledge of and experience with MPEG-DASH and Vudu's knowledge of how it was encouraging its partners, customers, and users to stream its DASH-enabled VOD and the parties' pre-suit communications regarding the patents and Vudu's website and apps, detailed how Vudu directly infringed and induced the direct infringement of the asserted claims of the '562 patent.

480. Alternatively, to the extent Vudu claims it did not have actual knowledge that its acts were inducing the infringement of the '562 patent, Vudu was willfully blind to the fact that its acts were inducing the infringement of the '562 patent.

481. Vudu subjectively believed that there was a high probability that the DASH-enabled streaming VOD offered through Vudu's website and apps were infringing or inducing the infringement of the '562 patent. On information and belief, Vudu had been offering DASH-enabled streaming VOD since at least 2016, and therefore Vudu had extensive knowledge of the MPEG-DASH standard and how its VOD was utilizing MPEG-DASH before being contacted by

Helios. Helios identified the '562 patent as a "U.S. DASH Patent" within its "DASH Patent Portfolio" and clearly and consistently identified MPEG-DASH as the standard to which its MPEG-DASH patents (including the '562 patent) pertained since at least approximately August 23, 2018. Helios explicitly stated that its MPEG-DASH patents were essential to MPEG-DASH and provided proof that it knew Vudu was utilizing the MPEG-DASH standard in providing streaming VOD via its website and apps. And Vudu knew that if a patent was standard-essential to MPEG-DASH, that patent was necessarily being infringed by streaming VOD utilizing MPEG-DASH.

482. Despite the facts set forth in paragraph 481 above, Vudu actively and deliberately avoided learning the details of its induced infringement of the '562 patent. Vudu informed Helios that Vudu was investigating Helios's MPEG-DASH patents, but this was a deliberate attempt to mislead Helios. When confronted with additional information and evidence that its DASH-enabled streaming VOD was infringing Helios's MPEG-DASH patents, and presented with the opportunity to review more detailed confidential information regarding Vudu's infringement, Vudu stated that "Vudu is not interested in receiving any confidential information" and then cut off all further communication to avoid learning of its infringement.

483. On information and belief, based on the facts and inferences set forth in paragraphs 427-482 above, Vudu's infringement has been and continues to be willful.

484. Plaintiffs have been harmed by Vudu's infringing activities.

COUNT IX – INFRINGEMENT OF U.S. Patent No. 8,909,805

485. The allegations set forth in the foregoing paragraphs 1 through 484 are incorporated into this Ninth Claim for Relief.

486. On December 9, 2014, the '805 patent was duly and legally issued by the United States Patent and Trademark Office under the title "Apparatus and Method for Providing Streaming Content." A true and correct copy of the '805 patent is attached as Exhibit 17.

487. Ideahub is the assignee and owner of the right, title, and interest in and to the '805 patent.

488. Helios holds the exclusive right to assert all causes of action arising under the '805 patent and the right to collect any remedies for infringement of it.

489. Upon information and belief, Vudu has and continues to induce the direct infringement of at least claims 1, 2, 3, and 4 of the '805 patent by selling, offering to sell, making, using, and/or providing and causing to be used streaming media content in accordance with the MPEG-DASH standard (the "Accused Instrumentalities"), including one or more videos on demand ("VOD") such as those available at <https://www.vudu.com/content/movies/home>. The preliminary claim chart attached as Exhibit 18 sets forth an exemplary instance of such direct infringement.

490. Upon information and belief, the Accused Instrumentalities are used to perform methods for providing media, the method comprising: receiving metadata of media, the metadata comprising one or more periods; processing the received metadata and extracting information included in the metadata, wherein the metadata includes a range attribute; requesting a segment suitable for a specific interval based on a request for bytes of a resource indicated by a URL that are designated by the range attribute; accessing segments of the media based on information provided by the metadata; decoding and rendering data of the media that is included in the segments; wherein each of the periods comprises one or more representations of the media, wherein each of the representations starts from a beginning point of a period including each of

the representation and continues to an ending point of the period, and comprises one or more segments; and wherein determining the start of a first period among one or more period comprises: when a start attribute exists in the first period element of the first period, a start time of the first period is equivalent to a value of the start attribute, when a start attribute does not exist in the first period element of the first period, and when a second period element of the second period includes a duration attribute, the start time of the first period is obtained by adding a value of the duration attribute of the second period element to a start time of the second period, and when a start attribute does not exist in the first period element of the first period, and when the first period is the first of the one or more periods, the start time of the first period is zero.

491. On information and belief, the Accused Instrumentalities have been used to infringe and continue to directly infringe at least claims 1, 2, 3, and 4 of the '805 patent during the pendency of the '805 patent.

492. Since at least approximately August 23, 2018, Vudu has had actual notice that it is inducing others to infringe the '805 patent.

493. On or about August 23, 2018, Helios sent Vudu a notice letter addressed to Ms. Jamie Elizabeth Chung, General Counsel for Walmart. Upon information and belief, as of approximately August 23, 2018, Walmart was the parent company of Vudu, and Ms. Chung had authority to discuss Helios's proposal on Vudu's behalf.

494. On information and belief, Vudu began offering streaming VOD using MPEG-DASH more than two years before receiving the Notice Letter. (*See, e.g.*, <https://castlabs.com/news/vudu-android-app-castlabs-technology/>, Mar. 11, 2016 (last accessed July 15, 2020).) It is therefore reasonable to infer that Vudu had intimate knowledge of MPEG-DASH and how Vudu's streaming VOD complied with MPEG-DASH before receiving the

Notice Letter. On information and belief, and also reasonably inferred, Vudu was aware that there were patents essential to the MPEG-DASH standard, as is common with respect to standard-setting organizations and efforts.

495. The Notice Letter identified Helios as “the worldwide exclusive licensee of patents and patent applications relating to [MPEG-DASH] that were researched and developed by [ETRI],” and noted that “ETRI was a key contributor to the development of [MPEG-DASH], which later led to its adoption as the first international standard for adaptive streaming technology.”

496. The Notice Letter specifically identified ISO/IEC 23009-1 as the relevant MPEG-DASH standard for the Asserted Patents, including the ’805 patent, and as the MPEG-DASH standard utilized by Vudu in its streaming VOD offerings.

497. The Notice Letter identified Vudu’s website, “<https://www.vudu.com/>,” and “apps on various types of electronic devices” as reasons Vudu “would benefit from a license under the DASH patent portfolio.” Because Vudu’s primary offering to consumers is a streaming service, and because its web site and apps are the platforms on which the streaming service is offered, it is reasonable to infer that Vudu understood that the act of offering such services not only necessitated Vudu’s own infringement, but also infringement by its customers.

498. Based on the facts set forth above, it is reasonable to infer that Vudu knew the reason Helios suggested Vudu “would benefit from a license under the DASH patent portfolio” is that Vudu’s website and apps provided DASH-enabled streaming VOD, and Helios was alleging its DASH patents were essential to Vudu’s use of this technology.

499. Helios attached to the Notice Letter a listing of the patents and patent applications comprising Helios’s MPEG-DASH portfolio including, under the heading “DASH Patent

Portfolio,” a table titled “U.S. DASH Patents,” which explicitly identified the ’805 patent by patent number, among 11 other U.S. patents. Five of the twelve “U.S. DASH Patents” identified in this table are asserted in this action.

500. In the Notice Letter, Helios also expressed its willingness to offer Vudu “a non-exclusive license of the DASH patent portfolio under fair and reasonable terms.” And, “to encourage open and frank discussions and to allow [Helios] to provide further information as to the reasons Walmart would benefit under a license of the DASH portfolio,” Helios enclosed a non-disclosure agreement (“NDA”) with the Notice Letter.

501. It is commonly understood in the technology industry, and reasonable to infer that Vudu knew, that a reference to “fair and reasonable terms” relates to so-called FRAND commitments commonly made by contributors of patented technology to standards-setting organizations. This presents another basis for inferring that Vudu understood that Helios was alleging that Vudu’s use of MPEG-DASH technology necessarily infringed Helios’s patents.

