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

VIRENTEM VENTURES, LLC, D/B/A ENOUNCE) Plaintiff,) v.) YOUTUBE, LLC; GOOGLE, LLC.) Defendants.)	C.A. No. 18-917-MN **JURY TRIAL DEMANDED**

**VIRENTEM VENTURES, LLC D/B/A ENOUNCE'S SECOND AMENDED
COMPLAINT FOR PATENT INFRINGEMENT**

Plaintiff, Virentem Ventures, LLC d/b/a Enounce, ("Plaintiff" or "Virentem" or "Enounce"), for its Second Amended Complaint against Defendants, YouTube, LLC ("YouTube") and Google, LLC ("Google") (collectively "Defendants") alleges:

THE PARTIES

1.   Plaintiff Virentem, d/b/a Enounce, is a Delaware limited liability company duly organized and existing under the laws of the State of Delaware, with a principle place of business in the State of California. The address of the registered office of Virentem is 2666 E Bayshore Rd Ste C, Palo Alto, CA 94303.

2.   On information and belief, Defendant YouTube is a corporation duly organized and existing under the laws of the State of Delaware, having its principal place of business at 901 Cherry Ave., San Bruno, CA 94066.

3.   On information and belief, Google is a corporation duly organized and existing under the laws of the State of Delaware, having its principle place of business at 1600 Amphitheatre Pkwy, Mountain View, CA 94043.

JURISDICTION

4.   This is an action arising under the patent laws of the United States. Accordingly, this Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a).

5.   This action alleges violations of the California Business & Professions Code over which this Court has jurisdiction pursuant to 28 U.S. Code § 1367(a).

6.   This Court has personal jurisdiction over YouTube and Google because they are both incorporated in Delaware. YouTube and Google provide video streaming and downloadable video services through web browsers, mobile applications and television applications that are and have been used, offered for sale, sold, and purchased in the District of Delaware.

VENUE

7.   Venue is proper in this judicial district pursuant to 28 U.S.C. §§1391(a), (b) and (c) and 1400(b). Defendants are Delaware corporations and Delaware is a convenient forum for resolution of the parties' disputes with respect to the Counts alleged herein.

FACTUAL ALLEGATIONS

8.   Enounce owns a portfolio of over 35 patents issued in the U.S. and abroad covering a wide variety of technologies, including patents that enable systems and users to listen to audio and watch video while varying the playback speed.

9.   Enounce, Incorporated ("Enounce, Inc.") was a startup that transformed the way media is viewed by allowing users to select and alter playback speeds while viewing content and having developed the underlying enabling technology, discovered a way to leverage data about the speeds chosen by users to determine audience affinity. Enounce, Inc. developed, productized and licensed the first Variable Speed Playback solutions for consumer video. Variable Speed Playback is also known as Time-Scale Modification ("TSM").

10.   In 2015, Enounce, Inc. was wound down and Virentem acquired its assets. Virentem currently maintains the Enounce business and product line with several members of the original Enounce, Inc. team.

11.   Speeding up content playback allows users to consume more content in less time. Speeding up content playback is not the same as fast-forwarding or simply advancing ("seeking") to a later point in the content – speeding up content allows the user to experience the entirety of the media work or content, but at a faster pace. This can be useful, for example, to save time when watching long lectures or interviews or when skimming content. By contrast, slowing down content allows users to better absorb the content, which can be useful, for example, when learning a new skill or foreign language or to grasp complex content. When speeding up or slowing down content, although the speed and duration change, these changes occur while maintaining intelligibility and speaker identity, and without affecting the "pitch" of the speakers or instruments in the audio portion. Prior techniques such as simple digital resampling or playing vinyl records at different speeds resulted in, for example, voices sounding like high-pitched chipmunks when sped up which adversely affected intelligibility and comprehension.

12.   In modern systems, when media content is presented at any speed other than the default (1x original), at least two different time parameters may be calculated or utilized: data time and presentation time. Data time for media content may refer to a time value specifying how long it would take to reach that location in the content, starting from the beginning of the media content, and playing at normal rate. Presentation time, on the other hand, may refer to the time elapsed since the beginning of the media content presentation and is used in signaling and synchronizing playback subsystems and data transfers.

13.   When a viewer speeds up or slows down the playback rate for a video, the amount of time spent viewing the video content (e.g., presentation time) differs from the time it would take to view the content at the default playback speed. For example, when a video is sped up and watched at 2x speed, the presentation time would be roughly half the amount of time it would be if the viewer had watched the video at the default (1x) speed. Conversely, if a viewer slowed down a video and watched it at 0.5x speed instead of the default 1x, the presentation time would be roughly double the amount of time it would be if the viewer had watched the video at the default (1x) speed.

<div align="center">**INVENTORS**</div>

14.   Inventor Donald J. Hejna, Jr. served as President and CEO of Enounce, Inc. He obtained a Bachelor of Science degree in Electrical Engineering and a Master of Science degree in Electrical Engineering and Computer Science from the Massachusetts Institute of Technology (M.I.T.) and a Master of Science from Stanford University. Mr. Hejna began his work in the TSM field working on his M.I.T. Master's Thesis during an internship as a Graduate Researcher for ROLM Systems Incorporated. His Master's Thesis work resulted in U.S. Patent No. 5,175,769, which is incorporated by reference into many of the patents described below.

