1	Francisco A. Villegas (Bar No. 206997)	
2	Damir Cefo (<i>pro hac vice, to be filed</i>) Mark W. Halderman (<i>pro hac vice, to be filed</i>) Evan M. Rosenbaum (Bar No. 310414)	
3	fvillegas@villegascefo.com dcefo@villegascefo.com	
4	mhalderman@villegascefo.com erosenbaum@villegascefo.com	
5	VILLEGAS & CEFO, LLP 1350 Avenue of the Americas, Floor 2	
6	New York, NY 10019 Telephone: (646) 844-0679	
7		
8	Lawrence C. Drucker (pro hac vice, to be filed) ldrucker@taylorenglish.com	
9	Bryan N. DeMatteo (<i>pro hac vice, to be filed</i>) bdematteo@taylorenglish.com	
10	TAYLOR ENGLISH DUMA LLP 1325 Avenue of the Americas, Suite 2700	
11	New York City, NY 10019 Telephone: (646) 993-1901	
12	John V. Picone III (Bar No. 187226)	
13	jpicone@spencerfane.com SPENCER FANE LLP	
14	225 West Santa Clara Street, Suite 1500 San Jose, CA 95113	
15	Telephone: (408) 286-5100	
16	Attorneys For Plaintiff RAZDOG HOLDINGS LLC	
17		
18	UNITED STATES DISTRICT COURT	
19	NORTHERN DISTR	ICT OF CALIFORNIA
20	RAZDOG HOLDINGS LLC,	Case No. 5:24-CV-3638
21	Plaintiff,	COMPLAINT
22	VS.	DEMAND FOR JURY TRIAL
23	TWITCH INTERACTIVE, INC.	
24	Defendants.	
25	Defendants.	
26		
27		
28		

45

6

7

9

11 12

13

14

1516

17

18

19

2021

22

2324

2526

27

28

Plaintiff RazDog Holdings LLC ("RazDog") alleges as follows for its patent infringement Complaint against Defendant Twitch Interactive, Inc. ("Twitch" or "Defendant"), concerning Twitch's infringement of RazDog's patents by providing website carousels that allow access to real-time media content.

INTRODUCTION

- 1. RazDog's founders saw an opportunity for companies to present content to users over the Internet in a new way. They achieved their vision by developing a software solution that allowed users to navigate between content received from various sources without needing to leave a single webpage.
- 2. In furtherance of its objectives, RazDog created a suite of software products that, on the front end, provided a graphical user interface with the intuitiveness and attractiveness of swiping on a smartphone (*i.e.*, CloudMotion) while also providing a flexible content management system on the backend (*i.e.*, CloudSource).

RazDog RD CloudMotion™ Technology

Patent pending. The only solution that lets all your users navigate any webenabled and cloud-based content, including heavy lifting business applications using fun and exciting RazDog swiping technology. RazDog RD CloudMotion™ Technology helps keep users on your website or webenabled applications up to twice as long on average. Your users will navigate deeper into your website or content containing RazDog software.

RazDog RD CloudSource™ Content Management Software

Integrated CMS solution features deep-dive data tracking and reporting. Transforms control, navigation and analysis of all your Internet, intranet, and cloud-based content, from web pages to heavy lifting business applications. Includes new RD CloudMotion™ swiping technology. Customers will navigate deeper into your content and stay on your website longer using RazDog RD CloudSource™

RazDog Success Stories

3. RazDog's CloudMotion and CloudSource software provided a smartphone-like experience on web browsers—complete with fully swipe-able content deployable by a server to any user device with a browser and Internet access. The software allowed users to swipe between content received in real time from multiple sources using a single sliding interface.