502. Based on the facts set forth above, it is reasonable to infer that as of approximately August 23, 2018, Vudu had knowledge of the ’805 patent, had knowledge that Helios was alleging that the ’805 patent was standard-essential for MPEG-DASH, and that Vudu subjectively knew that if the ’805 patent was standard-essential to MPEG-DASH, there was a high likelihood that Vudu’s providing and encouraging its customers to stream DASH-enabled VOD, including VOD offered through Vudu’s website and apps, infringed and induced the infringement of the ’805 patent.

503. Based on the facts set forth above, it is also reasonable to infer that as of approximately August 23, 2018, Vudu knew Helios had further details regarding Vudu’s

infringement and regarding the standard essentiality of Helios's MPEG-DASH patents, which Helios would share with Vudu if Vudu entered into an NDA.

504. Based on the facts set forth above, it is also reasonable to infer that as of approximately August 23, 2018, Vudu knew Helios was willing to offer Vudu a license to Helios's MPEG-DASH patent portfolio, including the '805 patent, on allegedly "fair and reasonable terms," consistent with the licensing of standard-essential patents.

505. On or about September 11, 2018, Helios emailed Vudu and requested confirmation of receipt of Helios's August 23, 2018 letter. Helios further offered to discuss the Notice Letter and reattached the Notice Letter and NDA for Vudu's review.

506. Helios received no reply to its September 11, 2018 email.

507. On or about September 20, 2018, Helios again emailed Vudu and requested confirmation of receipt of Helios's August 23, 2018 letter. Helios again offered to discuss the Notice Letter. Helios further inquired as to whether there was a better point of contact than Ms. Chung with whom Helios could discuss a potential Vudu license to Helios's MPEG-DASH portfolio.

508. On or about October 2, 2018, Mr. Emil Kim of Helios called Ms. Chung and left a voicemail message inquiring whether Vudu had received the Notice Letter and the status of Vudu's investigation.

509. On or about October 12, 2018, Vudu responded with a one-sentence email attaching a letter from Diana Luo, Senior Associate General Counsel of Walmart. Ms. Luo's letter confirmed receipt of the Notice Letter, asked that Helios "[p]lease direct all further communications on this matter to me going forward," and stated Vudu "will investigate the matter and respond in due course."

510. Based on the above facts, it is reasonable to infer that as of at least October 12, 2018 Vudu was investigating the allegations and information in the Notice Letter, including the claims of the U.S. MPEG-DASH patents identified in the Notice Letter (including the '805 patent) and whether Vudu's provision of DASH-enabled streaming VOD via its website and apps infringed and induced the infringement of those MPEG-DASH patents, including the '805 patent.

511. Based on the above facts, to the extent it is not reasonable to draw the inferences set forth in paragraphs 497-498 and 501-504 of this First Amended Complaint as of approximately August 23, 2018, it is reasonable to draw the inferences set forth in paragraphs 497-498 and 501-504 of this First Amended Complaint as of at least October 12, 2018.

512. Based on Ms. Luo's October 12, 2018 letter, it is also reasonable to infer that Helios had been contacting the correct entity since approximately August 23, 2018 regarding Vudu taking a license to Helios's MPEG-DASH patent portfolio, including the '805 patent.

513. On or about October 15, 2018, Helios responded via email to Vudu's October 12, 2018 letter. In its response, Helios again inquired as to the status of the NDA and reiterated that Helios would "be able to provide more details on the license" once the NDA was executed.

514. Helios received no reply to its October 15, 2018 email.

515. On or about October 31, 2018, Helios wrote again to Vudu to inquire about Vudu's investigation. Helios repeated its request that Vudu enter into an NDA with Helios. Helios wrote that "[a]s soon as the NDA is in place, [Helios] can provide more details, including claim charts" to Vudu regarding Vudu's alleged infringement.

516. Helios received no reply to its October 31, 2018 email.

517. Based on the above facts, it is reasonable to infer that at least as of October 31, 2018 Vudu knew Helios had further details regarding Vudu's infringement of the '805 patent, which Helios would share with Vudu if Vudu entered into an NDA.

518. Based on the above facts, it is reasonable to infer that at least as of October 31, 2018 Vudu knew that, if it entered into an NDA with Helios, it would receive claim charts detailing how Vudu directly infringed and induced the infringement of the '805 patent. It is also reasonable to infer that, by not responding to Vudu's October 31, 2018 communication and by refusing to enter into an NDA with Helios, Vudu was actively avoiding learning additional information about its infringement.

519. On or about February 19, 2019, Helios emailed Vudu and reiterated that Helios was still waiting for the results of Vudu's investigation, which Vudu had represented it began almost four months prior. Helios again identified ISO/IEC 23009-1 as the MPEG-DASH standard to which Helios's MPEG-DASH patent portfolio, including the '805 patent, pertained. Helios also informed Vudu that Helios "confirmed that Vudu utilizes the DASH standard." In support of this point, Helios attached screenshots to the February 19, 2019 email that demonstrated with pictorial evidence Vudu's use of MPEG-DASH in its streaming VOD.

520. In its February 19, 2019 email to Vudu, Helios also repeated its offer to provide "detailed claim charts evidencing that the patents in our portfolios are essential to the DASH . . . standards, as well as other sensitive information, including our licensing terms, but require an NDA (as attached) to be in place first."

521. Based on the above facts, it is reasonable to infer that, as of February 19, 2019, Vudu had either been investigating Helios's MPEG-DASH patents for over four months or had affirmatively misled Helios about its investigation of Helios's MPEG-DASH patents to avoid

learning the details of how Vudu's DASH-enabled VOD infringed Helios's MPEG-DASH patents, including the '805 patent.

522. Based on the above facts, to the extent Vudu did not already know Helios was alleging the patents in its MPEG-DASH patent portfolio (including the '805 patent) were standard-essential to MPEG-DASH, it is reasonable to infer Vudu knew this at least as of Helios's February 19, 2019 email.

523. Based on the above facts, including Vudu's extensive experience with MPEG-DASH through its provision of DASH-enabled streaming VOD on its website and apps, it is reasonable to infer that as of February 19, 2019 Vudu subjectively knew that if the '805 patent was standard-essential to MPEG-DASH there was a high likelihood that Vudu's providing and encouraging its customers to stream DASH-enabled VOD, including VOD offered through Vudu's website and apps, infringed and induced the infringement of the '805 patent.

524. On or about February 27, 2019, Vudu responded via email to Helios's multiple communications, and confirmed that Vudu had investigated patents identified in the Notice Letter. Vudu also alleged that Helios's identified patents "appear to be assigned to entities other than Helios" and that "it is not clear to us that Helios Streaming has any standing to engage in these discussions." Vudu also explicitly stated that "Vudu is not interested in receiving any confidential information, and anything you choose to send would be considered nonconfidential."

525. Helios responded the next day, on February 28, 2019, stating that "Helios Streaming was granted an exclusive license from the current assignee, Ideahub, with rights to sublicense the DASH patents." To support these statements, Helios attached screenshots from the publicly available U.S. Patent and Trademark Office website to its email response, and these

screenshots showed that all 12 MPEG-DASH patents identified in the Notice Letter, including the '805 patent, were assigned to Ideahub and were exclusively licensed to Helios Streaming.

526. Helios also reiterated in its February 28, 2019 email that it required an NDA to enter into substantive licensing discussions with Vudu in order to “provide [Vudu] with claim charts, licensing terms, and so forth. . . . Without the NDA, we cannot have any meaningful or substantive discussions to determine whether a license is appropriate, thereby foreclosing the possibility to resolve this matter amicably.” Helios offered times it was available to discuss these issues on the phone with Vudu.

527. Helios received no response to its February 28, 2019 communication.

528. Based on the above facts, it is reasonable to infer that at least as of February 27, 2019, Vudu subjectively believed there was a high probability that Vudu’s providing and encouraging its customers to stream DASH-enabled VOD, including VOD offered through Vudu’s website and apps, infringed and induced the infringement of the '805 patent. The following facts and inferences, in particular, support this inference: (1) Vudu knew Helios was alleging its MPEG-DASH patents (including the '805 patent) were standard-essential to MPEG-DASH, (2) Helios had confirmed Vudu’s streaming VOD utilized MPEG-DASH and provided evidence of this confirmation to Vudu via screenshots, and (3) Helios had offered repeatedly to provide confidential claim charts demonstrating how Vudu was directly infringing and inducing the direct infringement of Helios’s MPEG-DASH patents (including the '805 patent) and how Helios’s patents were standard essential to MPEG-DASH.