15.   Inventor Richard S. Goldhor served as Vice President of Engineering at Enounce, Inc. from 1999 to 2009. He has five degrees from M.I.T., including a Ph.D. of Bioelectrical Engineering, as well as a Bachelor and a Master of Science degrees in Electrical Engineering and Computer Science and Bachelor of Science in Physics. Additionally, he obtained a Master of Arts in Theological Research from Andover Newton Theological School. Dr. Goldhor has extensive experience with a variety of speech technologies.

16.   Mr. Hejna and Dr. Goldhor co-founded Enounce, Inc. in 1998.

17.   Inventor Edward J. Bianchi obtained a Bachelor of Science in Computer Science from the University of Vermont. He worked as the lead engineer at Enounce for nearly four years, developing patents and Enounce's "My Speed" commercial product offerings.

PATENTS

18.   United States Patent No. 7,683,903 ("the '903 Patent"), entitled "Management Of Presentation Time In A Digital Media Presentation System With Variable Rate Presentation Capability" was duly and lawfully issued March 23, 2010. Plaintiff is the owner of all rights, title, and interest in the '903 Patent. A true and correct copy of the '903 Patent is attached hereto as Exhibit A.

19.   The '903 Patent relates to the field of content presentation by a digital rendering system such as a digital media player. Prior to the invention of the '903 Patent, traditional rendering systems would maintain an internal variable during playback of media content that would reflect a current time, in effect, a current "position" in the media content that is being displayed and rendered.   A system uses the current time to keep objects synchronized. In a traditional linear media stream that is always played back at a fixed, "normal" rate, any given content element is always presented after a fixed amount of time has elapsed from the beginning of playback. A value indicating how long it would take to reach that location in the content starting from the beginning of the media content and playing at a normal rate can be called "data time."   The amount of time that has elapsed during rendering of the content, which can be called "presentation time," is often calculated by the audio renderer of a computer device, and the presentation time is the same as data time in traditional systems. When a rendering system is enhanced with TSM, which allows media content to be presented at various rates, problems may occur, for example in the sourcing and rendering of media. For example, when media content is played using TSM, presentation time is different, in the abstract, than data time. Conventional,

prior systems, however, would continue to calculate, store and distribute only a single "current time" variable. In such a scenario, the value of the presentation time parameter could never be unequal to the value of the data time parameter, and the use of a single "current time" variable would often prevent or confuse the timely delivery of data necessary for playback at different speeds or lead to a system that is not synchronized. The invention of the '903 Patent addresses this problem in an unconventional way, and improves the functioning and performance of the presentation and rendering system, for example, by maintaining and providing two separate and different values of time relating to the data time and presentation time. Further teachings of the '903 Patent relate to receiving a request for current time, or requests for a specific presentation time or a data time parameter, and ensuring that the timing renderer determines whether to base the time value returned on the current presentation time or the current data time.

20.   United States Patent No. 8,068,108 ("the '108 Patent"), entitled "Management Of Presentation Time In A Digital Media Presentation System With Variable Rate Presentation Capability" was duly and lawfully issued November 29, 2011. Plaintiff is the owner of all rights, title, and interest in the '108 Patent. A true and correct copy of the '108 Patent is attached hereto as Exhibit B.

21.   The '108 Patent is a continuation of the '903 Patent, and teaches many of the same improvements to computer technology over the prior art as discussed above for the '903 Patent.

22.   United States Patent No. 8,345,050 ("the '050 Patent"), entitled "Management Of Presentation Time In A Digital Media Presentation System With Variable Rate Presentation Capability," was duly and lawfully issued January 1, 2013. Plaintiff is the owner of all rights, title, and interest in the '050 Patent. A true and correct copy of the '050 Patent is attached hereto as Exhibit C.

23. The '050 Patent is a continuation of an application that led to a currently-unasserted patent, which is a division of the '108 Patent, and teaches many of the same improvements to computer technology over the prior art as discussed above for the '903 Patent.

24. United States Patent No. 9,785,400 ("the '400 Patent"), entitled "Enhancing a Rendering System to Distinguish Presentation Time from Data Time," was duly and lawfully issued October 10, 2017. Plaintiff is the owner of all rights, title, and interest in the '400 Patent. A true and correct copy of the '400 patent is attached hereto as Exhibit D.

25. The '400 patent is a continuation of a currently unasserted patent, which is a division of the '108 Patent, and teaches many of the same improvements to computer technology over the prior art as discussed above for the '903 Patent. Further, in certain aspects and claims of the '400 Patent, a method or device calculates a presentation time parameter from the data time parameter.

26. United States Patent No. 6,801,888 ("the '888 Patent"), entitled "Method and Apparatus to Prepare Listener-Interest-Filtered Work," was duly and lawfully issued October 5, 2004. Plaintiff is the owner of all rights, title, and interest in the '888 Patent. A true and correct copy of the '888 Patent is attached hereto as Exhibit E.

27. The invention in the '888 Patent relates to the field of speech, audio, and audio-visual works, and in particular to TSM-related systems and methods. TSM methods enable digitally recorded audio to be modified so that a perceived articulation rate of spoken passages, i.e., a speaking rate, can be modified dynamically during playback. In a typical such application, a listener can control the speaking rate during playback of a previously recorded speaker. This enables the listener to "speed-up" or "slow-down" the articulation rate and, thereby, the information delivery rate provided by the previously recorded speaker. The use of the TSM

method in the above-described application enables the sped-up or slowed-down speech or audio to be presented intelligibly at the increased or decreased playback rates.

