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**UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK**

QUANTUM STREAM, INC.,	:	ECF CASE
	:	
Plaintiff,	:	Civil Action No. 15-cv-8240
	:	
v.	:	
	:	
DIRECTV, LLC,	:	
	:	
Defendant.	:	
	:	
	:	X

FIRST AMENDED COMPLAINT AND DEMAND FOR TRIAL BY JURY

Plaintiff, Quantum Stream, Inc., for its First Amended Complaint, hereby alleges as follows:

THE PARTIES

1. Plaintiff Quantum Stream Inc. (“Quantum Stream”) is a corporation organized and existing under the laws of the State of Delaware, having its principal place of business at 780 3rd Avenue, 12th Floor, New York, New York 10017.

2. Upon information and belief, Defendant DIRECTV, LLC (“DIRECTV”) is a Delaware corporation, having its principal place of business at 2230 E. Imperial Highway, E Segundo, California 90245.

3. Upon information and believe, DIRECTV has a corporate office at 1 Rockefeller Plaza, New York, New York 10020.

4. Defendant DIRECTV is a provider of digital television entertainment services throughout the United States and, upon information and belief, has numerous customers in this judicial district.

JURISDICTION AND VENUE

5. Subject matter jurisdiction is conferred upon this Court under 28 U.S.C. § 1338(a) because this is an action for patent infringement arising under the patent laws of the United States, 35 U.S.C. §§ 1 *et seq.*

6. Venue is proper in this district pursuant to 28 U.S.C. §§ 1391(b), 1391(c), and 1400(b).

7. Personal Jurisdiction over DIRECTV exists because DIRECTV has a corporate office in this judicial district, has committed acts of patent infringement as alleged in the Complaint in this judicial district, and has minimum contacts with this forum through its sale, offer for sale, and use of systems to provide advertisements for inclusion in digital television and/or video-on-demand in this judicial district in violation of Quantum Stream's patent rights.

BACKGROUND

The Patents-In-Suit

8. United States Patent No. 9,047,626 ("the '626 Patent"), entitled "Content Distribution System and Method," was duly and lawfully issued on June 2, 2015, based upon an application filed by inventor, Tayo Akadiri. A copy of the '626 Patent is attached as Exhibit A.

9. The owner of the '626 Patent, by assignment, is Quantum Stream, which has the exclusive right to sue and to recover damages for infringement of the '626 Patent.

10. United States Patent No. 9,117,228 (“the ’228 Patent”), entitled “Content Distribution System and Method,” was duly and lawfully issued on August 25, 2015, based upon an application filed by inventor, Tayo Akadiri. A copy of the ’228 Patent is attached as Exhibit B.

11. The owner of the ’228 Patent, by assignment, is Quantum Stream, which has the exclusive right to sue and to recover damages for infringement of the ’228 Patent.

12. United States Patent No. 9,349,136 (“the ’136 Patent”), entitled “Content Distribution System and Method,” was duly and lawfully issued on May 24, 2016, based upon an application filed by inventor, Tayo Akadiri. A copy of the ’136 Patent is attached as Exhibit C.

13. The owner of the ’136 Patent, by assignment, is Quantum Stream, which has the exclusive right to sue and to recover damages for infringement of the ’136 Patent.

DIRECTV’s Infringing Systems

14. DIRECTV operates systems that provide DIRECTV customers with digital television entertainment services. Upon information and belief, these systems include servers, satellite dishes, and receivers/set-top boxes.

15. DIRECTV offers a large selection of digital channels, which provide digital video content, including digital video programs. *See* https://support.directv.com/app/answers/detail/a_id/1590 (Exh. D).

16. Upon information and belief, DIRECTV’s receivers/set-top boxes used in connection with its digital entertainment services and systems include Genie receivers, HD DVR receivers, TiVo receivers, DVR receivers, Genie Lite receivers, HD receivers, and Standard receivers. *See* http://www.directv.com/technology/genie_receiver?ACM=false&lpos=Header:3 (Exh. E).