529. Based on the above facts, it is also reasonable to infer at least as of February 27, 2019 that Vudu’s refusal to honor the confidentiality of Helios’s offered claim charts was a

deliberate act calculated to avoid learning the details of Vudu's infringement of Helios's MPEG-DASH patents, including the '805 patent.

530. On March 6, 2019, Helios emailed Vudu to request that Vudu respond and enter into an NDA by March 15, 2019.

531. Helios received no response to its March 6, 2019 email and was not otherwise contacted by Vudu between February 27, 2019 and Helios's filing the Original Complaint in this lawsuit.

532. On information and belief, the Accused Instrumentalities have and continue to be used, marketed, provided to, and/or used by or for each of Defendant's partners, clients, customers, and end users across the country and in this District.

533. Upon information and belief, Vudu has induced and continues to induce others to infringe at least claims 1, 2, 3, and 4 of the '805 patent under 35 U.S.C. § 271(b) by, among other things, and with specific intent or willful blindness, actively aiding and abetting others to infringe, including but not limited to Vudu's partners and customers, whose use of the Accused Instrumentalities constitutes direct infringement of at least claims 1, 2, 3, and 4 of the '805 patent. Vudu has induced and continues to induce others to infringe at least claims 1, 2, 3, and 4 of the '805 patent since at least receiving the Notice Letter on or about August 23, 2018; or, if not then, since confirming its receipt of the Notice letter and confirming it was investigating Helios's MPEG-DASH patents on or about October 12, 2018; or, if not then, since on or about February 19, 2019, when Helios emailed screenshots showing that Vudu's streaming VOD utilized MPEG-DASH and Helios reiterated that its MPEG-DASH patents were standard-essential to MPEG-DASH; or, if not then, since receiving the Original Complaint in this matter and Exhibit 18 thereto, which, in combination with Vudu's extensive knowledge of and

experience with MPEG-DASH and Vudu's knowledge of how it was encouraging its partners, customers, and users to stream its DASH-enabled VOD and the parties' pre-suit communications regarding the patents and Vudu's website and apps, detailed how Vudu directly infringed and induced the direct infringement of the asserted claims of the '805 patent.

534. In particular, Vudu's actions that aid and abet others such as their partners and customers to infringe include knowingly providing the Accused Instrumentalities with materials and/or services that encourage infringing use of the Accused Instrumentalities, including icons, instructions, or statements that actively encourage their partners' or customers' infringing use of the Accused Instrumentalities.

535. For example, Vudu has and continues to knowingly and strategically place one-click "Watch" or "Watch Free" buttons with its DASH-enabled VOD content to encourage its customers to stream Vudu's DASH-enabled VOD content, knowing that such streaming constitutes infringement of the '805 patent by the customers. (Ex. 18 at 2.) The claimed methods of claims 1, 2, 3, and 4 of the '805 patent are necessarily performed by the customer's terminal upon the customer's clicking the "Watch" or "Watch Free" buttons (*id.* at 2), and this constitutes direct infringement as set forth in Exhibit 18.

536. As a further example, Vudu has and continues to actively and knowingly encourage infringement of the '805 patent by, in addition to continuing to provide the "Watch" and "Watch Free" buttons mentioned above, instructing users of Roku streaming devices, smart TVs, PC and Mac devices, Chromecast devices, Android devices, iOS devices, Blu-ray players, Xbox devices, and Windows 10 devices, among others, to stream Vudu's DASH-enabled VOD:



(<https://www.vudu.com/content/movies/aboutus> (last accessed July 15, 2020).)

537. On information and belief, Vudu has engaged and continues to engage in such actions with specific intent specific intent to cause infringement or with willful blindness to the resulting infringement because Vudu has had actual knowledge of or should have had actual knowledge of the '805 patent and that its acts were inducing infringement of the '805 patent since at least the time of receiving the Notice Letter on or about August 23, 2018; or, if not then, since confirming its receipt of the Notice letter and confirming it was investigating Helios's MPEG-DASH patents on or about October 12, 2018; or, if not then, since on or about February 19, 2019, when Helios emailed screenshots showing that Vudu's streaming VOD utilized MPEG-DASH and Helios reiterated that its MPEG-DASH patents were standard-essential to MPEG-DASH; or, if not then, since receiving the Original Complaint in this matter and Exhibit 18 thereto, which, in combination with Vudu's extensive knowledge of and experience with MPEG-DASH and Vudu's knowledge of how it was encouraging its partners, customers, and users to stream its DASH-enabled VOD and the parties' pre-suit communications regarding the

patents and Vudu's website and apps, detailed how Vudu directly infringed and induced the direct infringement of the asserted claims of the '805 patent.

538. Alternatively, to the extent Vudu claims it did not have actual knowledge that its acts were inducing the infringement of the '805 patent, Vudu was willfully blind to the fact that its acts were inducing the infringement of the '805 patent.

539. Vudu subjectively believed that there was a high probability that the DASH-enabled streaming VOD offered through Vudu's website and apps were infringing or inducing the infringement of the '805 patent. On information and belief, Vudu had been offering DASH-enabled streaming VOD since at least 2016, and therefore Vudu had extensive knowledge of the MPEG-DASH standard and how its VOD was utilizing MPEG-DASH before being contacted by Helios. Helios identified the '805 patent as a "U.S. DASH Patent" within its "DASH Patent Portfolio" and clearly and consistently identified MPEG-DASH as the standard to which its MPEG-DASH patents (including the '805 patent) pertained since at least approximately August 23, 2018. Helios explicitly stated that its MPEG-DASH patents were essential to MPEG-DASH and provided proof that it knew Vudu was utilizing the MPEG-DASH standard in providing streaming VOD via its website and apps. And Vudu knew that if a patent was standard-essential to MPEG-DASH, that patent was necessarily being infringed by streaming VOD utilizing MPEG-DASH.

540. Despite the facts set forth in paragraph 539 above, Vudu actively and deliberately avoided learning the details of its infringement and/or induced infringement of the '805 patent. Vudu informed Helios that Vudu was investigating Helios's MPEG-DASH patents, but this was a deliberate attempt to mislead Helios. When confronted with additional information and evidence that its DASH-enabled streaming VOD was infringing Helios's MPEG-DASH patents,

and presented with the opportunity to review more detailed confidential information regarding Vudu's infringement, Vudu stated that "Vudu is not interested in receiving any confidential information" and then cut off all further communication to avoid learning of its infringement.

541. On information and belief, based on the facts and inferences set forth in paragraphs 485-540 above, Vudu's infringement has been and continues to be willful.

542. Plaintiffs have been harmed by Vudu's infringing activities.

COUNT X – INFRINGEMENT OF U.S. PATENT NO. 9,325,558

543. The allegations set forth in the foregoing paragraphs 1 through 542 are incorporated into this Tenth Claim for Relief.

544. On April 26, 2016, the '558 patent was duly and legally issued by the United States Patent and Trademark Office under the title "Apparatus and Method for Providing Streaming Content." A true and correct copy of the '558 patent is attached as Exhibit 19.

545. Ideahub is the assignee and owner of the right, title, and interest in and to the '558 patent.

546. Helios holds the exclusive right to assert all causes of action arising under the '558 patent and the right to collect any remedies for infringement of it.

547. Upon information and belief, Vudu has and continues to induce the direct infringement of at least claims 1, 2, 3, 4, and 5 of the '558 patent by selling, offering to sell, making, using, and/or providing and causing to be used streaming media content in accordance with the MPEG-DASH standard (the "Accused Instrumentalities"), including one or more videos on demand ("VOD") such as those available at <https://www.vudu.com/content/movies/home>. The preliminary claim chart attached as Exhibit 20 sets forth an exemplary instance of such direct infringement.

548. Upon information and belief, the Accused Instrumentalities are used to perform methods for providing media content including one or more periods, the method comprising: receiving metadata of the media content from a server, the metadata comprising a minBufferTime attribute indicating a minimum amount of initially buffered media content that is required to ensure playout of the media content, the minBufferTime attribute being defined in segment unit, wherein the metadata is a media presentation description (MPD) that provides descriptive information that enables a client to select one or more representations; receiving the media content from the server, and buffering the received media content by at least the minimum amount; and playing back the media content, wherein the minBufferTime attribute relates to the one or more periods, and wherein the minBufferTime attribute relates to providing a minimum amount of initially buffered media at a beginning of a media presentation, at a beginning of the one or more periods of the media presentation, or at any random access point of the media presentation.