-2-



- 4. Unlike previous swiping technologies that required a plug-in or were resident on a local device (such as a phone with a touch screen), RazDog's solution worked remotely with any web browser. It was deployable through a server (or device acting as a server) and was usable on a variety of devices, including, for example, PCs, desktops, laptops, and smartphones. Because the software did not require businesses to redesign existing applications or content, it allowed for simple integration into existing systems. Moreover, by providing an interface that aggregated multiple content sources and applications, RazDog was able to provide businesses with comprehensive data analytics.
- 5. RazDog had several early successes, such as promising partnerships with well-established companies. For instance, RazDog partnered with HP through the HP Alliance ONE Partner Program. HP provided training on RazDog's platform to sales representatives and launched a phone marketing program. Additionally, IBM, Cisco, Publicis, and several smaller companies partnered with RazDog and agreed to offer RazDog's solutions to their clients.
- 6. In April 2012, Microsoft invited RazDog to participate in an exclusive technology exposition called Channel Link. RazDog was awarded one of only eight Microsoft-sponsored slots.



Valued Vendor Partners,

Microsoft is funding Channel Development Jumpstart packages for a limited number of Microsoft partners to help them launch their solutions on StreamOne and attract new channel partners. I wanted to reach out to you to determine your eligibility for this offer as I think it would provide some great visibility if you qualify.



BRINGING YOU TOGETHER. BETTER. 2012

Congratulations StreamOne partners!!!

Your rapid response landed you one of the 8 Microsoft sponsored slots to attend Channel Link!!!!

It was great speaking with everyone yesterday. Again this is a great opportunity to attend one of Tech Data's reseller facing events. There is expected to be 500 reseller attendees. The event will be held at the Venetian – Las Vegas, April 10-12. Attached you will find the vendor prep kit, tentative agenda and Technology Expo Service Kit.

7. To protect its technology, RazDog filed for and obtained two patents—U.S. Patent No. 9,729,658 (the "'658 Patent") and U.S. Patent No. 10,334,068 (the "'068 Patent")—both of which are the subject of this litigation. The '658 and '068 Patents are collectively referred to herein as the "RazDog Patents."

-4-

8. While RazDog was ultimately unable to successfully market its software in the wake of rampant infringement, its patent-protected technology has flourished in the marketplace.

NATURE OF THE ACTION

9. This is a civil action for patent infringement arising under 35. U.S.C. § 100, et seq., and in particular, § 271 pertaining to Twitch's live video carousels.

PARTIES

- 10. Plaintiff RazDog is a Delaware company with a principal place of business located at 222 Stapleford Park Drive, Greenville, South Carolina 29607.
- 11. On information and belief, defendant Twitch is a Delaware corporation with a principal place of business located at 350 Bush Street, Suite 2, San Francisco, California 94104.
- 12. On information and belief, Twitch has committed acts of infringement in this District, including by, among other things, making, using, offering for sale, and/or selling services accessible at https://www.twitch.tv/ that infringe the RazDog Patents.

JURISDICTION AND VENUE

- 13. The Court has subject matter jurisdiction over this action under 28 U.S.C. §§ 1331 and 1338(a) because it arises under the patent laws of the United States.
- 14. The Court has personal jurisdiction over Twitch. On information and belief, Twitch maintains a regular and established place of business at 350 Bush St., San Francisco, CA 94104 and has purposefully availed itself of the rights and benefits of the laws of this State and this District by committing acts of infringement, as outlined in this Complaint.
- 15. On information and belief, Twitch operates infringing video streaming infrastructure through at least *sfo.contribute.live-video.net* in this District.
- 16. Venue is proper in this District under 28 U.S.C. §§ 1391 and 1400(b) because, among other things, Twitch has a regular and established place of business in this District, has engaged in a substantial number of events giving rise to RazDog's claims in this District, and has committed acts of infringement in this District.