17. Upon information and belief, in connection with its digital entertainment services, DIRECTV's systems allow for addressable advertising in order to target advertisements to its customers, which is described in at least the following articles:

- *DIRECTV: The Power of Precision*, ADWEEK, Dec. 1, 2014, <http://www.adweek.com/sa-article/directv-power-precision-161659> (Exh. F);
- *The CMO's Guide to Addressable TV Advertising*, Advertising Age, Feb. 19, 2014, <http://adage.com/article/cmo-strategy/cmo-s-guide-addressable-tv-advertising/291728/>; <http://www.invidi.com/media15.html> (Exh. G);
- *Cable Companies Mining Viewer Data For Targeted Ads*, Reuters, Posted June 27, 2013, updated August 27, 2013, http://www.huffingtonpost.com/2013/06/27/cable-companies-targeted-ads-data_n_3507487.html (Exh. H);
- *DirecTV Plans National Addressable Ad Rollout, Expands INVISION Partnership*, *TVexchanger.com*, Mar. 16, 2012, <http://www.tvexchanger.com/targeted-tv-news/directv-plans-national-addressable-ad-rollout-expands-invision-partnership/> (Exh. I); and
- *Targeted TV Ads Set for Takeoff, DirecTV to Pioneer Commercials Keyed to Each Household; Concerns About Privacy, Technology Linger*, *The Wall Street Journal*, Dec. 20, 2010, <http://www.wsj.com/articles/SB10001424052748704226504576029871779927478> (Exh. J).

18. DIRECTV sells and/or offers to sell addressable advertising services to advertisers.

19. DIRECTV's addressable advertising used to target advertising to its customers is also described in DIRECTV's materials, including "DIRECTV 2015 Media Kit,"

http://cdn.directv.com/cms3/special_projects/ad_sales_microsite/DIRECTV_Ad_Sales_Media_Kit.pdf. (Exh. K).

20. The DIRECTV 2015 Media Kit describes DIRECTV's addressable advertising system as follows:

- "Now use TV to target the households that are right for your brand with DIRECTV Ad Sales."
- "Reach the right customers at the right time. Powered by big data that changes along with people's needs, we're always equipped with the tools to find your ideal audience. We'll do all the heavy lifting before we deliver your message nationwide at scale, reaching the best audience every time—in real time."
- "Get a tailor-made campaign. Once we identify the members of your ideal audience, we'll sample over five million household profiles to determine the best ways to reach them. And we will work hand in hand with leading data firms to recommend the solutions you need to effectively reach your audience. Whatever your brand needs, DIRECTV Ad Sales has you covered."
- "Reach over 20 million of America's most desirable households with DIRECTV's exclusive advertising solutions."
- "Addressable Pinpoint and reach only your ideal audience with the largest national addressable platform."
- "Reach the audience you want. Without paying for the ones you don't. Combine the power of your 30-second TV ad with the precision targeting of digital."
- "DIRECTV Addressable Advertising is a sophisticated, industry-leading digital technology that reaches your target audience at the household level via the world's

most powerful medium: television. And since it's the largest national platform of its kind, your ad is delivered with precision at scale.”

- “100% reach. Zero waste. DIRECTV Addressable Advertising ensures that your message finds the best data-qualified households every time—instead of leaving that to chance. It's the most efficient buy you can get.”
- “Target. Win. And win again. How do you keep up with your audience's changing priorities? As our viewers' needs change, so do their addressable profiles. So you're always targeting based on up-to-the-minute data. That's why 91% of our clients return for additional campaigns.”
- “Reach your audience in powerful roadblock fashion. Run your ad on the most popular, demographically targeted networks for maximum impact.”
- “Supercharge your cluster with addressable. Complement your DIRECTV Targeted Cluster buy with a DIRECTV Addressable Advertising buy to guarantee maximum reach and increased frequency against your best prospects.”

http://cdn.directv.com/cms3/special_projects/ad_sales_microsite/DIRECTV_Ad_Sales_Media_Kit.pdf. (Exh. K)

21. Upon information and belief, DIRECTV has used its systems to provide targeted ads to be included in DIRECTV digital video content as detailed in the following case studies listed in “Appendix: Case Studies,” to the DIRECTV 2015 Media Kit:

- “Retail sales explosion. When a famous toy maker needed to boost sales among families with children aged 0-6, they relied on DIRECTV Addressable Advertising to pinpoint and reach them.”