549. On information and belief, the Accused Instrumentalities have been used to infringe and continue to directly infringe at least claims 1, 2, 3, 4, and 5 of the '558 patent during the pendency of the '558 patent.

550. Since at least approximately August 23, 2018, Vudu has had actual notice that it is inducing others to infringe the '558 patent.

551. On or about August 23, 2018, Helios sent Vudu a notice letter addressed to Ms. Jamie Elizabeth Chung, General Counsel for Walmart. Upon information and belief, as of approximately August 23, 2018, Walmart was the parent company of Vudu, and Ms. Chung had authority to discuss Helios's proposal on Vudu's behalf.

552. On information and belief, Vudu began offering streaming VOD using MPEG-DASH more than two years before receiving the Notice Letter. (*See, e.g.*, <https://castlabs.com/news/vudu-android-app-castlabs-technology/>, Mar. 11, 2016 (last accessed July 15, 2020).) It is therefore reasonable to infer that Vudu had intimate knowledge of MPEG-DASH and how Vudu’s streaming VOD complied with MPEG-DASH before receiving the Notice Letter. On information and belief, and also reasonably inferred, Vudu was aware that there were patents essential to the MPEG-DASH standard, as is common with respect to standard-setting organizations and efforts.

553. The Notice Letter identified Helios as “the worldwide exclusive licensee of patents and patent applications relating to [MPEG-DASH] that were researched and developed by [ETRI],” and noted that “ETRI was a key contributor to the development of [MPEG-DASH], which later led to its adoption as the first international standard for adaptive streaming technology.”

554. The Notice Letter specifically identified ISO/IEC 23009-1 as the relevant MPEG-DASH standard for the Asserted Patents, including the ’558 patent, and as the MPEG-DASH standard utilized by Vudu in its streaming VOD offerings.

555. The Notice Letter identified Vudu’s website, “<https://www.vudu.com/>,” and “apps on various types of electronic devices” as reasons Vudu “would benefit from a license under the DASH patent portfolio.” Because Vudu’s primary offering to consumers is a streaming service, and because its web site and apps are the platforms on which the streaming service is offered, it is reasonable to infer that Vudu understood that the act of offering such services not only necessitated Vudu’s own infringement, but also infringement by its customers.

556. Based on the facts set forth above, it is reasonable to infer that Vudu knew the reason Helios suggested Vudu “would benefit from a license under the DASH patent portfolio” is that Vudu’s website and apps provided DASH-enabled streaming VOD, and Helios was alleging its DASH patents were essential to Vudu’s use of this technology.

557. Helios attached to the Notice Letter a listing of the patents and patent applications comprising Helios’s MPEG-DASH portfolio including, under the heading “DASH Patent Portfolio,” a table titled “U.S. DASH Patents,” which explicitly identified the ’558 patent by patent number, among 11 other U.S. patents. Five of the twelve “U.S. DASH Patents” identified in this table are asserted in this action.

558. In the Notice Letter, Helios also expressed its willingness to offer Vudu “a non-exclusive license of the DASH patent portfolio under fair and reasonable terms.” And, “to encourage open and frank discussions and to allow [Helios] to provide further information as to the reasons Walmart would benefit under a license of the DASH portfolio,” Helios enclosed a non-disclosure agreement (“NDA”) with the Notice Letter.

559. It is commonly understood in the technology industry, and reasonable to infer that Vudu knew, that a reference to “fair and reasonable terms” relates to so-called FRAND commitments commonly made by contributors of patented technology to standards-setting organizations. This presents another basis for inferring that Vudu understood that Helios was alleging that Vudu’s use of MPEG-DASH technology necessarily infringed Helios’s patents.

560. Based on the facts set forth above, it is reasonable to infer that as of approximately August 23, 2018, Vudu had knowledge of the ’558 patent, had knowledge that Helios was alleging that the ’558 patent was standard-essential for MPEG-DASH, and that Vudu subjectively knew that if the ’558 patent was standard-essential to MPEG-DASH, there was a

high likelihood that Vudu's providing and encouraging its customers to stream DASH-enabled VOD, including VOD offered through Vudu's website and apps, infringed and induced the infringement of the '558 patent.

561. Based on the facts set forth above, it is also reasonable to infer that as of approximately August 23, 2018, Vudu knew Helios had further details regarding Vudu's infringement and regarding the standard essentiality of Helios's MPEG-DASH patents, which Helios would share with Vudu if Vudu entered into an NDA.

562. Based on the facts set forth above, it is also reasonable to infer that as of approximately August 23, 2018, Vudu knew Helios was willing to offer Vudu a license to Helios's MPEG-DASH patent portfolio, including the '558 patent, on allegedly "fair and reasonable terms," consistent with the licensing of standard-essential patents.

563. On or about September 11, 2018, Helios emailed Vudu and requested confirmation of receipt of Helios's August 23, 2018 letter. Helios further offered to discuss the Notice Letter and reattached the Notice Letter and NDA for Vudu's review.

564. Helios received no reply to its September 11, 2018 email.

565. On or about September 20, 2018, Helios again emailed Vudu and requested confirmation of receipt of Helios's August 23, 2018 letter. Helios again offered to discuss the Notice Letter. Helios further inquired as to whether there was a better point of contact than Ms. Chung with whom Helios could discuss a potential Vudu license to Helios's MPEG-DASH portfolio.

566. On or about October 2, 2018, Mr. Emil Kim of Helios called Ms. Chung and left a voicemail message inquiring whether Vudu had received the Notice Letter and the status of Vudu's investigation.

567. On or about October 12, 2018, Vudu responded with a one-sentence email attaching a letter from Diana Luo, Senior Associate General Counsel of Walmart. Ms. Luo's letter confirmed receipt of the Notice Letter, asked that Helios "[p]lease direct all further communications on this matter to me going forward," and stated Vudu "will investigate the matter and respond in due course."

568. Based on the above facts, it is reasonable to infer that as of at least October 12, 2018 Vudu was investigating the allegations and information in the Notice Letter, including the claims of the U.S. MPEG-DASH patents identified in the Notice Letter (including the '558 patent) and whether Vudu's provision of DASH-enabled streaming VOD via its website and apps infringed and induced the infringement of those MPEG-DASH patents, including the '558 patent.

569. Based on the above facts, to the extent it is not reasonable to draw the inferences set forth in paragraphs 555-556 and 559-562 of this First Amended Complaint as of approximately August 23, 2018, it is reasonable to draw the inferences set forth in paragraphs 555-556 and 559-562 of this First Amended Complaint as of at least October 12, 2018.

570. Based on Ms. Luo's October 12, 2018 letter, it is also reasonable to infer that Helios had been contacting the correct entity since approximately August 23, 2018 regarding Vudu taking a license to Helios's MPEG-DASH patent portfolio, including the '558 patent.

571. On or about October 15, 2018, Helios responded via email to Vudu's October 12, 2018 letter. In its response, Helios again inquired as to the status of the NDA and reiterated that Helios would "be able to provide more details on the license" once the NDA was executed.

572. Helios received no reply to its October 15, 2018 email.

573. On or about October 31, 2018, Helios wrote again to Vudu to inquire about Vudu's investigation. Helios repeated its request that Vudu enter into an NDA with Helios. Helios wrote that "[a]s soon as the NDA is in place, [Helios] can provide more details, including claim charts" to Vudu regarding Vudu's alleged infringement.

574. Helios received no reply to its October 31, 2018 email.

575. Based on the above facts, it is reasonable to infer that at least as of October 31, 2018 Vudu knew Helios had further details regarding Vudu's infringement of the '558 patent, which Helios would share with Vudu if Vudu entered into an NDA.

576. Based on the above facts, it is reasonable to infer that at least as of October 31, 2018 Vudu knew that, if it entered into an NDA with Helios, it would receive claim charts detailing how Vudu directly infringed and induced the infringement of the '558 patent. It is also reasonable to infer that, by not responding to Vudu's October 31, 2018 communication and by refusing to enter into an NDA with Helios, Vudu was actively avoiding learning additional information about its infringement.

