

EXHIBIT C-1
NL Giken Supplemental Infringement Claim Chart for US 8,677,391 – Served on October 21, 2024
CONFIDENTIAL – OUTSIDE ATTORNEYS’ EYES ONLY – SOURCE CODE

Claim Term	Mapping of Accused System
1[PRE]: A moving image data delivery system capable of being in communication with a plurality of moving image viewing apparatuses and an advertising image data delivery system comprising:	To the extent the preamble is limiting, the Twitch System¹ is a moving image data delivery system capable of being in communication with a plurality of moving image viewing apparatuses and an advertising image data delivery system. Defendants directly infringe claim 1 as each part of the Twitch System is made, used and/or controlled by Defendants and/or Twitch streamers with whom Defendants are contractually engaged and whose acts Defendants directs and/or controls. <i>See, e.g., Akamai Techs., Inc. v. Limelight Networks, Inc.</i>, 797 F.3d 1020 (Fed. Cir. 2015). Defendants further induce streamers to infringe claim 1 by encouraging said streamers, such as via contractual engagements, to use the Twitch System to stream content to viewers. <i>See, e.g., Centillion Data Sys., LLC v. Qwest Comms. Int’l, Inc.</i>, 631 F.3d 1279 (Fed. Cir. 2011). Defendants further induce viewers to infringe claim 1 by encouraging said viewers to use the Twitch System to view streaming and/or recorded content via the Twitch System. <i>See, e.g., id.</i> Defendants provide the claimed moving image data system by providing and maintaining the Twitch Platform and providing Twitch Studio to Twitch streamers with whom Defendants contractually engage to stream content to viewers (on a plurality of viewing apparatuses) in exchange for a share of advertising revenue provided Amazon Ad servers. Partners earn a share of the revenue from any ads on their channel. (DEFS-NLG_0000658). Defendants provide Twitch streaming software (Twitch Studio) to Twitch streamers and instruct and encourage them to download and install Twitch Studio or other third-party streaming software (e.g., OBS Project, Streamlabs Desktop, XSplit, Vmix, Elgato Game Capture, Live Gamer Extreme, and Lightstream) onto their computers.

¹ Defined herein as the Twitch Platform (including Twitch servers such as the CloudFront content server and software running thereon) in combination with one or more Twitch streamers’ computers having installed Twitch Studio (or other third-party streaming software that provides similar functionality to Twitch Studio, hereafter referred to as “third-party streaming software”).

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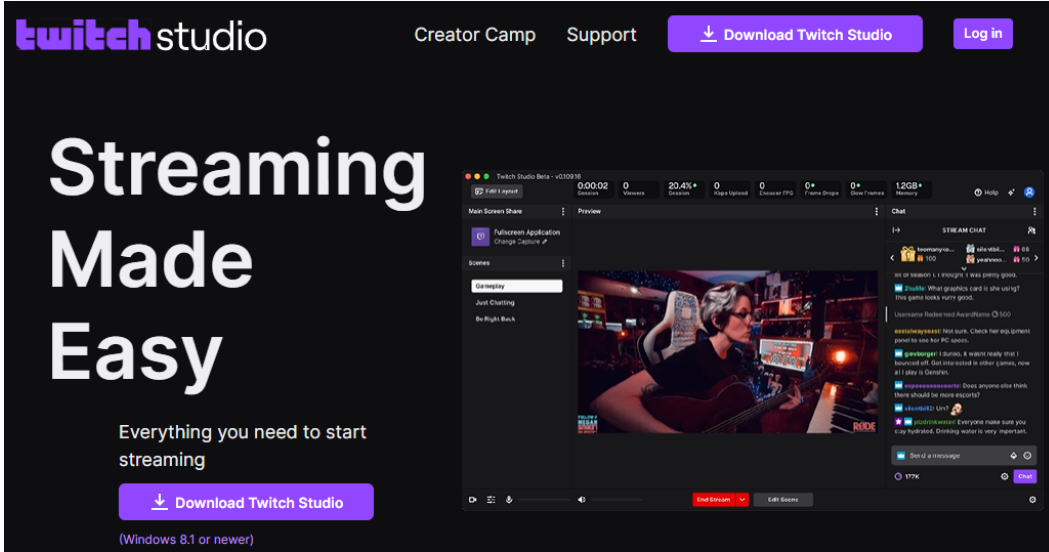
Claim Term	Mapping of Accused System
	Go live within minutes! Twitch Studio automates your setup and configures your hardware for you so you can start streaming with ease. No additional plug-ins needed. Get alerts, chat and manage your stream all in one place.  The screenshot displays the Twitch Studio website and its application interface. The website features the 'twitch studio' logo, navigation links for 'Creator Camp' and 'Support', and a prominent 'Download Twitch Studio' button. The main headline reads 'Streaming Made Easy' with the subtext 'Everything you need to start streaming' and another 'Download Twitch Studio' button. The application interface, shown in a preview window, includes a top status bar with system metrics (0 viewers, 20.4% bandwidth, 0 FPS, 0 RAM usage, 0+ system usage, 12GB+ memory), a central video preview area showing a streamer, and side panels for 'Main Screen Share', 'Scenes', 'Just Chatting', and a 'Chat' window with viewer messages.

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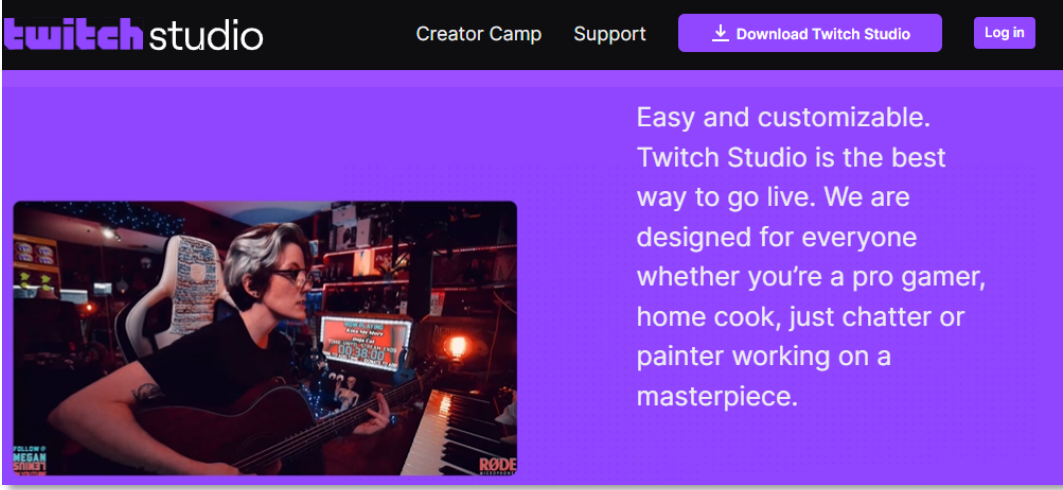
Claim Term	Mapping of Accused System
	 https://www.twitch.tv/broadcast/studio

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Claim Term	Mapping of Accused System
	System Requirements Twitch Studio Minimum Requirements: ▪ OS: Windows 8.1 64-bit ▪ GPU: DirectX 11 compatible ▪ RAM: 4+ GB (2GB free) ▪ CPU: 4 core Intel or AMD Twitch Studio Recommended Specifications: ▪ OS: Windows 10 64-bit ▪ GPU: NVIDIA GTX 10 series or newer, AMD RX400 series or newer ▪ RAM: 8GB+ ▪ CPU: 8 thread Intel or AMD The requirements may change based on your selected encoder, stream quality settings, and the game you are trying to capture. More intensive games will require better hardware in order to achieve good stream quality. If you encounter any issues with your streaming set up, feel free to join our Discord server to chat directly with other Twitch Studio users and some of our developers! https://help.twitch.tv/s/article/twitch-studio-faq?language=en_US

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8/22/24, 10:06 AM

Recommended Software for Broadcasting



(<https://obsproject.com/>)

OBS Project
(<https://obsproject.com/>)

Available on

Windows, Mac, Ubuntu

Licenses

Free



streamlabs

(<https://streamlabs.com/>)

Streamlabs Desktop
(<https://streamlabs.com/>)

Available on

Windows, Mac

Licenses

Free



(<https://www.xsplit.com/>)

XSplit
(<https://www.xsplit.com/>)

Available on

Windows

Licenses

Free, Paid



(<http://www.vmix.com/>)

Vmix
(<http://www.vmix.com/>)

Available on

Windows, Mac

Licenses

Product Software



(<https://www.elgato.com/en/gaming/game-capture-software>)

Elgato Game Capture
(<https://www.elgato.com/en/gaming/game-capture-software>)

Available on

Windows, Mac

Licenses

Product Software



(<https://www.avermedia.com/>)

Live Gamer Extreme
(<https://www.avermedia.com/>)

Available on

Windows, Mac

Licenses

Free, Paid



(<https://app.golightstream.com/welcome>)

Lightstream
(<https://app.golightstream.com/welcome>)

Available on

Windows, Mac

Licenses

Free, Paid

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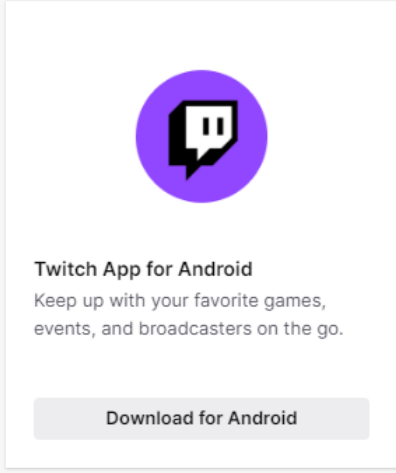
Claim Term	Mapping of Accused System
	(DEFS-NLG-0001421 at 422) Defendants also allow Twitch viewers to stream content from Twitch streamers and to view pre-roll and mid-roll advertisements on moving image viewing apparatuses (e.g. Twitch viewers’ laptops, phones, or other viewing devices) via software (e.g. mobile phone or TV applications) provided by Defendants and/or web browsers. Mobile Apps  https://www.twitch.tv/downloads

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	 Fire TV Turn your TV into your personal gaming theater with the Twitch App on Fire TV. Download for Fire TV https://www.twitch.tv/downloads Below is an image of a stream from a Twitch streamer’s computer system being viewed on a moving image viewing apparatus and being provided by a content delivery network (e.g. CloudFront).