- “High-speed success. How did a leading luxury automaker reach households in the market for a new car? By finding and reaching them through their consumer profiles and DIRECTV Addressable Advertising.”
- “A tastier bottom line. To increase sales among weight-conscious females, a popular food brand was able to reach them—and only them—using DIRECTV Addressable Advertising.”
- “More viewers, higher ratings. A popular movie channel needed the premiere of their new show to be a ratings sensation. They relied on DIRECTV Addressable Advertising to target their audience with exceeding granularity. The result? Ratings liftoff.”
- “A clean sales lift. To increase sales in households with specific demographics, one of the most popular CPG companies turned to DIRECTV Addressable Advertising for unparalleled accuracy;”
- “An A-list sales boost. When the top premium network needed a subscriber boost among adults 26-55, they relied on DIRECTV Addressable Advertising.”
- “Driving them to buy. How did a leading automaker find serious traction with in-market customers? By relying on the precision targeting of DIRECTV Addressable Advertising to lead them to a custom-made interactive DIRECTV experience.”

http://cdn.directv.com/cms3/special_projects/ad_sales_microsite/DIRECTV_Ad_Sales_Media_Kit.pdf. (Exh. K)

FIRST CLAIM FOR RELIEF

Patent Infringement Of United States Patent No. 9,047,626

22. Plaintiff repeats and realleges the preceding allegations as if restated in full herein.

23. Upon information and belief, DIRECTV has been and is directly infringing, either literally or under the doctrine of equivalents, the '626 Patent by making, using, offering to sell, and/or selling content distribution systems that include consumer device(s) and server interface(s), which provide video content and addressable advertising that meet all of the limitations of at least claim 1 of the '626 Patent in violation of 35 U.S.C. § 271(a), in this District and elsewhere within the United States, without authority.

24. For example, DIRECTV makes, uses, offers to sell, and/or sells a system for providing secondary content (*e.g.*, advertisements) for inclusion in video content (*e.g.*, TV and movie programs). The system comprising a consumer device (*e.g.*, set-top box) which has at least one network connector (*e.g.*, coaxial cable or Ethernet connector) for receiving secondary content selected based on targeted criteria (*e.g.*, consumer profiles and/or demographic information) and for receiving: (a) video content having at least one vacancy (*e.g.*, at least one designated special or temporal region or period during which advertisements are inserted), and (b) information (*e.g.*, data such as one or more attributes) related to the video content (*e.g.*, type of video program and/or time duration/location of the vacancy). The consumer device includes at least one storage device (*e.g.*, one or more internal memories) for storing the secondary content and information (*e.g.*, data such as one or more attributes) related to the secondary content (*e.g.*, the type of advertisement, the duration of the advertisement, and/or information related to the advertisement or intended audience). The consumer device also includes at least one processor for inserting secondary content into the at least one vacancy of the video content,

wherein the insertion is based on matching attributes associated with the vacancy (*e.g.*, type of program, and/or time duration/location of the vacancy) and attributes of the information related to the secondary content (*e.g.*, the type of advertisement, the duration of the advertisement, and/or information related to the advertisement or intended audience). The system also includes at least one server interface (*e.g.*, Ethernet, coaxial, or fiber optic interface) for transferring the video and secondary content to the consumer device. The consumer devices outputs the secondary content within the at least on vacancy of the video content.

25. Quantum Stream has been damaged by the infringement of the '626 Patent by DIRECTV and is suffering, and will continue to suffer, irreparable harm and damage as a result of this infringement unless such infringement is enjoined by this Court.

SECOND CLAIM FOR RELIEF

Patent Infringement Of United States Patent No. 9,117,228

26. Plaintiff repeats and realleges the preceding allegations as if restated in full herein.

27. Upon information and belief, DIRECTV has been and is directly infringing, either literally or under the doctrine of equivalents, the '228 Patent by making, using, offering to sell, and/or selling content distribution systems for targeting digital video advertisements to consumers that include server(s) and consumer device(s), which provide video content and addressable advertising that meet all of the limitations of at least claim 1 of the '228 Patent in violation of 35 U.S.C. § 271(a), in this District and elsewhere within the United States, without authority.