577. On or about February 19, 2019, Helios emailed Vudu and reiterated that Helios was still waiting for the results of Vudu's investigation, which Vudu had represented it began almost four months prior. Helios again identified ISO/IEC 23009-1 as the MPEG-DASH standard to which Helios's MPEG-DASH patent portfolio, including the '558 patent, pertained. Helios also informed Vudu that Helios "confirmed that Vudu utilizes the DASH standard." In support of this point, Helios attached screenshots to the February 19, 2019 email that demonstrated with pictorial evidence Vudu's use of MPEG-DASH in its streaming VOD.

578. In its February 19, 2019 email to Vudu, Helios also repeated its offer to provide "detailed claim charts evidencing that the patents in our portfolios are essential to the DASH . . .

standards, as well as other sensitive information, including our licensing terms, but require an NDA (as attached) to be in place first.”

579. Based on the above facts, it is reasonable to infer that, as of February 19, 2019, Vudu had either been investigating Helios’s MPEG-DASH patents for over four months or had affirmatively misled Helios about its investigation of Helios’s MPEG-DASH patents to avoid learning the details of how Vudu’s DASH-enabled VOD infringed Helios’s MPEG-DASH patents, including the ’558 patent.

580. Based on the above facts, to the extent Vudu did not already know Helios was alleging the patents in its MPEG-DASH patent portfolio (including the ’558 patent) were standard-essential to MPEG-DASH, it is reasonable to infer Vudu knew this at least as of Helios’s February 19, 2019 email.

581. Based on the above facts, including Vudu’s extensive experience with MPEG-DASH through its provision of DASH-enabled streaming VOD on its website and apps, it is reasonable to infer that as of February 19, 2019 Vudu subjectively knew that if the ’558 patent was standard-essential to MPEG-DASH there was a high likelihood that Vudu’s providing and encouraging its customers to stream DASH-enabled VOD, including VOD offered through Vudu’s website and apps, infringed and induced the infringement of the ’558 patent.

582. On or about February 27, 2019, Vudu responded via email to Helios’s multiple communications, and confirmed that Vudu had investigated patents identified in the Notice Letter. Vudu also alleged that Helios’s identified patents “appear to be assigned to entities other than Helios” and that “it is not clear to us that Helios Streaming has any standing to engage in these discussions.” Vudu also explicitly stated that “Vudu is not interested in receiving any

confidential information, and anything you choose to send would be considered nonconfidential.”

583. Helios responded the next day, on February 28, 2019, stating that “Helios Streaming was granted an exclusive license from the current assignee, Ideahub, with rights to sublicense the DASH patents.” To support these statements, Helios attached screenshots from the publicly available U.S. Patent and Trademark Office website to its email response, and these screenshots showed that all 12 MPEG-DASH patents identified in the Notice Letter, including the ’558 patent, were assigned to Ideahub and were exclusively licensed to Helios Streaming.

584. Helios also reiterated in its February 28, 2019 email that it required an NDA to enter into substantive licensing discussions with Vudu in order to “provide [Vudu] with claim charts, licensing terms, and so forth. . . . Without the NDA, we cannot have any meaningful or substantive discussions to determine whether a license is appropriate, thereby foreclosing the possibility to resolve this matter amicably.” Helios offered times it was available to discuss these issues on the phone with Vudu.

585. Helios received no response to its February 28, 2019 communication.

586. Based on the above facts, it is reasonable to infer that at least as of February 27, 2019, Vudu subjectively believed there was a high probability that Vudu’s providing and encouraging its customers to stream DASH-enabled VOD, including VOD offered through Vudu’s website and apps, infringed and induced the infringement of the ’558 patent. The following facts and inferences, in particular, support this inference: (1) Vudu knew Helios was alleging its MPEG-DASH patents (including the ’558 patent) were standard-essential to MPEG-DASH, (2) Helios had confirmed Vudu’s streaming VOD utilized MPEG-DASH and provided evidence of this confirmation to Vudu via screenshots, and (3) Helios had offered repeatedly to

provide confidential claim charts demonstrating how Vudu was directly infringing and inducing the direct infringement of Helios's MPEG-DASH patents (including the '558 patent) and how Helios's patents were standard essential to MPEG-DASH.

587. Based on the above facts, it is also reasonable to infer at least as of February 27, 2019 that Vudu's refusal to honor the confidentiality of Helios's offered claim charts was a deliberate act calculated to avoid learning the details of Vudu's infringement of Helios's MPEG-DASH patents, including the '558 patent.

588. On March 6, 2019, Helios emailed Vudu to request that Vudu respond and enter into an NDA by March 15, 2019.

589. Helios received no response to its March 6, 2019 email and was not otherwise contacted by Vudu between February 27, 2019 and Helios's filing the Original Complaint in this lawsuit.

590. On information and belief, the Accused Instrumentalities have and continue to be used, marketed, provided to, and/or used by or for each of Defendant's partners, clients, customers, and end users across the country and in this District.

591. Upon information and belief, Vudu has induced and continues to induce others to infringe at least claims 1, 2, 3, 4, and 5 of the '558 patent under 35 U.S.C. § 271(b) by, among other things, and with specific intent or willful blindness, actively aiding and abetting others to infringe, including but not limited to Vudu's partners and customers, whose use of the Accused Instrumentalities constitutes direct infringement of at least claims 1, 2, 3, 4, and 5 of the '558 patent. Vudu has induced and continues to induce others to infringe at least claims 1, 2, 3, 4, and 5 of the '558 patent since at least receiving the Notice Letter on or about August 23, 2018; or, if not then, since confirming its receipt of the Notice letter and confirming it was investigating

Helios's MPEG-DASH patents on or about October 12, 2018; or, if not then, since on or about February 19, 2019, when Helios emailed screenshots showing that Vudu's streaming VOD utilized MPEG-DASH and Helios reiterated that its MPEG-DASH patents were standard-essential to MPEG-DASH; or, if not then, since receiving the Original Complaint in this matter and Exhibit 20 thereto, which, in combination with Vudu's extensive knowledge of and experience with MPEG-DASH and Vudu's knowledge of how it was encouraging its partners, customers, and users to stream its DASH-enabled VOD and the parties' pre-suit communications regarding the patents and Vudu's website and apps, detailed how Vudu directly infringed and induced the direct infringement of the '558 patent.

592. In particular, Vudu's actions that aid and abet others such as their partners and customers to infringe include knowingly providing the Accused Instrumentalities with materials and/or services that encourage infringing use of the Accused Instrumentalities, including icons, instructions, or statements that actively encourage their partners' or customers' infringing use of the Accused Instrumentalities.

593. For example, Vudu has and continues to knowingly and strategically places one-click "Watch" or "Watch Free" buttons with its DASH-enabled VOD content to encourage its customers to stream Vudu's DASH-enabled VOD content, knowing that such streaming constitutes infringement of the '558 patent by the customers. (Ex. 20 at 2.) The claimed methods of claims 1, 2, 3, 4, and 5 of the '558 patent are necessarily performed by the customer's terminal upon the customer's clicking the "Watch" or "Watch Free" buttons (*id.* at 2), and this constitutes direct infringement as set forth in Exhibit 20.

594. As a further example, Vudu has and continues to actively and knowingly encourage infringement of the '558 patent by, in addition to continuing to provide the "Watch"

and “Watch Free” buttons mentioned above, instructing users of Roku streaming devices, smart TVs, PC and Mac devices, Chromecast devices, Android devices, iOS devices, Blu-ray players, Xbox devices, and Windows 10 devices, among others, to stream Vudu’s DASH-enabled VOD:



(<https://www.vudu.com/content/movies/aboutus> (last accessed July 15, 2020).)

595. On information and belief, Vudu has engaged and continues to engage in such actions with specific intent specific intent to cause infringement or with willful blindness to the resulting infringement because Vudu has had actual knowledge of or should have had actual knowledge of the '558 patent and that its acts were inducing infringement of the '558 patent since at least the time of receiving the Notice Letter on or about August 23, 2018; or, if not then, since confirming its receipt of the Notice letter and confirming it was investigating Helios’s MPEG-DASH patents on or about October 12, 2018; or, if not then, since on or about February 19, 2019, when Helios emailed screenshots showing that Vudu’s streaming VOD utilized MPEG-DASH and Helios reiterated that its MPEG-DASH patents were standard-essential to MPEG-DASH; or, if not then, since receiving the Original Complaint in this matter and Exhibit 20 thereto, which, in combination with Vudu’s extensive knowledge of and experience with

MPEG-DASH and Vudu's knowledge of how it was encouraging its partners, customers, and users to stream its DASH-enabled VOD and the parties' pre-suit communications regarding the patents and Vudu's website and apps, detailed how Vudu directly infringed and induced the direct infringement of the asserted claims of the '558 patent.