28.   The invention of the '888 Patent improves on the functioning of TSM systems by providing the ability to determine listener interest based on how listeners interact with the media utilizing TSM, and how such determination is used for generating and replaying speech, audio and audio-visual works at a desired speed. In particular, the present invention pertains to method and apparatus for developing and generating a "Speed Contour" or "Conceptual Speed Association (CSA)" data structure which represents desired speed of playback for portions of a speech, audio, and/or audio-visual work. Additionally, the '888 Patent pertains to method and apparatus for replaying the speech, audio and/or audio-visual work in accordance with the Speed Contour or Conceptual Speed Association data structure to produce a "listener-interest-filtered" work. Further, in certain aspects and claims of the '888 Patent, methods for obtaining speed contours and/or conceptual speed association ("CSA") data structure via online search facility and omitting portion(s) of the audio-visual work while utilizing speed contours and/or CSA data structure are disclosed.

29.   Conventional prior art methods for determining listener interest in portions of speech and/or audio are inherently inaccurate. Specifically, these methods involve detecting fast-forward and rewind patterns of, for example, a cassette tape produced by button pushes. The use of such fast-forward or rewind patterns suffers from various drawbacks. For example, the listener often alternates between fast-forwarding and rewinding over a particular piece of audio material because the information is either not presented or is unintelligible while fast-forwarding or rewinding. In addition, whenever a playback location is advanced, this either interrupts playback while advancing through the audio material or presents unintelligible versions of the audio

material ("chipmunk like" sounds for speed-up, etc.). As such, prior methods of determining

listener interest are of little use for determining an optimal information delivery rate.

30.   United States Patent No. 7,299,184 ("the '184 Patent"), entitled "Method and

Apparatus to Prepare Listener-Interest-Filtered Work," was duly and lawfully issued November

20, 2007. Plaintiff is the owner of all rights, title, and interest in the '184 Patent. A true and

correct copy of the '184 Patent is attached hereto as Exhibit F.

31.   The '184 patent is a continuation of the '888 Patent and teaches similar

improvements to computer technology over the prior art as discussed above for the '888 Patent.

32.   United States Patent No. 7,043,433 ("the '433 Patent"), entitled "Method and

Apparatus To Determine and Use Audience Affinity and Aptitude," was duly and lawfully issued

on May 9, 2006. Plaintiff is the owner of all rights, title, and interest in the '433 Patent. A true

and correct copy of the '433 Patent is attached hereto as Exhibit G.

33.   The '433 Patent has a familial relationship to the '888 Patent and thus the '433

Patent addresses many of the same prior art shortcomings as discussed above for the '888 Patent.

34.   The '433 Patent pertains to a way of determining audience affinity or aptitude in

portions of media works. Conventional prior art methods of determining listener interest were

inherently inaccurate. Detecting fast-forward and rewind patterns of, e.g., a cassette tape suffers

from the drawbacks of interrupting playback or playing "chipmunk like" sounds while advancing

through the audio material. The invention of the '433 Patent addresses this and other problems

of the prior art in an unconventional way, and improves the functioning and performance of a

system for inferring audience affinity or aptitude by providing a novel way, for example, to test

aptitude for content or properties of portions of a media work by presenting the media work,

obtaining user input regarding presentation rates of portions of the media work, and correlating

the presentation rates with the aptitude for the content or properties of the portions.

35.   United States Patent No. 9,185,380 ("the '380 Patent"), also entitled "Method and Apparatus To Determine and Use Audience Affinity and Aptitude," was duly and lawfully issued on November 10, 2015. Plaintiff is the owner of all rights, title, and interest in the '380 Patent. A true and correct copy of the '380 Patent is attached hereto as Exhibit H.

36.   The '380 Patent is a continuation of an application that led to a currently unasserted patent, which is a continuation of the application that led to the '433 Patent. The '380 Patent teaches similar improvements to computer technology over the prior art as discussed above for the '433 Patent. The claims of the '380 Patent focus on embodiments of the invention applying the teachings of the patent in the field of surveillance cameras.

37.   United States Patent No. 6,598,228 ("the '228 Patent"), entitled "Method and Apparatus for Controlling Time-Scale Modification During Multi-Media Broadcasts" was duly and lawfully issued July 22, 2003. Plaintiff is the owner of all rights, title, and interest in the '228 Patent. A true and correct copy of the '228 Patent is attached hereto as Exhibit I.

38.   The '228 Patent relates to a method and apparatus for controlling TSM of broadcast multi-media, for example audio and audio-visual works. Prior to the invention of the '228 Patent, there was a need for a method and/or apparatus to control presentation rates of broadcast multi-media, where for example, important messages may otherwise be missed if a user is listening at a very fast rate by utilizing TSM. Thus, there was a need for a method and/or apparatus to restrict or direct the playback rate for a client apparatus in a client-server system and/or broadcaster-recipient system and/or to notify the client apparatus or recipient devices of the importance of certain messages. Thus, the '228 Patent addresses this problem, for example, by broadcasting and analyzing guidance information to determine a presentation rate for broadcasted media. Further teachings of the '228 Patent relate to analyzing guidance

information that specifies that predetermined portions of a media work must be viewed at a predetermined presentation rate or skipped.