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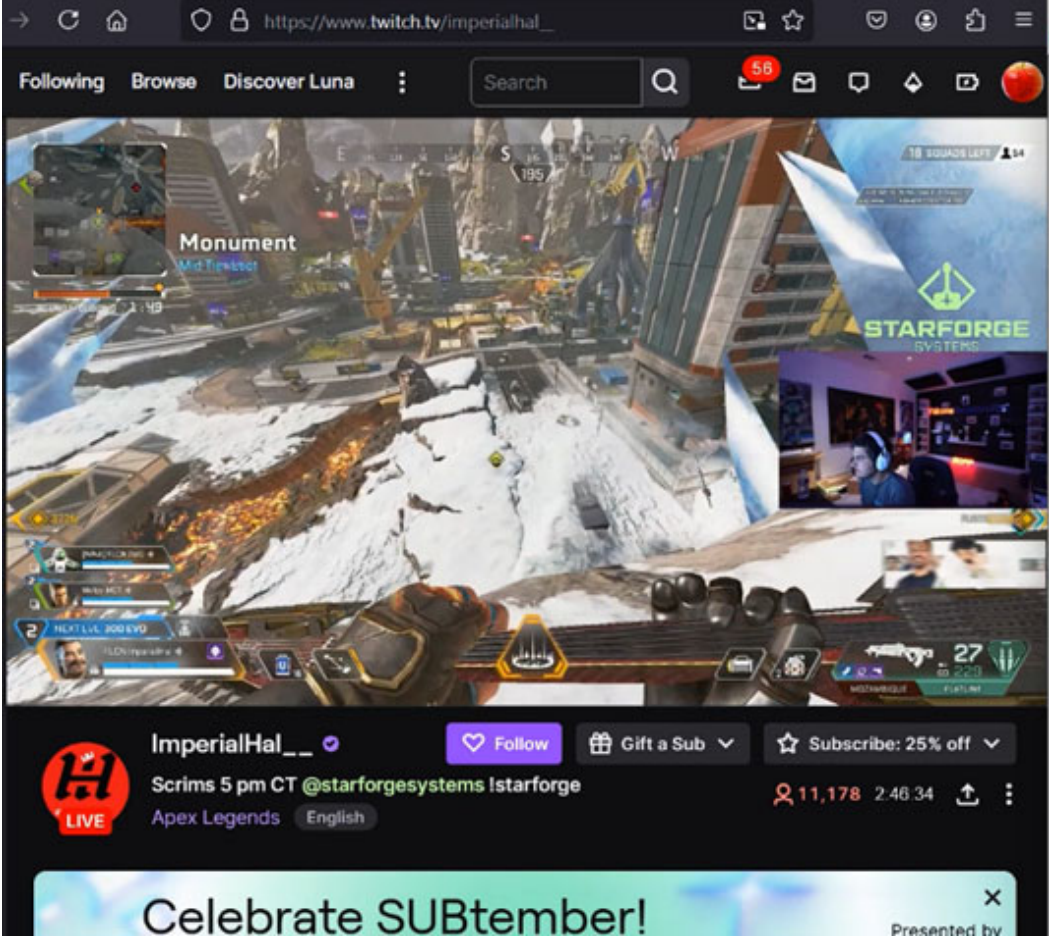
Claim Term	Mapping of Accused System
	 Thus, each Twitch streamer’s computer (with Twitch Studio and/or other third-party streaming software installed) together with the Twitch Platform (collectively the “Twitch System”) is a moving image data delivery system capable of being in communication with a plurality of moving image viewing apparatuses (e.g., Twitch viewer devices) and an advertising image data delivery system (e.g., Amazon Ad servers).

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1[A]: a storage of a plurality of digital moving image data of television programs to be viewed by the moving image viewing apparatuses;	The Twitch System includes a storage of a plurality of digital moving image data of television programs to be viewed by the moving image viewing apparatuses. For example, the Twitch Platform stores a plurality of digital moving image data of television programs (e.g. streamer content recorded using Twitch Studio and/or other third-party streaming software and uploaded to the Twitch Platform) to be viewed by the moving image viewing apparatuses. The Twitch Platform runs on Amazon Web Services (AWS). https://aws.amazon.com/blogs/media/how-twitch-built-the-global-live-streaming-network-that-powers-amazon-ivs/ As another example, each Twitch streamer’s computer (with Twitch Studio or other third-party streaming software installed) also stores a plurality of digital moving image data of television programs (e.g., streamer content recorded using Twitch Studio and/or other third-party streaming software) in RAM before it is uploaded to the Twitch Platform. The Twitch System enables streamers to stream the stored plurality of digital moving image data of television programs, such as the following “Featured Clips,” which were available on Twitch on December 19, 2023.

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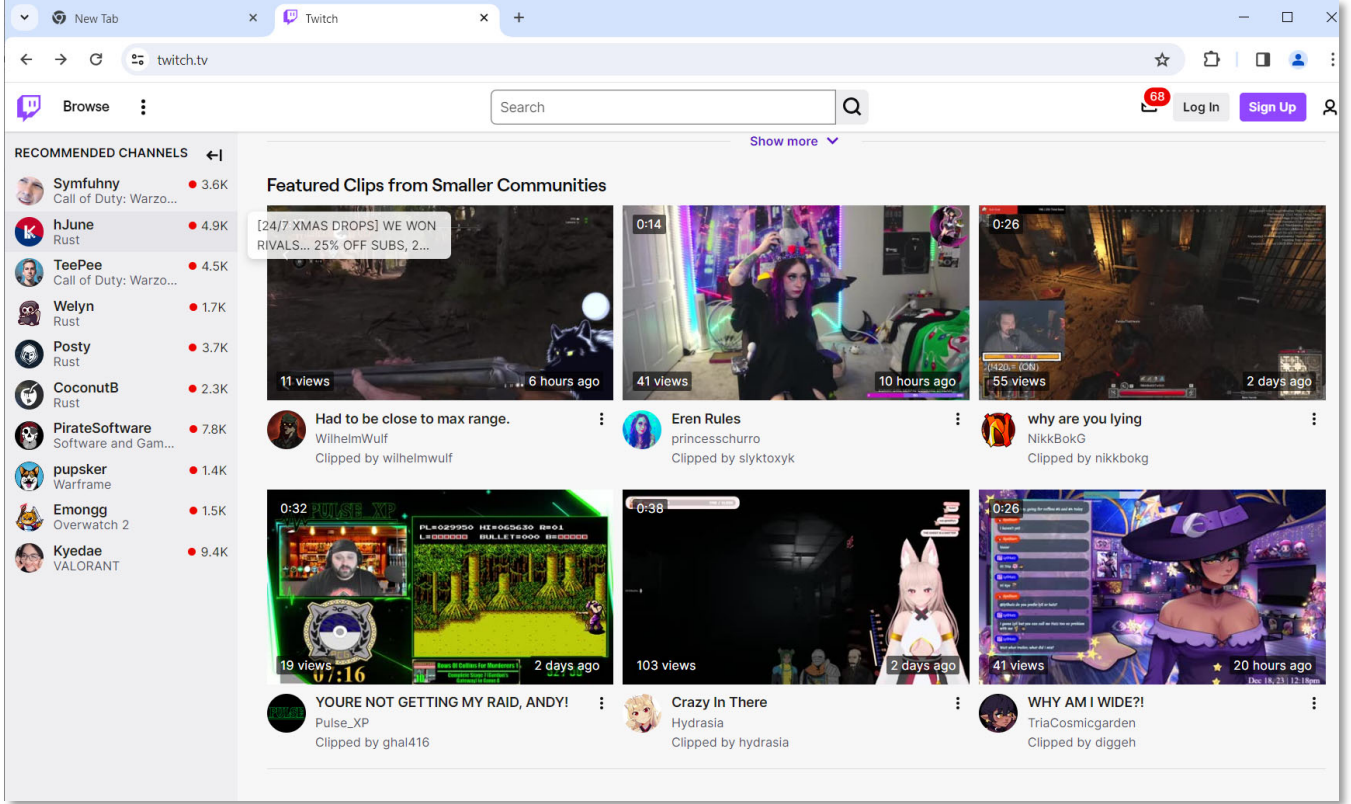
Claim Term	Mapping of Accused System
	 The screenshot shows the Twitch homepage. On the left, there is a 'RECOMMENDED CHANNELS' list with profiles for Symfuhny, hJune, TeePee, Welyn, Posty, CoconutB, PirateSoftware, pupsker, Emongg, and Kyedae. The main content area is titled 'Featured Clips from Smaller Communities' and displays a grid of video clips. Each clip includes a thumbnail, a title, a view count, and the time it was posted. The clips shown are: 'Had to be close to max range.' (11 views, 6 hours ago), 'Eren Rules' (41 views, 10 hours ago), 'why are you lying' (55 views, 2 days ago), 'YOU'RE NOT GETTING MY RAID, ANDY!' (19 views, 7:16), 'Crazy In There' (103 views, 2 days ago), and 'WHY AM I WIDE?!' (41 views, 20 hours ago).
1[B]: a first controller adapted to electrically provide one of the digital moving image data of television programs to one of the moving image viewing apparatuses for allowing to display the television program in exchange of a presentation of an electric data denoting a right of viewing the television program,	The Twitch System includes a first controller adapted to electrically provide one of the digital moving image data of television programs to one of the moving image viewing apparatuses for allowing to display the television program in exchange of a presentation of an electric data denoting a right of viewing the television program. The Twitch System requires viewers to watch un-skippable ads before being able to view streaming content.