28. For example, DIRECTV makes, uses, offers to sell, and/or sells a system for targeting digital video advertisements to consumers. The system comprises multiple servers (*e.g.*, at least one server such as digital video content distribution server(s)) and each server

comprises at least one network connector (*e.g.*, Ethernet, coaxial or fiber optic connector). A server (*e.g.*, digital video content distribution servers) is connected to at least one consumer device (*e.g.*, set-top box) over a network (*e.g.*, back-end and/or satellite network). A server is configured to transmit a digital video program (*e.g.*, TV and movie programs) to the at least one consumer device through the first network connector and over the network. At least one vacancy (*e.g.*, at least one designated spatial or temporal region or period during which advertisements are inserted) is associated with the digital video program. The DIRECTV system also includes a server comprising at least one storage device (*e.g.*, internal memory) for storing a plurality of digital video advertisements wherein at least one digital video advertisement has at least one attribute (*e.g.*, type of advertisement, the duration of the advertisement, and/or other information related to the advertisement or intended audience). The DIRECTV system has a server comprising at least one processor configured to select at least one digital video advertisement from the plurality of digital video advertisements. The selection is based on comparing targeted criteria (*e.g.*, consumer profiles and/or demographic information) to the at least one attribute of the at least one digital video advertisements. The server in DIRECTV's system which stores advertisements includes at least one second network connector (*e.g.*, Ethernet, coaxial or fiber optic connector) and is connected to the consumer devices over the network (*e.g.*, backend and/or satellite network), and is configured to transmit the selected advertisements to the consumer devices through the second network connector over the network. The system further includes at least one consumer device which includes a third network connector (*e.g.*, coaxial or Ethernet connector). The at least one consumer device is configured to receive the digital video program and the selected advertisement through the third network connector and over the network. The at least one consumer device includes at least one processor configured to insert

the selected advertisement into the at least one vacancy as the consumer is viewing the digital video program.

29. Quantum Stream has been damaged by the infringement of the '228 Patent by DIRECTV and is suffering, and will continue to suffer, irreparable harm and damage as a result of this infringement unless such infringement is enjoined by this Court.

THIRD CLAIM FOR RELIEF

Patent Infringement Of United States Patent No. 9,349,136

30. Plaintiff repeats and realleges the preceding allegations as if restated in full herein.

31. Upon information and belief, DIRECTV has been and is directly infringing, either literally or under the doctrine of equivalents, the '136 Patent by making, using, offering to sell, and/or selling content distribution systems for targeting digital video advertisements to consumers that include server(s) and consumer device(s), which provide video content and addressable advertising that meet all of the limitations of at least claim 1 of the '136 Patent in violation of 35 U.S.C. § 271(a), in this District and elsewhere within the United States, without authority.

32. For example, DIRECTV makes, uses, offers to sell, and/or sells a system for targeting digital video advertisements to consumers. The system comprises at least one first server (*e.g.*, digital video content distribution server) comprising a first network connector (*e.g.*, Ethernet, coaxial, or fiber optic connector), wherein the at least one first server is connected to at least one consumer device (*e.g.*, set-top box) over a network (*e.g.*, back-end and/or satellite network) and is configured to transmit a digital video program (*e.g.*, TV and movie programs), having at least one vacancy (*e.g.*, at least one designated spatial or temporal region or period during which advertisements are inserted), to the at least one consumer device through the first

network connector and over the network. The system also comprises at least one consumer device comprising at least one second network connector (*e.g.*, Ethernet or coaxial connector), wherein the at least one consumer device is configured to receive, through the at least one second network connector, the digital video program from the at least one first server and the digital video advertisements from at least one second server (*e.g.*, digital video advertising content distribution server). At least one of the digital video advertisements is selected for transmission to the at least one consumer device based on comparing targeted criteria (*e.g.*, consumer profiles and/or demographic information) to at least one attribute of the at least one of the digital video advertisements (*e.g.*, type of advertisement, the duration of the advertisement, and/or other information related to the advertisement or intended audience). The at least one of the consumer devices also comprises at least one processor configured to insert the selected at least one of the digital video advertisements into the at least one vacancy of the digital video program.