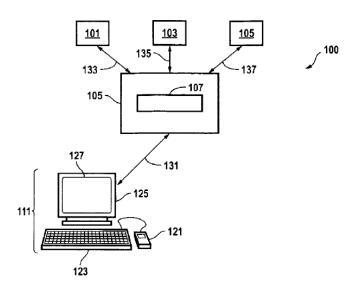
FACTUAL BACKGROUND

The RazDog Patents

- 17. On October 11, 2011, the RazDog inventors filed the application which the United States Patent and Trademark Office ("PTO") issued on August 8, 2017 as U.S. Patent No. 9,729,658, entitled "System For Managing Web-Based Content Data and Applications." Then, on June 26, 2017, the RazDog inventors filed a continuation application which the PTO issued on June 25, 2019 as U.S. Patent No. 10,334,068, entitled "System For Managing Web-Based Swipe Module Tool And Software For Scrolling And Paging Through Content Data And Applications." RazDog is the assignee and owner of all rights, title, and interest in and to the RazDog Patents, including the right to assert all causes of action arising under the RazDog Patents and the right to all remedies for infringement of the RazDog Patents.
- 18. The RazDog Patents describe two main components: (1) a "slide tool" interface; and (2) a remote tool box and networking component.
- 19. The "slide tool" interface allows users to page or scroll through content on a master webpage—with the content being provided in real time from multiple content sources or service providers.
- 20. A master server (105 below) and master webpage act as a point of access to such content. The master server ingests data from the content sources or providers (*e.g.*, 101, 103, 105 below) in real time (*e.g.*, live streams) for delivery to users on the master webpage.

¹ The '658 Patent is attached hereto as **Ex. 1**, and a patent infringement claim chart concerning Twitch's infringement thereof is introduced in the counts of infringement, *infra* ¶¶ 36, 41-43.

² The '068 Patent is attached hereto as **Ex. 2**, and a patent infringement claim chart concerning Twitch's infringement thereof is introduced in the counts of infringement, *infra* ¶¶ 36, 44-46.



'068 Patent at Figure 1; '658 Patent at Figure 1.

- 21. The remote tool box allows a user, administrator, or other webpage operator to control the layout or operation of the content displayed on the master webpage. An operator can enable or disable various tool features that change how subsets of content are received, organized, or displayed. For example, the layout of a website carousel can be modified, and the scrolling speed of a carousel raised or lowered. Similarly, the operator can restrict access to content to only certain authorized users. The master server also collects analytics based on the settings in the tool box to target products, services, or information to users.
- 22. Prior to the inventions of the RazDog Patents, "available computing systems require[d] multiple log-in procedures for accessing [] multiple sources of content data and/or services and/or d[id] not provide the ability to manage the content data and/or services from multiple sources through a single user interface." '068 Patent at 1:61-66; '658 Patent at 1:53-58. It is believed that there were no "computer systems . . . that allow[ed] [a user] to migrate through content data using a scrolling-type feature or tool . . ." in real time without a plug-in. '068 Patent at 2:6-9; '658 Patent at 1:66-2:2.
- 23. Instead, in prior "scrolling software that typically r[an] on mobile computing devices, such as smartphones . . . a user swipe[d] through content data contained in different files that are stored directly on the mobile device." '068 Patent at 2:10-15 (emphasis added); '658 Patent at 2:2-7 (emphasis added). Unlike RazDog's novel technology that enabled users to migrate

through content received in real time, it is believed that prior scrolling software on mobile devices only allowed users to swipe through content that had already been downloaded and stored locally.

- 24. A "second type of scrolling application include[d] a 'plug-in and play' software that is operated from a computing device, such as a lap-top or desk-top computer"—which required users to "download[] the plug-in and play software . . . allow[ing] the user to execute functions for scrolling or migrating through various web-pages of content data displayed on a web-site interface in a 'slide-like' presentation." '068 Patent at 2:24-32; '658 Patent at 2:16-24. It is believed that this plug-in software was "not capable of being integrated directly into web-based application, such as to allow the user to migrate through content data from multiple content data sources through a single user interface in real time." '068 Patent at 2:32-37; '658 Patent at 2:24-29.
- 25. The RazDog Patents resolved these technical shortcomings of prior techniques through their unconventional cloud-based system for managing and organizing content on webpages in real time. The technological solution taught by the RazDog Patents enabled users to page or scroll through content provided in real time on a master webpage without the need for a plug-in.
- 26. The RazDog Patents' teaching of a slide tool interface that allows for the convergence of content from multiple sources in real-time with a "tool box" was a contrarian approach to how companies managed and provided website content. Indeed, the novelty of RazDog's technology led the Managing Director of Publicis Boise to state, "Publicis Boise is known for innovation in media solutions and flawless execution of these concepts" and that it had "partnered with RazDog.com to bring the technology that will take web delivery of information and entertainment to the next level." **Ex. 5**, (1888 Press Release, Publicis Boise and RazDog Launch CloudMotion (TM), Dec. 14, 2011). She recognized that "[a]s a member of RazDog.com's partner network, Publicis Boise clients benefit from the strength of leading-edge software design and a next-generation software platform that integrates with customer's existing systems." *Id*.
- 27. Similarly, the Vice President of Software Product Marketing for Tech Data, described RazDog's CloudMotion software as "an innovative solution":