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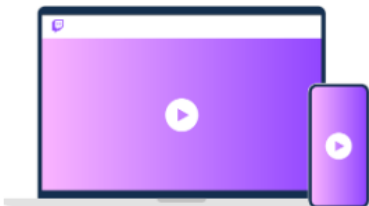
Claim Term	Mapping of Accused System
	Advertise your brand with solutions on Twitch Premium Live Video  Premium Video • 100% above the fold, unskippable • Inventory: desktop, mobile, tablet, console, and streaming TV Learn more ↗ https://advertising.amazon.com/resources/ad-specs/twitch/ Premium Video With a Twitch Premium Video package, your video ads are incorporated into Twitch live broadcasts across desktop, mobile, tablet, console, and streaming TV inventory, and you will be able to reach the Twitch audience with an unskippable, above the fold and highly visible placement. Ads are served in both pre-roll and mid-roll format and are clickable, with the exception of inventory on consoles and streaming devices. https://advertising.amazon.com/resources/ad-specs/twitch/premium-video (annotated) Digital moving image data is provided to the moving image viewing apparatus (i.e. device of a Twitch stream viewer) from a first controller such as a CloudFront content server:

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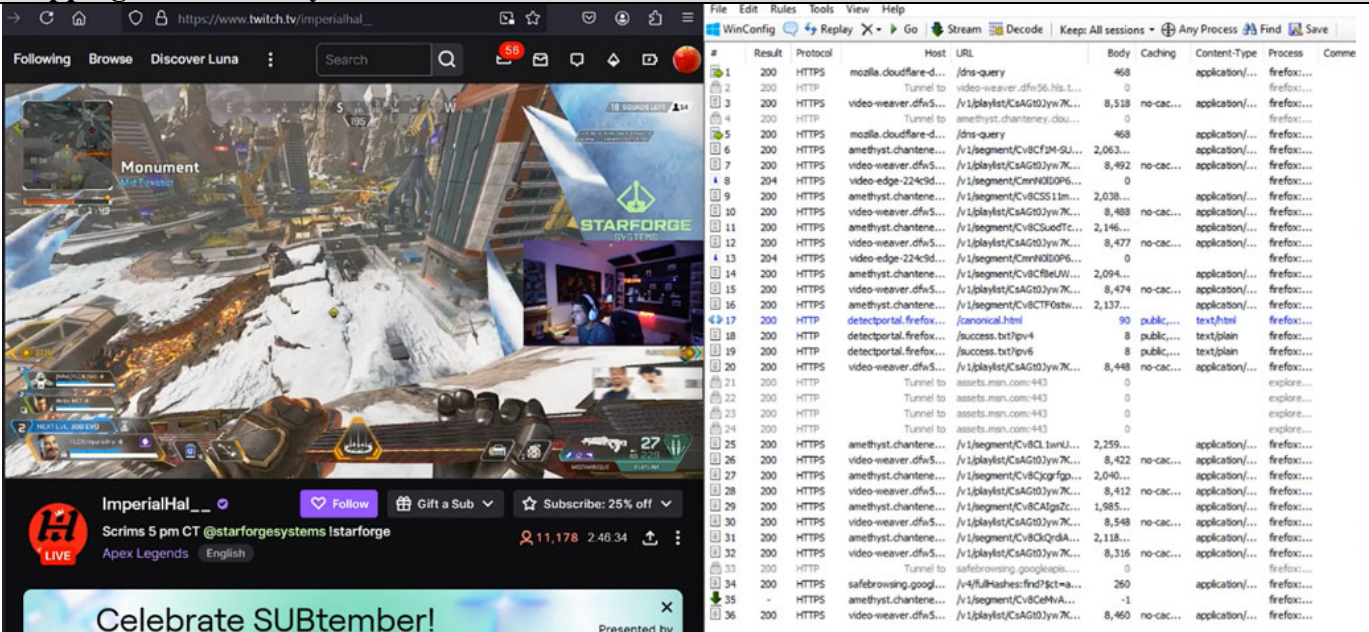
Claim Term	Mapping of Accused System
	 The screenshot displays a Twitch stream of a StarForge game. The game interface shows a snowy, industrial landscape with various structures and vehicles. The Twitch chat and user interface are visible at the bottom. Overlaid on the right side of the stream is a network traffic analysis tool, WinBox, which shows a list of HTTP requests. The requests are categorized by protocol (HTTP, HTTPS) and host (mozilla.cloudflare.com, video-weaver.dfw5..., amethyst.chantene..., detectportal.firefox...). The tool also displays details for each request, including the URL, body, and content type.

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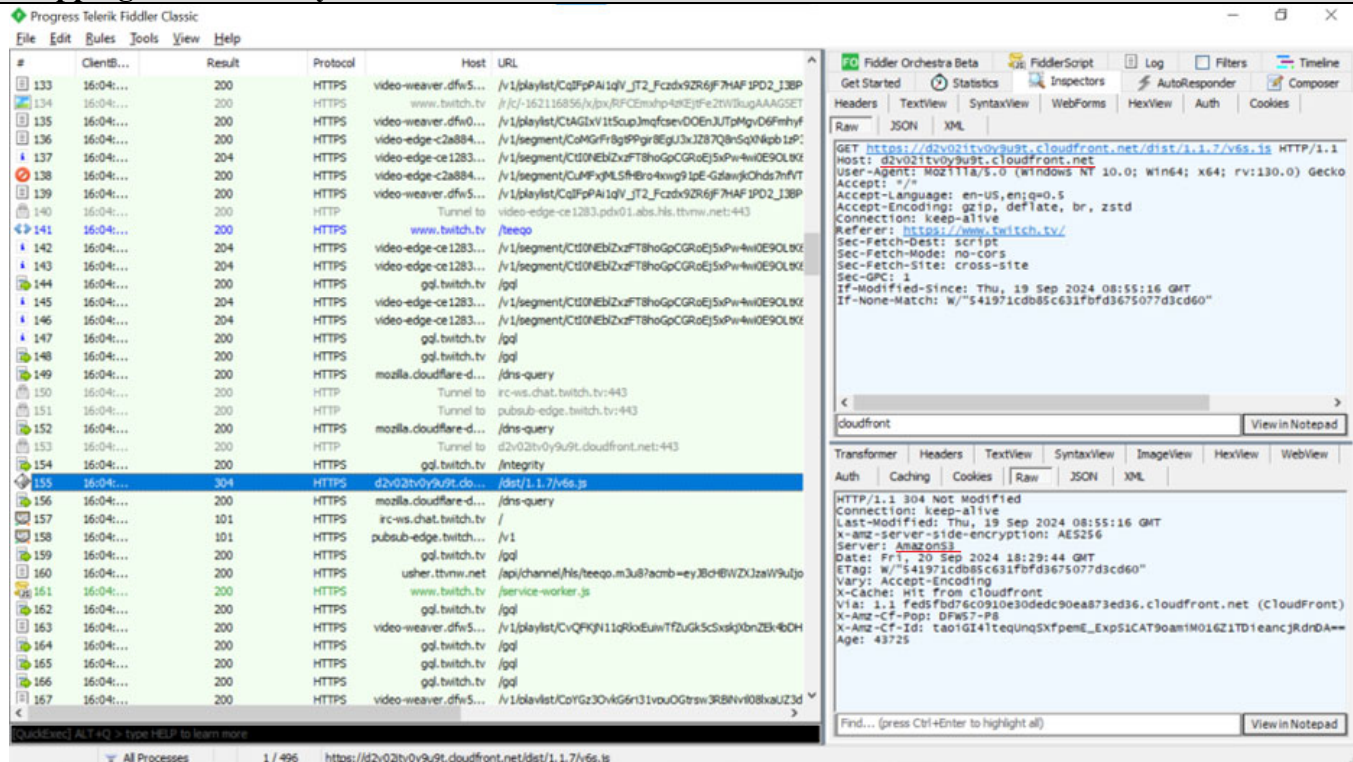
Claim Term	Mapping of Accused System
	 The screenshot displays two network monitoring tools. The top window, Fiddler Classic, shows a list of network traffic. The bottom window, Fiddler Orchestra Beta, shows the details of a selected request. The request is a GET to https://d2v02tv0y9u9t.cloudfront.net/dist/1.1.7/v6s.js. The response is a 304 Not Modified status, indicating that the resource has not been updated since the last request. The digital image data is provided in exchange of presentation of electric data denoting a right to view the image data (e.g., indicating that a commercial message has been viewed). Commercial messages are provided to the moving image viewing apparatus (e.g. Twitch viewer computer) from an Amazon Ad Server, and after they have played on the moving image viewing apparatus, the Twitch System is presented with electronic data indicating that the commercial message has been viewed:

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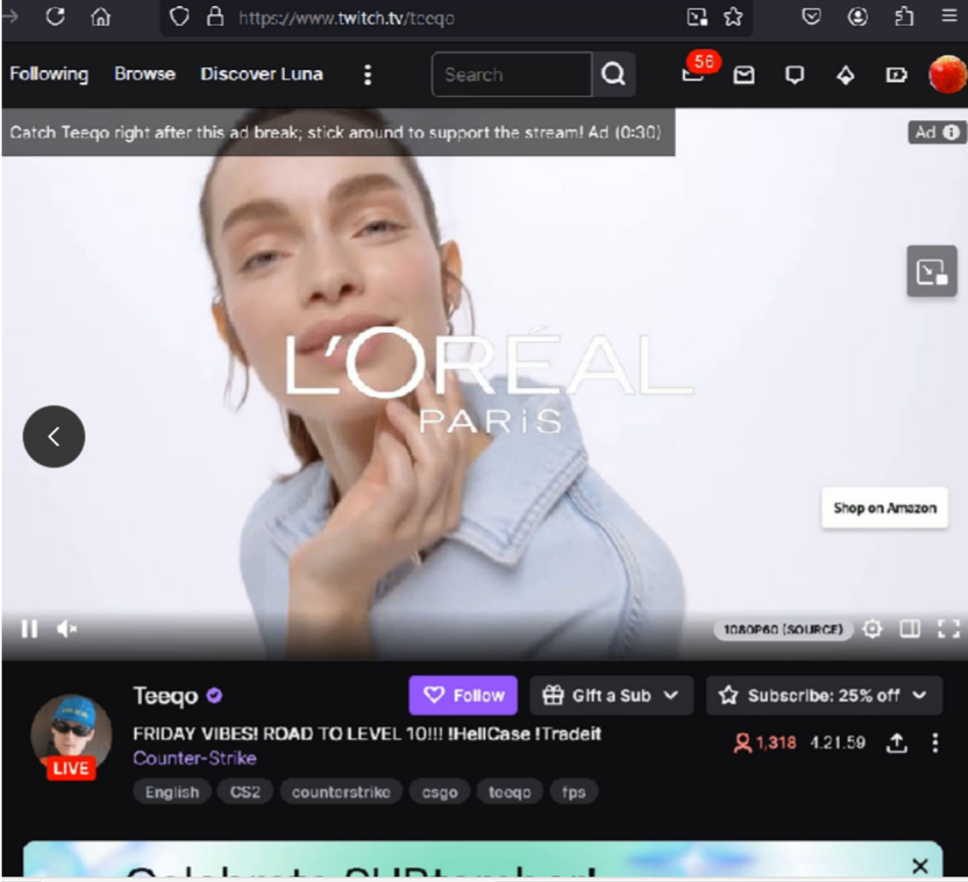
Claim Term	Mapping of Accused System
	
1[C]: the electric data having been issued to the moving image viewing apparatus, without intermediary of the moving image data delivery system, by the advertising image data delivery system in exchange of a commercial message view by the moving image	In the Twitch System, the electric data is issued to the moving image viewing apparatus, without intermediary of the moving image data delivery system, by the advertising image data delivery system in exchange of a commercial message view by the moving image viewing apparatus, provided by the advertising image data delivery system. For example, the Twitch System uses a 1 x 1 pixel to track viewer behavior, such as when a viewer “completes” viewing an ad. The 1 x 1 pixel is an electric data issued by the Twitch System (i.e., the

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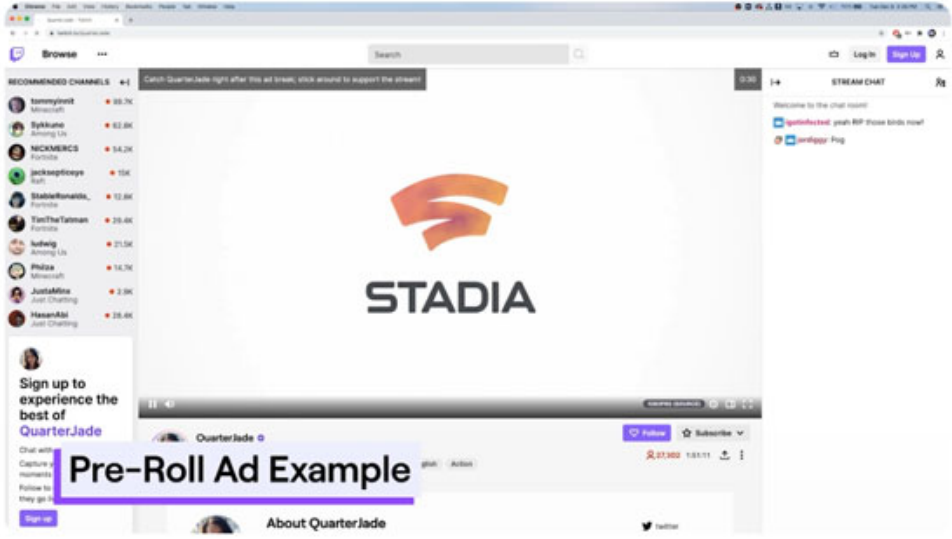
Claim Term	Mapping of Accused System
viewing apparatus, provided by the advertising image data delivery system,	advertising image data delivery system) to viewers' devices (i.e., moving image viewing apparatus) without involvement by the streamer's system (i.e., without intermediary of the moving image data delivery system) in exchange for viewing an ad. Example  The screenshot shows a Twitch browser interface. On the left is a 'RECOMMENDED CHANNELS' list. The main video player displays a large 'STADIA' logo. A purple banner at the bottom of the video player reads 'Pre-Roll Ad Example' and 'About QuarterJade'. On the right is a 'STREAM CHAT' window. Below the video player, the text 'Tags and trackers' is followed by '3rd Party Tracking Events (1x1 Pixel)' and a list of supported tracking events: Impressions, Clicks, Quartiles, and Completes (which is highlighted with a red box). https://advertising.amazon.com/resources/ad-specs/twitch/premium-video

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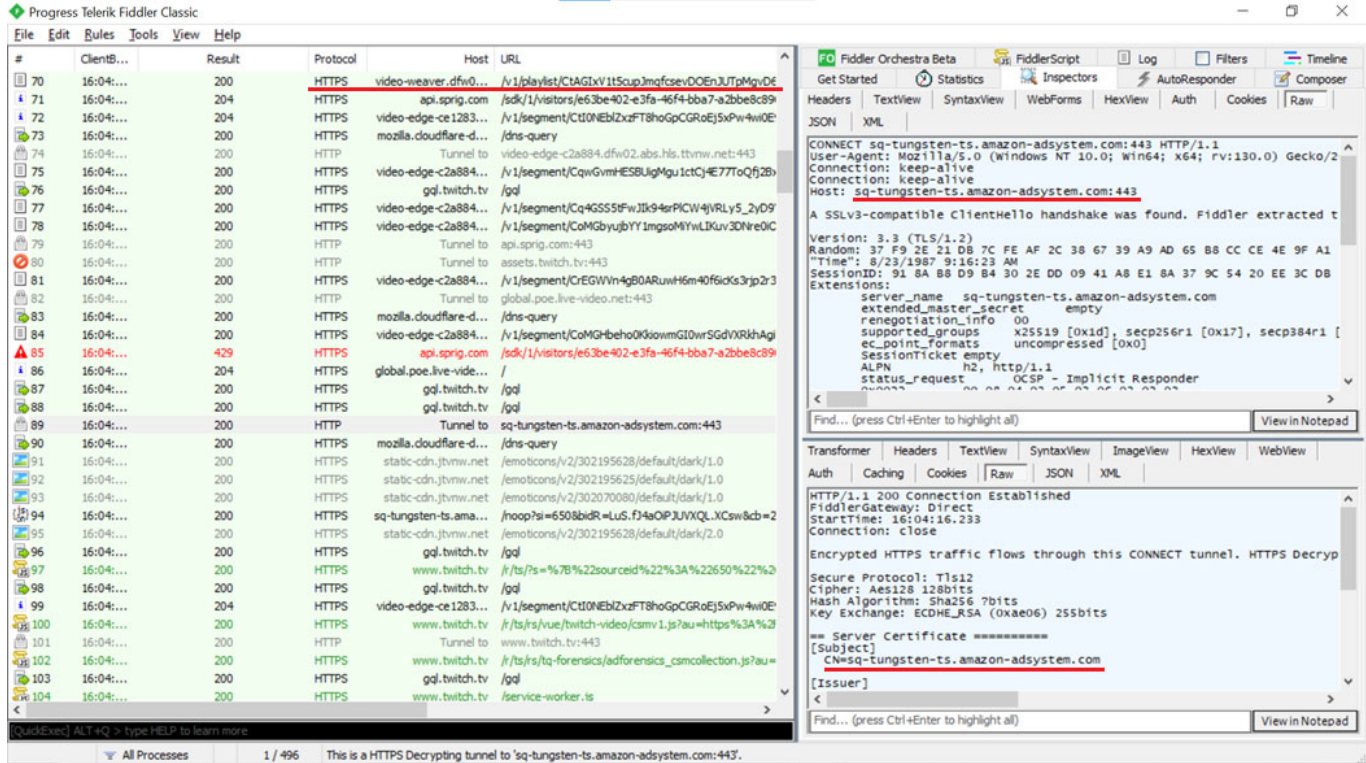
Claim Term	Mapping of Accused System
	Commercial messages are delivered to the moving image viewing apparatus by an Amazon Ad Server (e.g., sq-tungsten-ts.amazon-adsystem.com).  The Amazon Ad Servers issue electric data to the Twitch viewer’s devices in exchange of a commercial message view without intermediary of the moving image data delivery system (such as the Cloudfront content delivery and/or Twitch streamer computer both of which are included in the Twitch System).
1[D]: wherein no electric payment is made to the moving image data delivery system when the advertising image data delivery system issues the electric data to the moving image	In the Twitch System, no electric payment is made to the moving image data delivery system when the advertising image data delivery system issues the electric data to the moving image viewing apparatus in exchange of viewing commercial message.