596. Alternatively, to the extent Vudu claims it did not have actual knowledge that its acts were inducing the infringement of the '558 patent, Vudu was willfully blind to the fact that its acts were inducing the infringement of the '558 patent.

597. Vudu subjectively believed that there was a high probability that the DASH-enabled streaming VOD offered through Vudu's website and apps were infringing or inducing the infringement of the '558 patent. On information and belief, Vudu had been offering DASH-enabled streaming VOD since at least 2016, and therefore Vudu had extensive knowledge of the MPEG-DASH standard and how its VOD was utilizing MPEG-DASH before being contacted by Helios. Helios identified the '558 patent as a "U.S. DASH Patent" within its "DASH Patent Portfolio" and clearly and consistently identified MPEG-DASH as the standard to which its MPEG-DASH patents (including the '558 patent) pertained since at least approximately August 23, 2018. Helios explicitly stated that its MPEG-DASH patents were essential to MPEG-DASH and provided proof that it knew Vudu was utilizing the MPEG-DASH standard in providing streaming VOD via its website and apps. And Vudu knew that if a patent was standard-essential to MPEG-DASH, that patent was necessarily being infringed by streaming VOD utilizing MPEG-DASH.

598. Despite the facts set forth in paragraph 597 above, Vudu actively and deliberately avoided learning the details of its infringement and/or induced infringement of the '558 patent. Vudu informed Helios that Vudu was investigating Helios's MPEG-DASH patents, but this was

a deliberate attempt to mislead Helios. When confronted with additional information and evidence that its DASH-enabled streaming VOD was infringing Helios's MPEG-DASH patents, and presented with the opportunity to review more detailed confidential information regarding Vudu's infringement, Vudu stated that "Vudu is not interested in receiving any confidential information" and then cut off all further communication to avoid learning of its infringement.

599. On information and belief, based on the facts and inferences set forth in paragraphs 543-598 above, Vudu's infringement has been and continues to be willful.

600. Plaintiffs have been harmed by Vudu's infringing activities.

COUNT XI – INFRINGEMENT OF U.S. PATENT NO. 9,467,493

601. The allegations set forth in the foregoing paragraphs 1 through 600 are incorporated into this Eleventh Claim for Relief.

602. On October 11, 2016, the '493 patent was duly and legally issued by the United States Patent and Trademark Office under the title "Apparatus and Method for Providing Streaming Content." A true and correct copy of the '493 patent is attached as Exhibit 21.

603. Ideahub is the assignee and owner of the right, title, and interest in and to the '493 patent.

604. Helios holds the exclusive right to assert all causes of action arising under the '493 patent and the right to collect any remedies for infringement of it.

605. Upon information and belief, Vudu has and continues to induce the direct infringement of at least claims 1, 2, and 4 of the '493 patent by selling, offering to sell, making, using, and/or providing and causing to be used streaming media content in accordance with the MPEG-DASH standard (the "Accused Instrumentalities"), including one or more videos on demand ("VOD") such as those available at <https://www.vudu.com/content/movies/home>.

The preliminary claim chart attached as Exhibit 22 sets forth an exemplary instance of such direct infringement.

606. Upon information and belief, the Accused Instrumentalities are used to perform methods for providing media, the methods comprising: receiving metadata of media, the metadata comprising one or more BaseURL elements; sending a request for a segment of the media using a Uniform Resource Locator (URL) of the segment, the URL being resolved with respect to a BaseURL element; receiving the segment; and decoding and rendering data of the media that is included in the segment, wherein the metadata selectively comprises a sourceURL attribute of the segment, and wherein, when the metadata selectively comprises the sourceURL attribute of the segment, a BaseURL element among the BaseURL elements is mapped to the sourceURL attribute, so that the URL is generated.

607. On information and belief, the Accused Instrumentalities have been used to infringe and continue to directly infringe at least claims 1, 2, and 4 of the '493 patent during the pendency of the '493 patent.

608. Since at least approximately August 23, 2018, Vudu has had actual notice that it is inducing others to infringe the '493 patent.

609. On or about August 23, 2018, Helios sent Vudu a notice letter addressed to Ms. Jamie Elizabeth Chung, General Counsel for Walmart. Upon information and belief, as of approximately August 23, 2018, Walmart was the parent company of Vudu, and Ms. Chung had authority to discuss Helios's proposal on Vudu's behalf.

610. On information and belief, Vudu began offering streaming VOD using MPEG-DASH more than two years before receiving the Notice Letter. (*See, e.g.*, <https://castlabs.com/news/vudu-android-app-castlabs-technology/>, Mar. 11, 2016 (last accessed

July 15, 2020).) It is therefore reasonable to infer that Vudu had intimate knowledge of MPEG-DASH and how Vudu's streaming VOD complied with MPEG-DASH before receiving the Notice Letter. On information and belief, and also reasonably inferred, Vudu was aware that there were patents essential to the MPEG-DASH standard, as is common with respect to standard-setting organizations and efforts.

611. The Notice Letter identified Helios as "the worldwide exclusive licensee of patents and patent applications relating to [MPEG-DASH] that were researched and developed by [ETRI]," and noted that "ETRI was a key contributor to the development of [MPEG-DASH], which later led to its adoption as the first international standard for adaptive streaming technology."

612. The Notice Letter specifically identified ISO/IEC 23009-1 as the relevant MPEG-DASH standard for the Asserted Patents, including the '493 patent, and as the MPEG-DASH standard utilized by Vudu in its streaming VOD offerings.

613. The Notice Letter identified Vudu's website, "<https://www.vudu.com/>," and "apps on various types of electronic devices" as reasons Vudu "would benefit from a license under the DASH patent portfolio." Because Vudu's primary offering to consumers is a streaming service, and because its web site and apps are the platforms on which the streaming service is offered, it is reasonable to infer that Vudu understood that the act of offering such services not only necessitated Vudu's own infringement, but also infringement by its customers.

614. Based on the facts set forth above, it is reasonable to infer that Vudu knew the reason Helios suggested Vudu "would benefit from a license under the DASH patent portfolio" is that Vudu's website and apps provided DASH-enabled streaming VOD, and Helios was alleging its DASH patents were essential to Vudu's use of this technology.

615. Helios attached to the Notice Letter a listing of the patents and patent applications comprising Helios's MPEG-DASH portfolio including, under the heading "DASH Patent Portfolio," a table titled "U.S. DASH Patents," which explicitly identified the '493 patent by patent number, among 11 other U.S. patents. Five of the twelve "U.S. DASH Patents" identified in this table are asserted in this action.

616. In the Notice Letter, Helios also expressed its willingness to offer Vudu "a non-exclusive license of the DASH patent portfolio under fair and reasonable terms." And, "to encourage open and frank discussions and to allow [Helios] to provide further information as to the reasons Walmart would benefit under a license of the DASH portfolio," Helios enclosed a non-disclosure agreement ("NDA") with the Notice Letter.

617. It is commonly understood in the technology industry, and reasonable to infer that Vudu knew, that a reference to "fair and reasonable terms" relates to so-called FRAND commitments commonly made by contributors of patented technology to standards-setting organizations. This presents another basis for inferring that Vudu understood that Helios was alleging that Vudu's use of MPEG-DASH technology necessarily infringed Helios's patents.

618. Based on the facts set forth above, it is reasonable to infer that as of approximately August 23, 2018, Vudu had knowledge of the '493 patent, had knowledge that Helios was alleging that the '493 patent was standard-essential for MPEG-DASH, and that Vudu subjectively knew that if the '493 patent was standard-essential to MPEG-DASH, there was a high likelihood that Vudu's providing and encouraging its customers to stream DASH-enabled VOD, including VOD offered through Vudu's website and apps, infringed and induced the infringement of the '493 patent.