39.   United States Patent No. 7,100,188 ("the '188 Patent"), entitled "Method and Apparatus for Controlling Time-Scale Modification During Multi-Media Broadcasts" was duly and lawfully issued August 29, 2006. Plaintiff is the owner of all rights, title, and interest in the '188 Patent. A true and correct copy of the '188 Patent is attached hereto as Exhibit J.

40.   The '188 Patent is a continuation of the application that led to the '228 Patent, and teaches many of the same improvements to computer technology over the prior art as discussed above for the '228 Patent.

41.   United States Patent No. 8,566,885 ("the '885 Patent"), entitled "Method and Apparatus for Controlling Time-Scale Modification During Multi-Media Broadcasts" was duly and lawfully issued October 22, 2013. Plaintiff is the owner of all rights, title, and interest in the '885 Patent. A true and correct copy of the '885 Patent is attached hereto as Exhibit K.

42.   The '885 Patent is a continuation of the '117 patent and teaches many of the same improvements to computer technology over the prior art as discussed above for the '117, '188 and '228 Patents.

YOUTUBE AND GOOGLE'S USE OF THE PATENTED TECHNOLOGY

43.   YouTube is a subsidiary of Google. With more than one billion users, YouTube is one of the world's largest, if not the largest, online video sharing and hosting platforms. YouTube and Google allow users to upload and view videos, which are stored on one or more YouTube and/or Google servers.

44.   Prior to 2010, YouTube used the Adobe Flash platform as the exclusive and standard way to play its videos. In 2010, YouTube allowed experimental use of an HTML5 video player for playing some of YouTube's videos and continued its use in beta until January

2015, when YouTube moved to using HTML5 as the standard player for its videos. Prior to

January 2015, the Adobe Flash platform remained the default standard for playing YouTube

videos. Variable speed playback was not available from YouTube for playing videos using the

Adobe Flash platform. However, the Enounce MySpeed product did allow users to speed-up and

slow-down content viewed on the Adobe Flash platform, including YouTube content.

       45.   The YouTube HTML5 video player allows viewers to adjust the speed of audio

and corresponding video during playback. YouTube refers to this functionality as variable speed

playback. The variable speed playback functionality implemented on YouTube via user

interface controls allows viewers to watch videos and broadcasts at variable presentation rates of

0.25x; 0.5x; 0.75x; Normal; 1.25x; 1.5x; and/or 2x.

       46.   Defendants have touted the release of Variable speed playback on mobile,

highlighting its popularity as a feature request after being released as a feature for YouTube web

browser versions:

> Variable speed playback was launched on the web several years ago and is one of our most highly requested features on mobile. Now, it's here! You can speed up or slow down videos in the YouTube app on iOS and on Android devices running Android 5.0+. Playback speed can be adjusted from 0.25x (quarter speed) to 2x (double speed) in the overflow menu of the player controls.

> The most commonly used speed setting on the web is 1.25x, closely followed by 1.5x. Speed watching is the new speed listening which was the new speed reading, especially when consuming long lectures or interviews. But variable speed isn't just useful for skimming through content to save time, it can also be an important tool for investigating finer details. For example, you might want to slow down a tutorial to learn some new choreography or figure out a guitar strumming pattern.

https://youtube-eng.googleblog.com/2017/09/variable-speed-playback-on-mobile.html.

       47.   YouTube and/or Google offer a subscription service called YouTube Red. With

YouTube Red, users can watch YouTube videos without viewing ads, and users can also

download YouTube videos to a device which allows for offline storage and viewing of the content as long as the device has an internet connection at least once every 30 days.

48.   YouTube and/or Google have developed the YouTube application which can be downloaded and used on mobile devices, tablets, laptops and other devices. Google maintains and updates the YouTube application. On information and belief, on Google-manufactured hardware, and other devices running Google's Android operating systems, the YouTube application comes pre-installed and the app cannot be removed.

49.   Pursuant to Fed. R. Civ. P. 8(b), by virtue of Defendants' Sept. 10, 2019 Answer and prior failure to deny any allegations in the preceding paragraph, Defendant has admitted the allegations.

50.   On information and belief, if a phone manufacturer wants its users to have access to the Google Play app store, then Google requires the company to include a large bundle of its apps preinstalled on the device in an all-or-nothing type of scenario. Some of the apps that Google requires manufacturers to preinstall on its devices to access the Google Play app store include YouTube and Google Chrome, as well as Gmail and Google Maps. *See e.g.,* https://www.forbes.com/sites/amitchowdhry/2015/08/26/android-bloatware/#412b68d52c0b

51.   Play Protect Certified Android Devices come with pre-installed Google apps, where Google has verified that the Google apps pre-installed on Certified devices are authentic and can work as intended. This includes Google apps such as YouTube and Chrome. *See e.g.,* https://www.android.com/certified/

52.   Google has hundreds of partners that ship Play Protect certified phones and tablets. Play Protect certified Android devices are tested for security and performance and preloaded with Google apps. Partners include, for example, Samsung, Sony, Motorola, LG, and many more. *See* https://www.android.com/certified/partners/

53.   Google further makes and maintains Chrome OS, which is the operating system that powers every Chromebook. All Chromebooks come with pre-installed Google apps, including YouTube and Chrome. Chromebooks' software is designed and built by Google, then paired with hardware from brands like HP, Dell, Lenovo, Samsung, Acer and ASUS. *See* https://www.google.com/chromebook/switch-qa/; *see also* https://www.google.com/chromebook/shop/#laptop

54.   After YouTube officially launched Variable Speed Playback in the YouTube web application, the feature became one of the most highly requested features for YouTube to implement on mobile devices. By September 2017, YouTube launched Variable Speed Playback for its mobile applications.