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viewing apparatus in exchange of viewing commercial message; and	For example, the Twitch System pays streamers on a monthly basis, and therefore no electric payment is made to the streamer (i.e., the moving image data delivery system) when the electric data is issued to the viewer (i.e., the moving image viewing apparatus) in exchange for viewing an ad. Future Payouts <i>So, when's my next payout?</i> You receive a payout once a month if your balance from your last payment exceeds the \$50 or \$100 threshold. If you don't exceed the balance in a given month, we roll your balance over to the next month. https://help.twitch.tv/s/article/when-am-i-getting-paid?language=en_US As this payment occurs no more frequently than once a month, no payment is made to the Streamer when the Amazon Ad server issues the electric data.
1[E]: a second controller adapted to receive an electric payment from the advertising image data delivery system in exchange of a presentation of a report from the moving image data delivery system to the advertising image data delivery system, the report indicating that the moving image data delivery system is presented with the electric data.	The Twitch System includes a second controller adapted to receive an electric payment from the advertising image data delivery system in exchange of a presentation of a report from the moving image data delivery system to the advertising image data delivery system, the report indicating that the moving image data delivery system is presented with the electric data. For example, as shown below, the Twitch streamers' computers (with Twitch Studio and/or other third-party streaming software installed) include a second controller (e.g. processor) adapted to receive an electronic payment (e.g. ad revenue) from the advertising image data delivery system (e.g. Amazon Ad server) in exchange of a presentation of a report from the moving image data delivery system to the advertising image data delivery system. Defendants share ad revenue with Twitch streamers (e.g., "Affiliates") who monetize their streaming with ads.

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	Why Should I Be An Affiliate? The Twitch Affiliate program unlocks tools to level up your community. You can also monetize your content on Twitch. The following tools and benefits are not available to non-monetized Twitch accounts. Monetization Tools: ▪ Cheering with Bits (Learn more) ▪ Subscriptions ▪ Ad Revenue ▪ Hype Chat (Learn more) https://help.twitch.tv/s/article/joining-the-affiliate-program?language=en_US Twitch streamers have access to a “My Overview Page” and a “Stats Chart” that provides a dashboard with various analytics about their channel, including data about ads viewed and revenue generated.

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Claim Term	Mapping of Accused System
	What's in My Overview Page? Your Analytics Overview provides a top-level snapshot of your recent streams, milestones, top clips, and progress towards achievements. If you'd like to drill down into more specific info, visit other pages in your Analytics. Visit Now. By default, your Overview will show you data from the last 30 days. Clicking the arrows on the left and right of the current date will adjust the date back or forward by 30 days. To choose a custom date range, click on the date picker in the center and select a start and end date using the calendar that pops up. < Aug 1, 2019 – Aug 31, 2019 31 days > ▪ What's In My Analytics Overview? ▪ The Stats Chart ▪ Category Suggestions ▪ Questions Answered by Analytics ▪ Providing Feedback ▪ Frequently Asked Questions The Stats Chart This section breaks down and provides a short overview of the different parts of the Stats Chart. The stats available are as follows: Revenue The total revenue gained. Mousing over the graph will display a breakdown of the estimated revenue received from each source. Learn more about your payout balance in our knowledge guide here: link.twitch.tv/PayoutBalance

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	The screenshot shows four definitions for Twitch analytics metrics: Ad Breaks: The total duration of the ad breaks that you ran during streams. Ad Time Per Hour: The average amount of time per hour that ads were running during your streams. Promotion Impressions: The total number of times your stream's video card was viewed while in a promotional placement. Promotion Clicks: The total number of times your stream's video card was clicked while in a promotional placement. https://help.twitch.tv/s/article/channel-analytics?language=en_US The below screenshot of Twitch’s dashboard shows the amount of revenue and average minutes of ads shown per hour (i.e., about 9 minutes) one streamer generated over a given time period. The screenshot shows the Twitch Channel Analytics dashboard for the period Sep 13, 2021 – Sep 15, 2021 (3 days). The metrics displayed are: <table border="1"> <thead> <tr> <th>Metric</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Average Viewers</td> <td>66</td> </tr> <tr> <td>Follows</td> <td>4</td> </tr> <tr> <td>Subscriptions</td> <td>39</td> </tr> <tr> <td>Revenue</td> <td>\$99.13</td> </tr> <tr> <td>Ad Time Per Hour</td> <td>8m 52s</td> </tr> </tbody> </table> https://www.youtube.com/watch?v=HThjx2TuzKI&t=509s	Metric	Value	Average Viewers	66	Follows	4	Subscriptions	39	Revenue	\$99.13	Ad Time Per Hour	8m 52s
Metric	Value												
Average Viewers	66												
Follows	4												
Subscriptions	39												
Revenue	\$99.13												
Ad Time Per Hour	8m 52s												
9: The moving image data delivery system according to claim 1, wherein the advertising image data delivery	The Twitch System includes wherein the advertising image data delivery system is integrated into the moving image data delivery system.												

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system is integrated into the moving image data delivery system.	Defendants directly infringe claim 9 as each part of the Twitch System is made, used and/or controlled by Defendants and/or Twitch streamers with whom Defendants are contractually engaged and whose acts Defendants directs and/or controls. <i>See, e.g., Akamai Techs., Inc. v. Limelight Networks, Inc.</i>, 797 F.3d 1020 (Fed. Cir. 2015). Defendants further induce streamers to infringe claim 9 by encouraging said streamers, such as via contractual engagements, to use the Twitch System to stream content to viewers. <i>See, e.g., Centillion Data Sys., LLC v. Qwest Comms. Int’l, Inc.</i>, 631 F.3d 1279 (Fed. Cir. 2011). Defendants further induce viewers to infringe claim 9 by encouraging said viewers to use the Twitch System to view streaming and/or recorded content via the Twitch System. <i>See, e.g., id.</i> For example, in the Twitch system, the Amazon Ad servers are integrated into the CloudFront content delivery network under the umbrella of Amazon Web Services.
10[PRE]: An advertising image data delivery system capable of being in communication with a plurality of moving image viewing apparatuses, a moving image data delivery system and an advertiser paying for the commercial message comprising:	To the extent the preamble is limiting, the set of one or more Amazon Ad Servers used to deliver commercial messages within the Twitch Platform (including Twitch servers such as the CloudFront content server and software running thereon) is an advertising image data delivery system capable of being in communication with a plurality of moving image viewing apparatuses, a moving image data delivery system and an advertiser paying for the commercial message. Defendants directly infringe claim 10 as each part of the Twitch Platform is made, used and/or controlled by Defendants. Defendants further induce streamers to infringe claim 10 by encouraging said streamers, such as via contractual engagements, to use the Twitch System, including the Twitch Platform, to stream content to viewers. <i>See, e.g., Centillion Data Sys., LLC v. Qwest Comms. Int’l, Inc.</i>, 631 F.3d 1279 (Fed. Cir. 2011). Defendants further induce viewers to infringe claim 10 by encouraging said viewers to use the Twitch System, including the Twitch Platform to view streaming and/or recorded content via the Twitch System. <i>See, e.g., id.</i> Defendants provide Amazon Ad Servers that deliver commercial messages to moving image viewing apparatuses. The commercial messages are paid for by an advertiser.