619. Based on the facts set forth above, it is also reasonable to infer that as of approximately August 23, 2018, Vudu knew Helios had further details regarding Vudu's infringement and regarding the standard essentiality of Helios's MPEG-DASH patents, which Helios would share with Vudu if Vudu entered into an NDA.

620. Based on the facts set forth above, it is also reasonable to infer that as of approximately August 23, 2018, Vudu knew Helios was willing to offer Vudu a license to Helios's MPEG-DASH patent portfolio, including the '493 patent, on allegedly "fair and reasonable terms," consistent with the licensing of standard-essential patents.

621. On or about September 11, 2018, Helios emailed Vudu and requested confirmation of receipt of Helios's August 23, 2018 letter. Helios further offered to discuss the Notice Letter and reattached the Notice Letter and NDA for Vudu's review.

622. Helios received no reply to its September 11, 2018 email.

623. On or about September 20, 2018, Helios again emailed Vudu and requested confirmation of receipt of Helios's August 23, 2018 letter. Helios again offered to discuss the Notice Letter. Helios further inquired as to whether there was a better point of contact than Ms. Chung with whom Helios could discuss a potential Vudu license to Helios's MPEG-DASH portfolio.

624. On or about October 2, 2018, Mr. Emil Kim of Helios called Ms. Chung and left a voicemail message inquiring whether Vudu had received the Notice Letter and the status of Vudu's investigation.

625. On or about October 12, 2018, Vudu responded with a one-sentence email attaching a letter from Diana Luo, Senior Associate General Counsel of Walmart. Ms. Luo's letter confirmed receipt of the Notice Letter, asked that Helios "[p]lease direct all further

communications on this matter to me going forward,” and stated Vudu “will investigate the matter and respond in due course.”

626. Based on the above facts, it is reasonable to infer that as of at least October 12, 2018 Vudu was investigating the allegations and information in the Notice Letter, including the claims of the U.S. MPEG-DASH patents identified in the Notice Letter (including the '493 patent) and whether Vudu's provision of DASH-enabled streaming VOD via its website and apps infringed and induced the infringement of those MPEG-DASH patents, including the '493 patent.

627. Based on the above facts, to the extent it is not reasonable to draw the inferences set forth in paragraphs 613-614 and 617-620 of this First Amended Complaint as of approximately August 23, 2018, it is reasonable to draw the inferences set forth in paragraphs 613-614 and 617-620 of this First Amended Complaint as of at least October 12, 2018.

628. Based on Ms. Luo's October 12, 2018 letter, it is also reasonable to infer that Helios had been contacting the correct entity since approximately August 23, 2018 regarding Vudu taking a license to Helios's MPEG-DASH patent portfolio, including the '493 patent.

629. On or about October 15, 2018, Helios responded via email to Vudu's October 12, 2018 letter. In its response, Helios again inquired as to the status of the NDA and reiterated that Helios would “be able to provide more details on the license” once the NDA was executed.

630. Helios received no reply to its October 15, 2018 email.

631. On or about October 31, 2018, Helios wrote again to Vudu to inquire about Vudu's investigation. Helios repeated its request that Vudu enter into an NDA with Helios. Helios wrote that “[a]s soon as the NDA is in place, [Helios] can provide more details, including claim charts” to Vudu regarding Vudu's alleged infringement.

632. Helios received no reply to its October 31, 2018 email.

633. Based on the above facts, it is reasonable to infer that at least as of October 31, 2018 Vudu knew Helios had further details regarding Vudu's infringement of the '493 patent, which Helios would share with Vudu if Vudu entered into an NDA.

634. Based on the above facts, it is reasonable to infer that at least as of October 31, 2018 Vudu knew that, if it entered into an NDA with Helios, it would receive claim charts detailing how Vudu directly infringed and induced the infringement of the '493 patent. It is also reasonable to infer that, by not responding to Vudu's October 31, 2018 communication and by refusing to enter into an NDA with Helios, Vudu was actively avoiding learning additional information about its infringement.

635. On or about February 19, 2019, Helios emailed Vudu and reiterated that Helios was still waiting for the results of Vudu's investigation, which Vudu had represented it began almost four months prior. Helios again identified ISO/IEC 23009-1 as the MPEG-DASH standard to which Helios's MPEG-DASH patent portfolio, including the '493 patent, pertained. Helios also informed Vudu that Helios "confirmed that Vudu utilizes the DASH standard." In support of this point, Helios attached screenshots to the February 19, 2019 email that demonstrated with pictorial evidence Vudu's use of MPEG-DASH in its streaming VOD.

636. In its February 19, 2019 email to Vudu, Helios also repeated its offer to provide "detailed claim charts evidencing that the patents in our portfolios are essential to the DASH . . . standards, as well as other sensitive information, including our licensing terms, but require an NDA (as attached) to be in place first."

637. Based on the above facts, it is reasonable to infer that, as of February 19, 2019, Vudu had either been investigating Helios's MPEG-DASH patents for over four months or had

affirmatively misled Helios about its investigation of Helios's MPEG-DASH patents to avoid learning the details of how Vudu's DASH-enabled VOD infringed Helios's MPEG-DASH patents, including the '493 patent.

638. Based on the above facts, to the extent Vudu did not already know Helios was alleging the patents in its MPEG-DASH patent portfolio (including the '493 patent) were standard-essential to MPEG-DASH, it is reasonable to infer Vudu knew this at least as of Helios's February 19, 2019 email.

639. Based on the above facts, including Vudu's extensive experience with MPEG-DASH through its provision of DASH-enabled streaming VOD on its website and apps, it is reasonable to infer that as of February 19, 2019 Vudu subjectively knew that if the '493 patent was standard-essential to MPEG-DASH there was a high likelihood that Vudu's providing and encouraging its customers to stream DASH-enabled VOD, including VOD offered through Vudu's website and apps, infringed and induced the infringement of the '493 patent.

640. On or about February 27, 2019, Vudu responded via email to Helios's multiple communications, and confirmed that Vudu had investigated patents identified in the Notice Letter. Vudu also alleged that Helios's identified patents "appear to be assigned to entities other than Helios" and that "it is not clear to us that Helios Streaming has any standing to engage in these discussions." Vudu also explicitly stated that "Vudu is not interested in receiving any confidential information, and anything you choose to send would be considered nonconfidential."

641. Helios responded the next day, on February 28, 2019, stating that "Helios Streaming was granted an exclusive license from the current assignee, Ideahub, with rights to sublicense the DASH patents." To support these statements, Helios attached screenshots from

the publicly available U.S. Patent and Trademark Office website to its email response, and these screenshots showed that all 12 MPEG-DASH patents identified in the Notice Letter, including the '493 patent, were assigned to Ideahub and were exclusively licensed to Helios Streaming.

642. Helios also reiterated in its February 28, 2019 email that it required an NDA to enter into substantive licensing discussions with Vudu in order to “provide [Vudu] with claim charts, licensing terms, and so forth. . . . Without the NDA, we cannot have any meaningful or substantive discussions to determine whether a license is appropriate, thereby foreclosing the possibility to resolve this matter amicably.” Helios offered times it was available to discuss these issues on the phone with Vudu.

643. Helios received no response to its February 28, 2019 communication.

644. Based on the above facts, it is reasonable to infer that at least as of February 27, 2019, Vudu subjectively believed there was a high probability that Vudu’s providing and encouraging its customers to stream DASH-enabled VOD, including VOD offered through Vudu’s website and apps, infringed and induced the infringement of the '493 patent. The following facts and inferences, in particular, support this inference: (1) Vudu knew Helios was alleging its MPEG-DASH patents (including the '493 patent) were standard-essential to MPEG-DASH, (2) Helios had confirmed Vudu’s streaming VOD utilized MPEG-DASH and provided evidence of this confirmation to Vudu via screenshots, and (3) Helios had offered repeatedly to provide confidential claim charts demonstrating how Vudu was directly infringing and inducing the direct infringement of Helios’s MPEG-DASH patents (including the '493 patent) and how Helios’s patents were standard essential to MPEG-DASH.

645. Based on the above facts, it is also reasonable to infer at least as of February 27, 2019 that Vudu’s refusal to honor the confidentiality of Helios’s offered claim charts was a

deliberate act calculated to avoid learning the details of Vudu's infringement of Helios's MPEG-DASH patents, including the '493 patent.