55.   In YouTube, the data time for media content is displayed to the user and updated in the rendered version of a video and/or broadcast. The data time depicts the amount of time it would take to reach that location starting from the beginning of the media content and playing at normal rate.

56.   On information and belief, YouTube also calculates, stores and/or maintains the presentation time of media content that is watched at a variable playback speed. For example, YouTube provides content creators with Watch Time statistics and reports, which, among other things, provides "Watch Time: The amount of time that a viewer has watched a video." (*See e.g.,* https://support.google.com/youtube/answer/1714329?hl=en) On information and belief, Watch Time factors in the actual amount of time (for example, based on the wall clock duration) that a viewer played the video.

57.   With more than one billion users, and estimates of 300 hours of video uploaded to YouTube every minute, YouTube's ability to rank videos and return search results that are more desirable is important to the company. At one point in time, YouTube primarily focused on the

number of views a video received in order to evaluate a video's rank or relevance. However,

YouTube modified its algorithm to factor in the presentation time, or watch time.

58.   YouTube's prior head of Creator Marketing Communications was quoted as

describing the importance of the shift to watch time:

> "YouTube viewers watch a lot of video — over 4 billion hours a month at last count.
> But the average household also watches several hours of video per day on their TVs.
> So for YouTube to become the most important media in more people's lives, we've
> got a lot of growing to do," he said. "Over the past few months we have made some
> changes to YouTube to encourage people to spend more time watching, interacting,
> and sharing with the community. To support this, we've updated what we call video
> discovery features, meaning how our viewers find videos to watch via search and
> suggested videos. These changes better surface the videos that viewers actually
> watch, over those that they click on and then abandon."
>
> "Now when we suggest videos, we focus on those that increase the amount of time
> that the viewer will spend watching videos on YouTube, not only on the next view,
> but also successive views thereafter," Meyerson said. "If viewers are watching more
> YouTube, it signals to us that they're happier with the content they've found. It
> means that creators are attracting more engaged audiences. It also opens up more
> opportunities to generate revenue for our partners."

59.   YouTube's Watch Time calculations take into account the speed at which the

media content was played. Factoring playback rate into Watch Time helps better quantify

viewers' engagement and interest in the videos, and also allows for more accurate statistics

surrounding the amount of time a viewer remains on YouTube's website.   This is important to

YouTube because the more time a viewer remains on YouTube's website, the more potential

value and revenue YouTube may obtain from that individual through advertising revenue, for

example.

60.   Another feature of YouTube's platform is the ability to obtain a URL with a link

that will open a video to a particular point in the video. When a user right-clicks the video,

he/she is given an option to "Copy video URL at current time." Regardless of the playback

speed at which the user was watching the video, the URL that is generated by this method

incorporates a time code appended to the video URL that provides the user with the data time in

seconds that indicates how long it would take to reach that location in the content, starting from the beginning of the media content, and playing at normal rate.

61.   YouTube also has a Restricted Mode feature that provides the ability to control content that users can view on YouTube. When Restricted Mode is turned on, YouTube's system looks at information like the video's metadata, title, and the language used in the video to determine if the video should be omitted and not shown to the users. For example, videos containing potentially mature content will not be shown to viewers who have Restricted Mode turned on.

62.   In 2017, Google and/or YouTube launched YouTube TV, a TV streaming service that lets consumers watch live TV from major broadcast and popular cable networks. A YouTube TV subscription allows a user to watch live TV, watch on-demand shows, and to record content to a cloud-based DVR for later playback.

63.   YouTube TV can be watched on a number of devices, including phones and tablets running Android L or later, (including at least the Pixel 2 and Pixel 2 XL), computers (including at least the Pixelbook) via web browsers such as Chrome, or on TVs using Google Chromecast or the YouTube app on Roku, Apple TV, Android TV, Xbox One and supported Samsung and LG TVs.

64.   YouTube TV, at least when viewed through web browsers such as Chrome, provides users with variable speed playback controls which allow users to slow down live TV and slow down or speed-up broadcasts that have been paused, recorded, or are available through OnDemand.

65.   YouTube also partners with Nielsen, a global measurement and data analytics company. Nielsen's TV panels provide ratings data for both national and local television. Nielsen measures how many people were exposed to a piece of content or ad, how often they

were exposed, as well as how long the audience was exposed. One way in which this data is

measured is through watermarks, which are unique sounds inaudible to the human ear and

encoded into content. Meters use these watermarks to measure how often and how long content

is viewed. On information and belief, because YouTube partners with Nielsen, YouTube

includes measurement software in its content, on its chosen sites, ads, apps and/or video players

in order to track how long a video or ad has been watched.

66.   Google has also developed the Chrome web browser and Chrome application

which can be downloaded and used on mobile devices, tablets, laptops and other devices.