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	Advertise your brand with solutions on Twitch Premium Live Video  Premium Video • 100% above the fold, unskippable • Inventory: desktop, mobile, tablet, console, and streaming TV Learn more ↗ https://advertising.amazon.com/resources/ad-specs/twitch/ Premium Video With a Twitch Premium Video package, your video ads are incorporated into Twitch live broadcasts across desktop, mobile, tablet, console, and streaming TV inventory, and you will be able to reach the Twitch audience with an unskippable, above the fold and highly visible placement. Ads are served in both pre-roll and mid-roll format and are clickable, with the exception of inventory on consoles and streaming devices. https://advertising.amazon.com/resources/ad-specs/twitch/premium-video (annotated) Defendants also allow Twitch viewers to stream content from a moving image data delivery system (e.g., Twitch streamers and CloudFront content streaming servers referred to as the Twitch System above in

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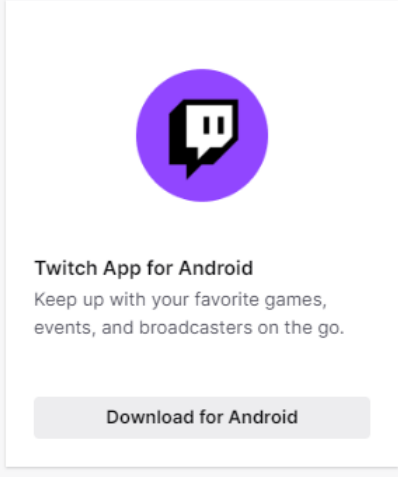
Claim Term	Mapping of Accused System
	relation to claim 1) and to view pre-roll and mid-roll advertisements on moving image viewing apparatuses (e.g., Twitch viewers’ laptops, phones, or other viewing devices) via software (e.g., mobile phone or TV applications) provided by Defendants and/or web browsers. Mobile Apps  https://www.twitch.tv/downloads

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Claim Term	Mapping of Accused System
	 Fire TV Turn your TV into your personal gaming theater with the Twitch App on Fire TV. Download for Fire TV https://www.twitch.tv/downloads Below is an image of an advertisement being viewed on a moving image viewing apparatus provided by an Amazon Ad Server.

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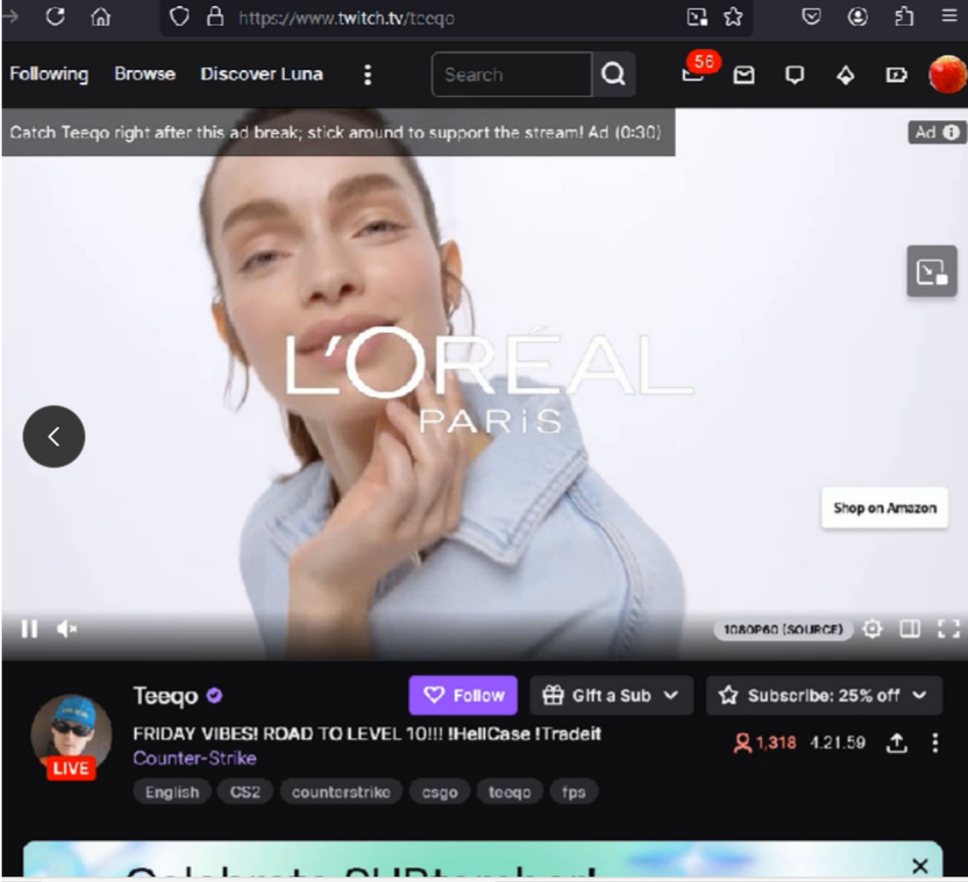
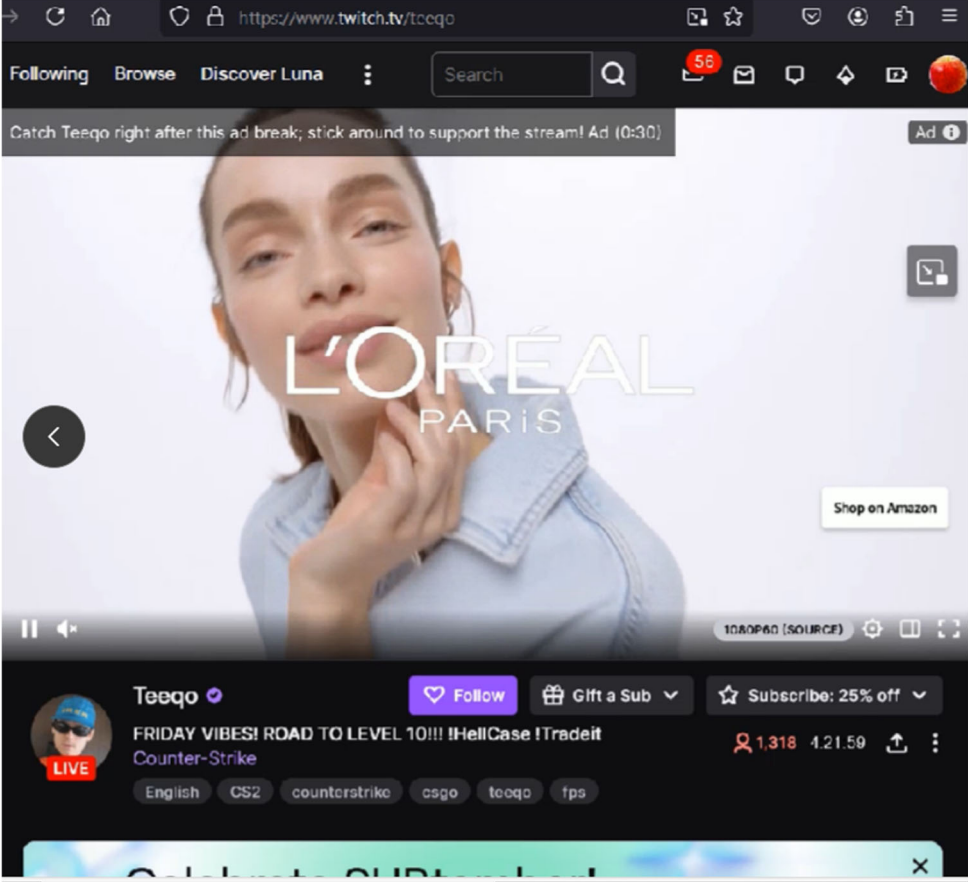
Claim Term	Mapping of Accused System
	
10[A]: a storage of a plurality of advertising image data to be viewed by the moving image viewing apparatuses;	The Amazon Ad Servers include a storage of a plurality of advertising image data to be viewed by the moving image viewing apparatuses. For example, Amazon Ad Servers store advertising image data using storage of Amazon Web Services (e.g., Amazon S3) to be provided to Twitch viewers.

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Claim Term	Mapping of Accused System
	
10[B]: a first controller adapted to issue, without intermediary of the moving image data delivery system, to one of the moving image viewing apparatuses an electric data denoting a right of viewing a television program in exchange of commercial message view by the moving image viewing apparatus, provided by the advertising	The Amazon Ad Servers include a first controller adapted to issue, without intermediary of the moving image data delivery system, to one of the moving image viewing apparatuses an electric data denoting a right of viewing a television program in exchange of commercial message view by the moving image viewing apparatus, provided by the advertising image data delivery system, wherein the one of the moving image viewing apparatuses is provided with the television program from the moving image data delivery system in exchange of a presentation of the electric data to the moving image data delivery system from the one of the moving image viewing apparatus.