646. On March 6, 2019, Helios emailed Vudu to request that Vudu respond and enter into an NDA by March 15, 2019.

647. Helios received no response to its March 6, 2019 email and was not otherwise contacted by Vudu between February 27, 2019 and Helios's filing the Original Complaint in this lawsuit.

648. On information and belief, the Accused Instrumentalities have and continue to be used, marketed, provided to, and/or used by or for each of Defendant's partners, clients, customers, and end users across the country and in this District.

649. Upon information and belief, Vudu has induced and continues to induce others to infringe at least claims 1, 2, and 4 of the '493 patent under 35 U.S.C. § 271(b) by, among other things, and with specific intent or willful blindness, actively aiding and abetting others to infringe, including but not limited to Vudu's partners and customers, whose use of the Accused Instrumentalities constitutes direct infringement of at least claims 1, 2, and 4 of the '493 patent. Vudu has induced and continues to induce others to infringe at least claims 1, 2, and 4 of the '493 patent since at least receiving the Notice Letter on or about August 23, 2018; or, if not then, since confirming its receipt of the Notice letter and confirming it was investigating Helios's MPEG-DASH patents on or about October 12, 2018; or, if not then, since on or about February 19, 2019, when Helios emailed screenshots showing that Vudu's streaming VOD utilized MPEG-DASH and Helios reiterated that its MPEG-DASH patents were standard-essential to MPEG-DASH; or, if not then, since receiving the Original Complaint in this matter and Exhibit 22 thereto, which, in combination with Vudu's extensive knowledge of and experience with

MPEG-DASH and Vudu's knowledge of how it was encouraging its partners, customers, and users to stream its DASH-enabled VOD and the parties' pre-suit communications regarding the patents and Vudu's website and apps, detailed how Vudu directly infringed and induced the direct infringement of the asserted claims of the '493 patent.

650. In particular, Vudu's actions that aid and abet others such as their partners and customers to infringe include knowingly providing the Accused Instrumentalities with materials and/or services that encourage infringing use of the Accused Instrumentalities, including icons, instructions, or statements that actively encourage their partners' or customers' infringing use of the Accused Instrumentalities.

651. For example, Vudu has and continues to knowingly and strategically place one-click "Watch" or "Watch Free" buttons with its DASH-enabled VOD content to encourage its customers to stream Vudu's DASH-enabled VOD content, knowing that such streaming constitutes infringement of the '493 patent by the customers. (Ex. 22 at 2, 11.) The claimed methods of claims 1, 2, and 4 of the '493 patent are necessarily performed by the customer's terminal upon the customer's clicking the "Watch" or "Watch Free" buttons (*id.* at 2, 11), and this constitutes direct infringement as set forth in Exhibit 22.

652. As a further example, Vudu has and continues to actively and knowingly encourage infringement of the '558 patent by, in addition to continuing to provide the "Watch" and "Watch Free" buttons mentioned above, instructing users of Roku streaming devices, smart TVs, PC and Mac devices, Chromecast devices, Android devices, iOS devices, Blu-ray players, Xbox devices, and Windows 10 devices, among others, to stream Vudu's DASH-enabled VOD:



(<https://www.vudu.com/content/movies/aboutus> (last accessed July 15, 2020).)

653. On information and belief, Vudu has engaged and continues to engage in such actions with specific intent specific intent to cause infringement or with willful blindness to the resulting infringement because Vudu has had actual knowledge of or should have had actual knowledge of the '493 patent and that its acts were inducing infringement of the '493 patent since at least the time of receiving the Notice Letter on or about August 23, 2018; or, if not then, since confirming its receipt of the Notice letter and confirming it was investigating Helios's MPEG-DASH patents on or about October 12, 2018; or, if not then, since on or about February 19, 2019, when Helios emailed screenshots showing that Vudu's streaming VOD utilized MPEG-DASH and Helios reiterated that its MPEG-DASH patents were standard-essential to MPEG-DASH; or, if not then, since receiving the Original Complaint in this matter and Exhibit 22 thereto, which, in combination with Vudu's extensive knowledge of and experience with MPEG-DASH and Vudu's knowledge of how it was encouraging its partners, customers, and users to stream its DASH-enabled VOD and the parties' pre-suit communications regarding the

patents and Vudu's website and apps, detailed how Vudu directly infringed and induced the direct infringement of the asserted claims of the '493 patent.

654. Alternatively, to the extent Vudu claims it did not have actual knowledge that its acts were inducing the infringement of the '493 patent, Vudu was willfully blind to the fact that its acts were inducing the infringement of the '493 patent.

655. Vudu subjectively believed that there was a high probability that the DASH-enabled streaming VOD offered through Vudu's website and apps were infringing or inducing the infringement of the '493 patent. On information and belief, Vudu had been offering DASH-enabled streaming VOD since at least 2016, and therefore Vudu had extensive knowledge of the MPEG-DASH standard and how its VOD was utilizing MPEG-DASH before being contacted by Helios. Helios identified the '493 patent as a "U.S. DASH Patent" within its "DASH Patent Portfolio" and clearly and consistently identified MPEG-DASH as the standard to which its MPEG-DASH patents (including the '493 patent) pertained since at least approximately August 23, 2018. Helios explicitly stated that its MPEG-DASH patents were essential to MPEG-DASH and provided proof that it knew Vudu was utilizing the MPEG-DASH standard in providing streaming VOD via its website and apps. And Vudu knew that if a patent was standard-essential to MPEG-DASH, that patent was necessarily being infringed by streaming VOD utilizing MPEG-DASH.

656. Despite the facts set forth in paragraph 655 above, Vudu actively and deliberately avoided learning the details of its infringement and/or induced infringement of the '493 patent. Vudu informed Helios that Vudu was investigating Helios's MPEG-DASH patents, but this was a deliberate attempt to mislead Helios. When confronted with additional information and evidence that its DASH-enabled streaming VOD was infringing Helios's MPEG-DASH patents,

and presented with the opportunity to review more detailed confidential information regarding Vudu's infringement, Vudu stated that "Vudu is not interested in receiving any confidential information" and then cut off all further communication to avoid learning of its infringement.

657. On information and belief, based on the facts and inferences set forth in paragraphs 601-656 above, Vudu's infringement has been and continues to be willful.

658. Plaintiffs have been harmed by Vudu's infringing activities.

STATEMENT REGARDING FRAND OBLIGATION

659. Plaintiffs contend that, pursuant to relevant ISO and IEC guidelines, bylaws, and policies, many of the claims of the Asserted Patents are subject to Fair, Reasonable, and Non-Discriminatory ("FRAND") licensing obligations to willing licensees.

660. To the extent Vudu refuses to willingly take a license under such claims of the Asserted Patents under FRAND terms, Plaintiffs reserve the right to treat Vudu as an unwilling licensee, such that Plaintiffs would not be bound by any FRAND licensing obligation for purposes of this action or any license to Vudu. Accordingly, Plaintiffs seek the maximum available reasonable royalty damages to compensate for Vudu's infringing activities.

JURY DEMAND

Pursuant to Rule 38 of the Federal Rules of Civil Procedure, Plaintiffs demand a trial by jury on all issues triable as such.

PRAYER FOR RELIEF

WHEREFORE, Plaintiffs demand judgment for itself and against Vudu as follows:

- A. An adjudication that Vudu has infringed each of the Asserted Patents;
- B. An award of damages to be paid by Vudu adequate to compensate Plaintiffs for Vudu's past infringement of each of the Asserted Patents, and any continuing or future

infringement through the date such judgment is entered, including interest, costs, expenses and an accounting of all infringing acts including, but not limited to, those acts not presented at trial;

C. A declaration that this case is exceptional under 35 U.S.C. § 285, and an award of Plaintiffs' reasonable attorneys' fees; and

D. An award to Plaintiffs of such further relief at law or in equity as the Court deems just and proper.

Dated: July 15, 2020

DEVLIN LAW FIRM LLC

/s/ Timothy Devlin

Timothy Devlin (No. 4241)
1526 Gilpin Avenue
Wilmington, Delaware 19806
Telephone: (302) 449-9010
Facsimile: (302) 353-4251
tdevlin@devlinlawfirm.com

*Attorney for Plaintiffs Helios Streaming, LLC,
and Ideahub, Inc.*