"Our StreamOne partnership with RazDog.com reconfirms Tech Data's commitment to provide our customers with innovative software that will continue to help them meet their business goals," said Stacy Nethercoat, Vice President of Software Product Marketing for Tech Data. "By offering CloudMotion, our network of resellers are able to provide business value and an innovative solution to end-users."

Ex. 6, (1888 Press Release, RazDog.com included in Tech Data's StreamOne (TM) Solutions Store Agreement Allows RazDog to Reach 60,000 Value Added Resellers, Jan. 24, 2012).

28. For at least these reasons, the RazDog Patents' advancements to prior techniques were unconventional at the time of their priority date.

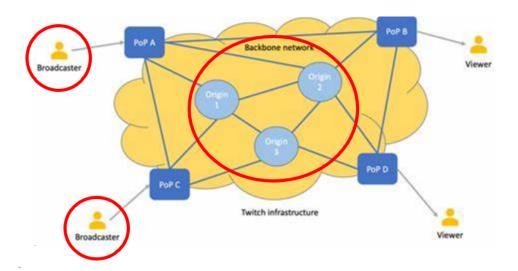
Twitch's Infringement

- 29. The Twitch Video System is a cloud-based system that delivers live streams from individual broadcasters, sometimes referred to as "streamers," pertaining to video games and other topics, together with live commentary.
- 30. Twitch servers ingest live media from pre-selected broadcasters simultaneously in real time, which they then deliver to viewers via Twitch's cloud-based infrastructure and webpage carousels. Viewers can horizontally page or scroll between video content organized on the carousels.
- 31. Twitch's webpage includes a "slide tool"—"carousels" for organizing live video content received from the numerous content sources (*e.g.*, streamers):



32. As shown below, multiple broadcasters stream live video through Twitch's infrastructure. The origin server (and/or one or more of the content processing and/or delivery

servers in Twitch's infrastructure) then delivers this content in real time to remote computer devices (viewers below) via Twitch's webpage.



Ex. 7, (Ingesting Live Video Streams at Global Scale) (emphasis added).

33. Broadcasters stream content data and content applications to Twitch's origin server simultaneously in real time. As shown below, Twitch ingests video data from broadcasters using the real-time messaging protocol (RTMP). On information and belief, these videos are streamed simultaneously in real time to the Twitch origin server so that Twitch can deliver them "live" on its carousels.

Video System

The video system is responsible for getting video from the broadcaster to our viewers. This includes the following core components:

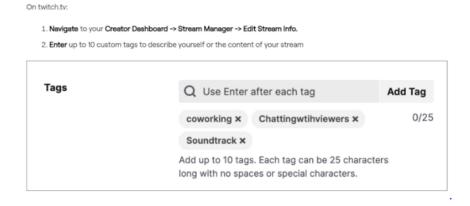
Video ingest — We take RTMP video in, and then transport it to the transcode system.

Ex. 8, (Twitch Engineering: An Introduction and Overview, Dec. 18, 2015) (emphasis added).

- 34. The videos are then viewable from remote computer devices on Twitch's live streamed website carousels.
- 35. The Twitch Video System also includes a remote tool box that allows Twitch and its users to write code, enter settings, and/or select icons associated with code that enable and disable various tool features to control how subsets of video content are received, displayed, and/or organized.

36. These services and features, as well as other implementations of the Twitch Video System that include carousels and a remote tool box, infringe the RazDog Patents (the "Twitch Infringing Services"), as set forth in more detail in the infringement charts attached hereto as **Exhibit 3** and **4**.

37. Moreover, Twitch provides instructions to use the Twitch Infringing Services. For example, it instructs how to use the Tags feature in an infringing manner:



Ex. 9, (Adding Tags to Your Stream).