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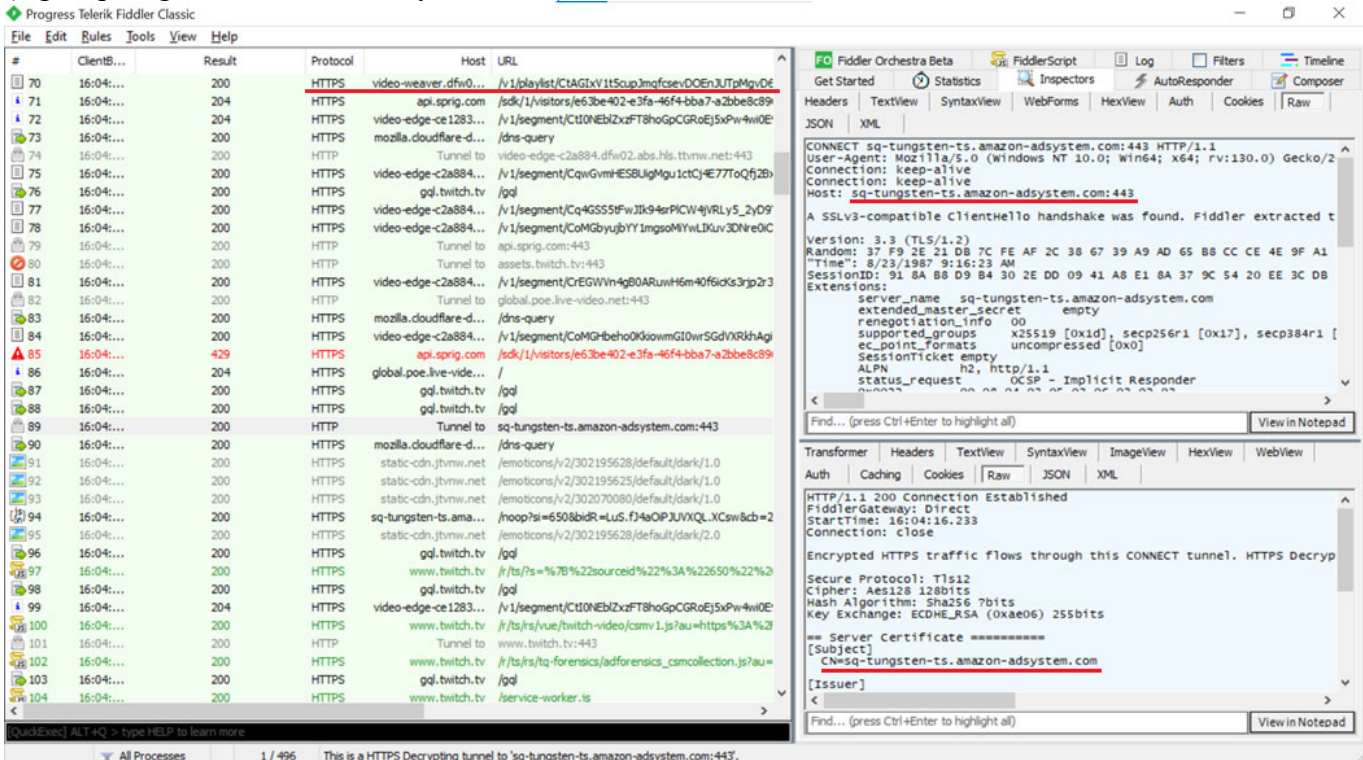
Claim Term	Mapping of Accused System
	https://advertising.amazon.com/resources/ad-specs/twitch/premium-video Commercial messages are delivered to the moving image viewing apparatus by an Amazon Ad Server (e.g., sq-tungsten-ts.amazon-adsystem.com).  The Amazon Ad Servers issue electric data to the Twitch viewers’ devices in exchange of a commercial message view without intermediary of the moving image data delivery system (such as the CloudFront content delivery and/or Twitch streamer computer both of which are included in the Twitch System).
10[C]: a second controller adapted to receive an electric payment from the advertiser in exchange of a presentation of a report from the	The Amazon Ad Servers include a second controller adapted to receive an electric payment from the advertiser in exchange of a presentation of a report from the advertising image data delivery system to the advertiser, the report indicating that the advertising image data delivery system issues the electric data to the moving image viewing apparatuses, wherein no electric payment is made to the moving image data

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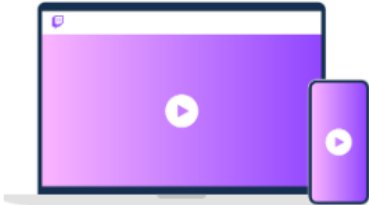
Claim Term	Mapping of Accused System
advertising image data delivery system to the advertiser, the report indicating that the advertising image data delivery system issues the electric data to the moving image viewing apparatuses, wherein no electric payment is made to the moving image data delivery system when the advertising image data delivery system issues the electric data to the moving image viewing apparatus in exchange of viewing commercial message; and	delivery system when the advertising image data delivery system issues the electric data to the moving image viewing apparatus in exchange of viewing commercial message. For example, the Amazon Ad Servers include a second controller adapted to receive payment (from advertisers) in exchange of a presentation of a report indicating that the Amazon Ad Servers issued the electric data to Twitch viewers’ devices. Advertise your brand with solutions on Twitch Premium Live Video  Premium Video • 100% above the fold, unskippable • Inventory: desktop, mobile, tablet, console, and streaming TV Learn more ↗ https://advertising.amazon.com/resources/ad-specs/twitch/

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Claim Term	Mapping of Accused System
	Premium Video With a Twitch Premium Video package, your video ads are incorporated into Twitch live broadcasts across desktop, mobile, tablet, console, and streaming TV inventory, and you will be able to reach the Twitch audience with an unskippable, above the fold and highly visible placement. Ads are served in both pre-roll and mid-roll format and are clickable, with the exception of inventory on consoles and streaming devices. https://advertising.amazon.com/resources/ad-specs/twitch/premium-video (annotated) The Amazon Ads API is adapted to receive an electric payment from the advertiser: POST /billing/invoices/pay This API allows clients to initiate payments on their currently unpaid or open invoices. The API returns details regarding which invoices it failed to collect payment on, a human-readable reason for the failure, and list of invoices for which it successfully collected payment. As a note, this API does not support globally scoped calls today. https://advertising.amazon.com/API/docs/en-us/guides/account-management/billing/payments The Amazon Ads API reports information of commercial message views to advertisers: Ad reports Advertised product reports contain performance data for campaigns at the ad level.

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Claim Term	Mapping of Accused System
	Base metrics  addToCart, addToCartClicks, addToCartRate, addToList, qualifiedBorrows, royaltyQualifiedBorrows, addToListFromClicks, qualifiedBorrowsFromClicks, royaltyQualifiedBorrowsFromClicks, adGroupId, adGroupName, adId, brandedSearches, brandedSearchesClicks, campaignBudgetAmount, campaignBudgetCurrencyCode, campaignBudgetType, campaignId, campaignName, campaignStatus, clicks, cost, costType, date, detailPageViews, detailPageViewsClicks, eCPAddToCart, endDate, impressions, newToBrandDetailPageViewRate, newToBrandDetailPageViews, newToBrandDetailPageViewsClicks, newToBrandECPDetailPageView, newToBrandPurchases, newToBrandPurchasesClicks, newToBrandPurchasesPercentage, newToBrandPurchasesRate, newToBrandSales, newToBrandSalesClicks, newToBrandSalesPercentage, newToBrandUnitsSold, newToBrandUnitsSoldClicks, newToBrandUnitsSoldPercentage, purchases, purchasesClicks, purchasesPromoted, sales, salesClicks, salesPromoted, startDate, unitsSold, unitsSoldClicks, video5SecondViewRate, video5SecondViews, videoCompleteViews, videoFirstQuartileViews, videoMidpointViews, videoThirdQuartileViews, videoUnmutes, viewabilityRate, viewableImpressions https://advertising.amazon.com/API/docs/en-us/guides/reporting/v3/report-types/ad videoCompleteViews Type: Integer Description: The number of impressions where the video was viewed to 100%. Report types: sbCampaigns, sbAdGroups, sbPlacement, sbTargeting, sbSearchTerm, sdCampaigns, sdAdGroups, sdTargeting, sdAdvertisedProduct, stCampaigns, stTargeting, sbAds https://advertising.amazon.com/API/docs/en-us/guides/reporting/v3/columns#videoCompleteViews In the Twitch System, no electric payment is made to the moving image data delivery system when the advertising image data delivery system issues the electric data to the moving image viewing apparatus in exchange of viewing commercial message.

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	For example, the Twitch System pays streamers on a monthly basis, and therefore no electric payment is made to the streamer (i.e., the moving image data delivery system) when the electric data is issued to the viewer (i.e., the moving image viewing apparatus) in exchange for viewing an ad. Future Payouts <i>So, when's my next payout?</i> You receive a payout once a month if your balance from your last payment exceeds the \$50 or \$100 threshold. If you don't exceed the balance in a given month, we roll your balance over to the next month. https://help.twitch.tv/s/article/when-am-i-getting-paid?language=en_US As this payment occurs no more frequently than once a month, no payment is made to the Streamer when the Amazon Ad server issues the electric data.
10[D]: a third controller adapted to allot the received electric payment to the moving image data delivery system in exchange of a presentation of a report from the moving image data delivery system to the advertising image data delivery system, the report indicating that the moving image data delivery system is presented with the electric data.	The Amazon Ad Servers include a third controller (e.g., hardware and software) adapted to allot the received electric payment to the moving image data delivery system in exchange of a presentation of a report from the moving image data delivery system to the advertising image data delivery system, the report indicating that the moving image data delivery system is presented with the electric data. For example, the Amazon Ad servers allot received electric payment from the advertiser among Twitch streamers who monetize their streaming with ads.

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Claim Term	Mapping of Accused System
	Why Should I Be An Affiliate? The Twitch Affiliate program unlocks tools to level up your community. You can also monetize your content on Twitch. The following tools and benefits are not available to non-monetized Twitch accounts. Monetization Tools: ▪ Cheering with Bits (Learn more) ▪ Subscriptions ▪ Ad Revenue ▪ Hype Chat (Learn more) https://help.twitch.tv/s/article/joining-the-affiliate-program?language=en_US Twitch streamers have access to a “My Overview Page” and a “Stats Chart” that provides a dashboard with various analytics about their channel, including data about ads viewed and revenue generated.