Google maintains and updates the Chrome web browser and Chrome application. Further, when

installed, Chrome prompts and induces users to select it as the "default" browser.

67.   On information and belief, on Google-manufactured hardware, the Chrome app

comes pre-installed, and the application cannot be removed.

68.   On information and belief, Google requires phone and tablet manufacturers

running Android operating systems, and laptops running Chrome OS to pre-install the Google

Chrome app, and such application cannot be removed.

69.   Google also manufactures various hardware devices, including the Pixel 2, Pixel 2

XL, Pixel 3, Pixel 3a mobile devices and Pixelbook laptop/tablet and the Pixel Slate. Such

devices are only some of the exemplary devices on which a consumer might view YouTube

content.

70.   In 2014, Google acquired Nest, a maker of surveillance cameras and other smart

home products, for $3.2 billion. On information and belief, Nest later became a wholly owned

subsidiary of Alphabet, Google's parent corporation. On information and belief, earlier this

year, Nest became a part of Google's hardware division. Google continues to use the Nest brand

name for its surveillance cameras and other smart home products.

71.   Google, under its Nest brand name, makes and sells the following surveillance cameras: Nest Cam Indoor and Outdoor, Nest Cam IQ Indoor and Outdoor, and the Hello Doorbell. These cameras work in conjunction with the Nest Application, which can be operated on mobile phones, tablets, laptops, and desktop computers, and performs recognition of motion and persons within the camera's view, and Nest Aware, a feature that allows video storage in the cloud for up to 30 days, and performs facial recognition, among other features. Nest Cam Indoor and Outdoor, Nest Cam IQ Indoor and outdoor, the Hello Doorbell, the Nest Application, and Nest Aware are referred to as "the Google Nest Products" in this Second Amended Complaint.

GOOGLE LEARNED OF THE PATENTED TECHNOLOGY PRIOR TO INTRODUCING THE YOUTUBE HTML5 VIDEO PLAYER

72.   Google learned of Enounce's patented technology beginning in 2009. In early 2009, Enounce communicated with Google regarding Enounce's technology and patents. However, after providing its information to Google, Enounce was told that "[after consulting the YouTube team], Google would have no interest in working with Enounce strategically at this point." Then, later in 2009, Enounce discussed its products and patents and provided a presentation to various Google engineers at Google's I/O conference in San Francisco, CA. In 2010, YouTube released an experimental version of its YouTube interface utilizing HTML5 that allowed for variable speed playback of videos using TSM. Later in 2010, Enounce again discussed its products and patents with various Google personnel and provided a presentation to them.

73.   In 2013, Enounce further corresponded with multiple individuals within Google and/or YouTube regarding Enounce's patents and technology and was told in response that "there's not a culture here of using third party software--too many smart here people [sic] all fighting for interesting projects so there's always a whole queue of people ready to write their

own code. In fact, I can't even think of one example where we use stuff from outside--we are

always getting rid of vendors and replacing with our own code (for better or worse)."

74.   In October 2013, then Don Hejna, CEO of Enounce, Inc. had lunch with Glen

Anderson at Google. Mr. Anderson then followed up with Mr. Hejna, inviting him to "send … a

short summary of your patents, if not some of the patent numbers themselves (if you wish to

disclose)" to Christina [Robson], a program manager with "connections into Google biz dev

and/or legal" with whom he "had a short conversation" about Mr. Hejna's "situation." He

indicated that "[s]he may be able to help connect [Mr. Hejna] with the right person [at Google]."

75.   On October 22, 2013, at Mr. Anderson's invitation, Mr. Hejna then sent an email

to Mr. Anderson and Ms. Robson, stating:

> I've included a list of 16 issued patents that relate to viewing multimedia works
> (video). Most focus on determining a user's interest and affinity from the playback
> speeds selected while watching a video or other multimedia work.   There are
> several applications: increasing advertising yield, increasing 'sticky-ness" on a site
> that offers alternative videos, repurposing training material, inferring "crowd-
> preferred" playback speeds and presenting material at that rate to other viewers to
> increase engagement.
>
> A short example: By observing the playback speed changes selected by a user
> during viewing and utilizing meta data, we learn a user's interests and preferences.
> This can be used to select advertisements and select additional media of interest to
> present.   When watching a video of activities to do in Hawaii, if a user fast-
> forwards through material related to golf and slows down for material about
> snorkeling, we know to show ads for snorkeling and not ads for golfing. We then
> select more material on snorkeling to increase engagement and show more relevant
> advertising.
>
> Once we know a users, interest, we can create a playback speed-contour that
> automatically changes playback rates during viewing: speed through and skim
> material they are uninterested in and slow down for material they have an interest
> in. Similarly for learning, we can speed through material they know and present
> unknown material more slowly.
>
> Additionally there are several patents that relate to restricting the ability of users to
> speed through material of certain types like currently active promotions and allow
> them to speed through stale material such as old promotions that have expired.

Included in the list of patents were Asserted Patents 6,598,228; 6,801,888; 7,043,433; 7,100,188; 7,299,184; and, 8,566,885.