38. As another example, Twitch provides instructions on how to use the Suggested Channels feature in an infringing manner:

Adding to your Suggested Channels List Suggested channels are enabled by default, so all you need to do is add channels to your list, and set the priority. To add specific channels to your suggested list: 1 Visit your Creator Dashboard. 2 Click Settings (https://link.twitch.tv/myChannelSettings) 3 Click Channel and then Featured Content. 4 Select Suggested Channels

Ex. 11, (How to Use Suggested Channels).

- 39. Twitch is a wholly owned subsidiary of Amazon.com, Inc.
- 40. On information and belief, Twitch is also part of Amazon Web Services, Inc. ("AWS"). For example, although Twitch is putatively a separate company, Twitch's former CEO Emmett Shear confirmed that Twitch is part of AWS:

So Twitch is part of AWS?

That's right. We're technically inside of AWS, but we are very independent and still with our own separate company. But that's the part of Amazon we are closest to.

Ex. 17, (Twitch CEO Emmett Shear Talks Live Streaming, Sarcasm, and Amazon Web Services).

COUNT ONE

Patent Infringement of the '658 Patent

- 41. RazDog incorporates by reference each of the preceding paragraphs of this Complaint.
- 42. Twitch has directly infringed and continues to directly infringe at least claim 1 of the '658 Patent, pursuant to 35 U.S.C. § 271(a), literally or under the doctrine of equivalents, through its making, using, selling and/or offering for sale of the Twitch Infringing Services. For example, Twitch's infringement of claim 1 of the '658 Patent through the Twitch Infringing Services is shown in the chart attached hereto. *See* Ex. 3.
- 43. Accordingly, Twitch's infringement of the '658 Patent has injured RazDog in an amount to be determined at trial.

COUNT TWO

Patent Infringement of the '068 Patent

- 44. RazDog incorporates by reference each of the preceding paragraphs of this Complaint.
- 45. Twitch has directly infringed and continues to directly infringe claim 1 of the '068 Patent, pursuant to 35 U.S.C. § 271(a), literally or under the doctrine of equivalents, through its making, using, selling and/or offering for sale of the Twitch Infringing Services. For example, Twitch's infringement of the '068 Patent through the Twitch Infringing Services is shown in the chart attached hereto. *See* Ex. 4.
- 46. Accordingly, Twitch's infringement of the '068 Patent has injured RazDog in an amount to be determined at trial.

1	PRAYER FOR RELIEF		
2	WHEREFORE, RazDog respectfully prays for relief as follows:		
3	A. A judgment that Twitch has infringed one or more claims of the '658 and		
4	'068 Patents;		
5	B. An award of damages pursuant to 35 U.S.C. § 284 in an amount sufficient		
6	to compensate RazDog for Twitch's infringement, not less than a reasonable		
7	royalty, along with pre- and post-judgment interest;		
8	C. An order for an accounting of damages caused by Twitch's infringement;		
9	D. An order declaring this case exceptional and awarding RazDog its costs		
10	expenses, and attorneys' fees pursuant to 35 U.S.C. § 285; and		
11	E. An order awarding RazDog such other and further relief, whether at law o		
12	in equity, that this Court finds just, equitable, and proper.		
13	JURY DEMAND		
14	Pursuant to Federal Rule of Civil Procedure 38(b) and Civil Local Rule 3-6(a), RazDog		
15	hereby demands a trial by jury on all issues so triable.		
16			
17	Dated: June 17, 2024 By: /s/ John V. Picone III		
18	Francisco A. Villegas (Bar No. 206997) Mark W. Halderman (pro hac vice, pending)		
19	Damir Cefo (pro hac vice, pending) Evan M. Rosenbaum (Bar No. 310414)		
20	VILLEGAS & CEFO, LLP		
21	Lawrence C. Drucker (pro hac vice, pending)		
22	Bryan N. DeMatteo (<i>pro hac vice, to be filed</i>) TAYLOR ENGLISH DUMA LLP		
23	John V. Picone III (Bar No. 187226)		
24	SPENCER FANE LLP		
25	Attorneys for Plaintiff RazDog Holdings LLC		
26			
27			
28	-13-		