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Claim Term	Mapping of Accused System
	What's in My Overview Page? Your Analytics Overview provides a top-level snapshot of your recent streams, milestones, top clips, and progress towards achievements. If you'd like to drill down into more specific info, visit other pages in your Analytics. Visit Now. By default, your Overview will show you data from the last 30 days. Clicking the arrows on the left and right of the current date will adjust the date back or forward by 30 days. To choose a custom date range, click on the date picker in the center and select a start and end date using the calendar that pops up. < Aug 1, 2019 – Aug 31, 2019 31 days > ▪ What's In My Analytics Overview? ▪ The Stats Chart ▪ Category Suggestions ▪ Questions Answered by Analytics ▪ Providing Feedback ▪ Frequently Asked Questions The Stats Chart This section breaks down and provides a short overview of the different parts of the Stats Chart. The stats available are as follows: Revenue The total revenue gained. Mousing over the graph will display a breakdown of the estimated revenue received from each source. Learn more about your payout balance in our knowledge guide here: link.twitch.tv/PayoutBalance

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Claim Term	Mapping of Accused System																				
	<table> <tr> <td>Ad Breaks</td><td>The total duration of the ad breaks that you ran during streams.</td></tr> <tr> <td>Ad Time Per Hour</td><td>The average amount of time per hour that ads were running during your streams.</td></tr> <tr> <td>Promotion Impressions</td><td>The total number of times your stream's video card was viewed while in a promotional placement.</td></tr> <tr> <td>Promotion Clicks</td><td>The total number of times your stream's video card was clicked while in a promotional placement.</td></tr> </table> https://help.twitch.tv/s/article/channel-analytics?language=en_US The below screenshot of Twitch’s dashboard shows the amount of revenue and average minutes of ads shown per hour (i.e., about 9 minutes) one streamer generated over a given time period. <table border="1"> <caption>Twitch Channel Analytics Data (Sep 13, 2021 – Sep 15, 2021)</caption> <thead> <tr> <th>Metric</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Average Viewers</td> <td>66</td> </tr> <tr> <td>Follows</td> <td>4</td> </tr> <tr> <td>Subscriptions</td> <td>39</td> </tr> <tr> <td>Revenue</td> <td>\$99.13</td> </tr> <tr> <td>Ad Time Per Hour</td> <td>8m 52s</td> </tr> </tbody> </table> https://www.youtube.com/watch?v=HThjx2TuzKI&t=509s	Ad Breaks	The total duration of the ad breaks that you ran during streams.	Ad Time Per Hour	The average amount of time per hour that ads were running during your streams.	Promotion Impressions	The total number of times your stream's video card was viewed while in a promotional placement.	Promotion Clicks	The total number of times your stream's video card was clicked while in a promotional placement.	Metric	Value	Average Viewers	66	Follows	4	Subscriptions	39	Revenue	\$99.13	Ad Time Per Hour	8m 52s
Ad Breaks	The total duration of the ad breaks that you ran during streams.																				
Ad Time Per Hour	The average amount of time per hour that ads were running during your streams.																				
Promotion Impressions	The total number of times your stream's video card was viewed while in a promotional placement.																				
Promotion Clicks	The total number of times your stream's video card was clicked while in a promotional placement.																				
Metric	Value																				
Average Viewers	66																				
Follows	4																				
Subscriptions	39																				
Revenue	\$99.13																				
Ad Time Per Hour	8m 52s																				
12: The advertising image data delivery system according to claim 10 further comprising a fourth controller adapted to electrically provide one of the plurality of advertising image data of commercial messages to one of the	The Amazon Ad Servers include a fourth controller adapted to electrically provide one of the plurality of advertising image data of commercial messages to one of the plurality of moving image viewing apparatuses by request thereof. Defendants directly infringe claim 12 as each part of the Twitch Platform is made, used and/or controlled by Defendants. Defendants further induce streamers to infringe claim 12 by encouraging said streamers,																				

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Claim Term	Mapping of Accused System
plurality of moving image viewing apparatuses by request thereof.	such as via contractual engagements, to use the Twitch System, including the Twitch Platform, to stream content to viewers. <i>See, e.g., Centillion Data Sys., LLC v. Qwest Comms. Int’l, Inc.</i>, 631 F.3d 1279 (Fed. Cir. 2011). Defendants further induce viewers to infringe claim 12 by encouraging said viewers to use the Twitch System, including the Twitch Platform to view streaming and/or recorded content via the Twitch System. <i>See, e.g., id.</i> For example, Twitch viewers’ devices execute a function to request an advertisement from the Amazon Ad Servers.
13: The advertising image data delivery system according to claim 10 further comprising a fourth controller adapted to electrically provide one of the plurality of advertising image data of commercial messages to one of the plurality of moving image viewing apparatuses, the advertising image data of commercial message being related to a television program designated by the moving image viewing apparatus.	The Amazon Ad Servers further comprises a fourth controller adapted to electrically provide one of the plurality of advertising image data of commercial messages to one of the plurality of moving image viewing apparatuses, the advertising image data of commercial message being related to a television program designated by the moving image viewing apparatus. Defendants directly infringe claim 13 as each part of the Twitch Platform is made, used and/or controlled by Defendants. Defendants further induce streamers to infringe claim 13 by encouraging said streamers, such as via contractual engagements, to use the Twitch System, including the Twitch Platform, to stream content to viewers. <i>See, e.g., Centillion Data Sys., LLC v. Qwest Comms. Int’l, Inc.</i>, 631 F.3d 1279 (Fed. Cir. 2011). Defendants further induce viewers to infringe claim 13 by encouraging said viewers to use the Twitch System, including the Twitch Platform to view streaming and/or recorded content via the Twitch System. <i>See, e.g., id.</i> For example, the Amazon Ad Servers include a fourth controller that uses Sponsored TV to provide Twitch ads for particular Twitch streams based on expected appeal to viewers of that stream. Sponsored TV overview Sponsored TV is a self-service, programmatic ad solution that helps advertisers build their brand in front of new audiences across streaming TV services like Freevee, Twitch, and other Streaming TV publishers. Brands can easily amplify their full-funnel marketing mix with Sponsored TV, discovering, reaching, and inspiring audiences as they watch their favorite shows, streamers and movies. https://advertising.amazon.com/API/docs/en-us/guides/sponsored-tv/overview

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Claim Term	Mapping of Accused System
	Sponsored TV targeting Sponsored TV targeting consists of two targeting expressions types. <code>CONTENT_CATEGORY_SIMILAR_TO</code> expression type targets audiences that are likely to be interested in specific types of content, including documentaries, music videos, and TV genres, such as drama or products in categories sold on Amazon like "Built-in Dishwashers" or "Women's Sports Apparel." <code>ASIN_CATEGORY_SIMILAR_TO</code> expression type targets the ASIN category that is similar to the specified category. Sponsored TV supports targeting recommendations based on ASIN which can be accessed through the steps mentioned here. https://advertising.amazon.com/API/docs/en-us/guides/sponsored-tv/targeting
14: The advertising image data delivery system according to claim 10 further comprising a fourth controller adapted to electrically provide one of the plurality of advertising image data of commercial messages to one of the plurality of moving image viewing apparatuses, the plurality of advertising image data of commercial messages including an advertisement of a television program.	The Amazon Ad Servers include a fourth controller adapted to electrically provide one of the plurality of advertising image data of commercial messages to one of the plurality of moving image viewing apparatuses, the plurality of advertising image data of commercial messages including an advertisement of a television program. Defendants directly infringe claim 14 as each part of the Twitch Platform is made, used and/or controlled by Defendants. Defendants further induce streamers to infringe claim 14 by encouraging said streamers, such as via contractual engagements, to use the Twitch System, including the Twitch Platform, to stream content to viewers. <i>See, e.g., Centillion Data Sys., LLC v. Qwest Comms. Int’l, Inc.</i>, 631 F.3d 1279 (Fed. Cir. 2011). Defendants further induce viewers to infringe claim 14 by encouraging said viewers to use the Twitch System, including the Twitch Platform to view streaming and/or recorded content via the Twitch System. <i>See, e.g., id.z</i> For example, commercial messages delivered by the Amazon Ad Servers include advertisements for other streams on Twitch.
15: The advertising image data delivery system according to claim 10, wherein the advertising image data delivery system is integrated into a system of the advertiser.	The Amazon Ad Servers are integrated into a system of the advertiser. Defendants directly infringe claim 15 as each part of the Twitch Platform is made, used and/or controlled by Defendants. Defendants further induce streamers to infringe claim 15 by encouraging said streamers, such as via contractual engagements, to use the Twitch System, including the Twitch Platform, to stream content to viewers. <i>See, e.g., Centillion Data Sys., LLC v. Qwest Comms. Int’l, Inc.</i>, 631 F.3d 1279 (Fed.

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Claim Term	Mapping of Accused System
	Cir. 2011). Defendants further induce viewers to infringe claim 15 by encouraging said viewers to use the Twitch System, including the Twitch Platform to view streaming and/or recorded content via the Twitch System. <i>See, e.g., id.z</i> For example, when a commercial message is played advertising Amazon or Twitch, the Amazon Ad Servers are integrated into a system of the advertiser (i.e., Amazon).