76.   On October 24, 2013, after sending the email and list of patents with descriptions of each that would convey their applicability to Google and/or YouTube's business, Ms. Robson replied to Mr. Hejna stating:

> Don, thanks for your email. I've found out what the procedure here is- this is new to me :). There's a contact portal that connects you with the attorneys and business folks who are best paired with your work (I think this would be YouTube, which is not my area). You can access it here. If you have any questions or have trouble with that portal, reach out to patent-triage@google.com- they can help you.
>
> Thanks! -Christine

77.   Because Mr. Hejna had been informed that submission through the portal was the only way to begin a discussion with Google about a relationship relating to the patents, in March 2014, Enounce made a submission through that contact portal (the "Acquisition Opportunity Portal" or "AOP"). Enounce did not receive a response.

78.   In May 2014, Mr. Hejna then attempted to follow up with Christine Robson. By reply, he learned she was on maternity leave until August.

79.   Mr. Hejna then sent the following email to John Small on May 14, 2014:

> My name is Don Hejna and I am CEO of Enounce, Inc. I reached out to Christine Robson (Google labs) to continue an earlier conversation about our video interest technology and received an email reply that she was on maternity leave until August. You were listed as a contact point in the interim.
>
> We'd like to have a discussion with Google about some early testing of our "video interest filter" technology on a large dataset (YouTube) and monetization of the information (think double-click for video). We have about 20 patents (www.enounce.com/patents) in this area and I think because of that Christine directed me to submit our patents on Google's patent-triage site. We did that and didn't hear back are now following up to find that Christine is out for a few months.
>
> We're looking to beta-test and form a partnership with Google at this time and not muddle around in legal land. Having jumped through the first hoop now, could you and I have a 5 minute phone call to sort out the right person for us to follow-up with?

- Don

80.   On June 26, 2014, Enounce received an email from "Google Acquisitions Team"

stating:

Thanks very much for sending us this patent portfolio. Unfortunately, we have
decided to pass on the opportunity.

Let's stay in touch and hopefully we'll be able to work together on other deals.

Regards,
Google Acquisitions Team

81.   In 2015, Google and YouTube made the YouTube HTML5 player the default for

playing audio and video and incorporated and/or continued using the technological

improvements disclosed and claimed in Enounce's Asserted Patents.

FIRST COUNT
(Infringement of U.S. Patent No. 7,683,903)

82.   Virentem incorporates by reference paragraphs 1 through 81.

83.   The '903 Patent was filed on August 17, 2004. The inventors of the '903 Patent

are Richard S. Goldhor, and Edward J. Bianchi.

84.   Defendants make, use, sell, offer to sell, and/or import methods and devices that

incorporate the infringing features described below. The YouTube and Google Products and

Services, which include, without limitation, the Google Pixelbook, Pixel Slate, Pixel 3, Pixel 3a,

Pixel 2 and Pixel 2 XL hardware that render YouTube content via Chrome, Chrome apps,

YouTube apps, the Google/YouTube servers, and/or hardware that renders YouTube TV content

via Chrome, directly infringe one or more of the claims of the '903 Patent, including without

limitation Claims 1, 2, 3, 4, 7, 12, 13, 14, 17, and 22.

85.   As a non-limiting example, to the extent the preamble of Claim 1 of the '903

Patent is limiting, the YouTube and Google Products and Services are presented via a method

described in accordance with the preamble language. For example, the method used by YouTube and Google Products and Services is performed by at least one machine, that renders temporal sequence presentation data in a machine-implemented rendering system, the temporal sequence presentation data being tangibly stored in a computer-readable medium. For example, YouTube and/or Google servers tangibly store YouTube video and audio content as well as recorded, paused, or OnDemand YouTube TV content, which is temporal sequence presentation data. Further, in Android mobile devices using the YouTube app, including the Google Pixel 3, Pixel 3a, Pixel 2 and Google Pixel 2XL, or Chromebooks, including the Google Pixelbook, or Pixel Slate when operating under a YouTube Red subscription, video content may also be stored offline (i.e., in the device).

86.   The YouTube and Google Products and Services maintain a value of a presentation time parameter tangibly stored in a second computer-readable medium and representing an amount of time elapsed during rendering of a portion of the temporal sequence presentation data. For example, YouTube's Watch Time statistics are based on YouTube and/or Google Products and Services maintaining a record (or records) of the presentation time elapsed during rendering of a portion of the video. Similarly, in Android mobile devices using the YouTube app, including the Google Pixel 3, Pixel 3a, Pixel 2 and Google Pixel 2XL, or in Chromebooks, including the Google Pixelbook, or Pixel Slate, when a user downloads a video to view offline, and later reconnects to the internet, the presentation time elapsed is maintained and stored for later reporting. For example, the devices contain a sound card and/or audio renderer which, in connection with memory, other hardware, software, firmware, and/or computer programs, maintains a value of a presentation time parameter. On information and belief, the

presentation time elapsed during rendering of YouTube TV content is also maintained and stored.

87.   The YouTube and Google Products and Services provide the value of the presentation time parameter to a first component of the rendering system. For example, during playback, the value of the presentation time is recorded and provided to a component of the rendering system in order to synchronize the content, determine ad placement, and to calculate Watch Time and other TV viewing statistics.

88.   The YouTube and Google Products and Services maintain a value of a data time parameter tangibly stored in a third computer-readable medium and representing an amount of time required by the rendering system to render the portion of the temporal sequence presentation data at a default presentation rate. For example, when a user views a YouTube video on a web browser, such as Chrome, in the YouTube mobile app (streaming or offline), or YouTube TV content in a browser, the data time is maintained and displayed at the bottom of the video as the video is being watched, regardless of the presentation rate at which the video is watched.