33. Quantum Stream has been damaged by the infringement of the '136 Patent by DIRECTV and is suffering, and will continue to suffer, irreparable harm and damage as a result of this infringement unless such infringement is enjoined by this Court.

WILLFUL INFRINGEMENT

34. DIRECTV was on notice of the '626 and '228 Patents as well as Quantum Stream's infringement allegations at least since the filing of the original Complaint in October 2015.

35. After being put on notice in October 2015, it was objectively reckless and unreasonable for DIRECTV to continue to make, use, sell, offer to sell, or import the DIRECTV addressable advertising system and components thereof including its set-top boxes.

36. Upon information and belief, since the filing of the original Complaint, DIRECTV has been monitoring prosecution of Quantum Stream's pending patent application(s) and was on notice of the '136 Patent at least as early as the issuance of the '136 Patent on May 24, 2016.

37. After being having notice of the '136 Patent, it was objectively reckless and unreasonable for DIRECTV to continue to make, use, sell, offer to sell, or import the DIRECTV its addressable advertising systems and components thereof, including its set-top boxes.

38. After the filing of the original Complaint, on information and belief, DIRECTV continued to make, use, sell, offer for sale, and/or import its addressable advertising systems and components thereof, including its set-top boxes, and continued to provide user manuals/guides and demonstrations instructing customers how targeted advertisements are delivered to DIRECTV's digital television customers using DIRECTV's addressable advertising systems.

39. As of the filing of this First Amended Complaint, on information and belief, DIRECTV continues to make, use, sell, offer for sale, and/or import its addressable advertising systems and components thereof, including its set-top boxes, and continues to provide user manuals/guides and demonstrations instructing customers how targeted advertisements are delivered to DIRECTV's digital television customers using DIRECTV's addressable advertising systems.

40. Between the filing of the original Complaint and the First Amended Complaint, Lowe's was objectively reckless, and acted despite an objectively high likelihood that its actions constituted infringement of a valid patent, in continuing to make, use, sell, offer for sale, and import its addressable advertising systems and components thereof including its set-top boxes, including Iris mobile apps, and continuing to provide user manuals/guides, demonstrations, as

well as videos instructing customers how to install, operate, and use the DIRECTV addressable advertising systems and components thereof, including its set-top boxes.

41. The continued infringement by DIRECTV of the '626, '228, and '136 Patents is deliberate and willful, entitling Quantum Stream to increased damages under 35 U.S.C. § 284 and to attorney fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.

REQUESTED RELIEF

WHEREFORE, Quantum Stream demands judgment as follows:

- A. A finding that DIRECTV has infringed one or more claims of the '626 Patent;
- B. A finding that DIRECTV has infringed one or more claims of the '228 Patent;
- C. A finding that DIRECTV has infringed one or more claims of the '136 Patent;
- D. A finding that DIRECTV has willfully infringed one or more claims of the '626 Patent;
- E. A finding that DIRECTV has willfully infringed one or more claims of the '228 Patent;
- F. A finding that DIRECTV has willfully infringed one or more claims of the '136 Patent;
- G. A permanent injunction enjoining DIRECTV, its officers, agents, servants, employees, and attorneys, and all persons acting in concert or participation with any of them from infringing the '626, '228, and '136 Patents;
- H. An award of damages under 35 U.S.C. § 284 (or as otherwise permitted by law) adequate to compensate Quantum Stream for the infringement by DIRECTV along with prejudgment and postjudgment interest;
- I. An award of Quantum Stream's costs and attorney fees and expenses pursuant to 35 U.S.C. § 285 or as otherwise permitted by law; and

J. An award of such other costs and further relief that this Court determines to be just and equitable.

DEMAND FOR TRIAL BY JURY

Pursuant to Fed. R. Civ. P. 38(b), Quantum Stream hereby demands a jury trial on all issues so triable.

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Dated: August 3, 2016

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