89.   On information and belief, the YouTube and Google Products and Services provide the value of the data time parameter to a second component of the rendering system. For example, in order to accurately display the data time that is maintained, the data time parameter is provided to a component of the rendering system.

90.   The YouTube and Google Products and Services further meet the limitation of exemplary Claim 1. For example, when a video is being watched at anything other than normal speed (e.g., .25x; .5x; .75x, 1.25x, 1.5x; 2x), the value of the presentation time parameter is not equal to the value of the data time parameter. When audio/video content is rendered using variable speed playback on a browser, such as Chrome, on information and belief, the audio

renderer utilizes two different values for presentation time and data time. For example, on information and belief, the Chromium code, upon which Chrome is based, utilizes an audio renderer implementation and algorithm to queue audio data and stretch or shrink audio data when the content is rendered using variable speed playback.

91.   As a further non-limiting example, the YouTube and Google Products and Services perform a step described in dependent Claim 4 of providing the data time parameter value in response to a request from the second component for a current time. When a user right-clicks a YouTube video, for example, and requests "copy video URL at current time" YouTube and/or Google receive a request for a current time. Regardless of the playback speed at which the user was watching the video, the URL that is generated by this method incorporates a time code appended to the video URL that provides the user with the data time in seconds that indicates how long it would take to reach that location in the content, starting from the beginning of the media content, and playing at normal rate.

92.   By making, using, testing, offering for sale, selling, and/or importing the YouTube and Google Products and Services, YouTube and Google have injured Enounce and are liable to Enounce for directly infringing one or more claims of the '903 Patent, including without limitation Claims 1, 2, 3, 4, 7, 12, 13, 14, 17, and 22 pursuant to 35 U.S.C. § 271(a).

93.   Defendants also actively induce infringement of the '903 Patent under 35 U.S.C. § 271(b). Defendants have known of the '903 Patent and Plaintiff's accusations of infringement of the '903 Patent since at least June 21, 2018 when they were provided with a copy of the original complaint in this case.

94.   Third-party manufactured mobile devices and tablets (collectively hereinafter the "client device" or "apparatus") with the Android Operating System or the Chrome Operating System with the YouTube application ("YouTube App") and/or Chrome application ("Chrome

App") and associated software installed directly infringe one or more of the claims of the '903

Patent, including without limitation Claims 13, 14, 17, and 22, and directly infringe method

claims 1, 2, 3, 4, 7 and 12, any time a YouTube video, or VOD or post-live TV content

(collectively media), is played in variable speed on such device. Third-party manufactures of

these client devices include, without limitation, Samsung, LG, Sony, Motorola, Lenovo, Nokia,

Xiaomi, and Oppo. https://www.android.com/phones-tablets/;

https://www.android.com/certified/partners/; https://www.google.com/chromebook/shop/#laptop.

Additionally, third-party browsers that support YouTube HTML5 Video Player, including

without limitation, Microsoft Edge, Firefox, Opera and Apple Safari (*see*

https://www.youtube.com/supported_browsers), operating on any device directly infringe one or

more of the claims of the '903 Patent, including without limitation claims 1, 2, 3, 4, 7 and 12,

any time a YouTube video, or VOD or post-live TV content (collectively media), is played in

variable speed on such device through a browser. Further, any client device that has the Google

Chrome HTML5 web browser software installed (including devices running Windows 10/8.1/8/7

64-bit; Windows 10/8.1/8/7 32-bit; Mac OS X 10.10 or later or Linux) directly infringes one or

more of the claims of the '903 Patent, including without limitation Claims 13, 14, 17, and 22,

and directly infringe method claims 1, 2, 3, 4, 7 and 12, any time media is played in variable

speed on such device, including YouTube TV content.   Thus, the third-party manufacturers of

such client devices and browsers directly infringe by making, using, selling, offering for sale

and/or importing such devices and performing methods of the asserted claims.

95.   As a non-limiting example, to the extent the preamble of Claim 1 of the '903

Patent is limiting, the YouTube App, Chrome App, or Chrome web browser and associated

software present media content on the client device via a method described in accordance with

the preamble language. For example, the method used by the YouTube App and associated

software, Chrome App, or Chrome web browser is performed by at least one machine, that renders temporal sequence presentation data in a machine-implemented rendering system, the temporal sequence presentation data being tangibly stored in a computer-readable medium. For example, YouTube and/or Google servers tangibly store YouTube video and audio content as well as recorded, paused, or OnDemand YouTube TV content, which is temporal sequence presentation data. Further, in Android mobile devices or Chromebooks using the YouTube App, when operating under a YouTube Red subscription, video content may also be stored offline (i.e., in the device).

96.   The client device with the installed YouTube App, Chrome App, or Chrome web browser and associated software, maintain a value of a presentation time parameter tangibly stored in a second computer-readable medium and representing an amount of time elapsed during rendering of a portion of the temporal sequence presentation data. For example, YouTube's Watch Time statistics are based on YouTube and/or Google Products and Services maintaining a record (or records) of the presentation time elapsed during rendering of a portion of the video. Similarly, in Android mobile devices or Chromebooks using the YouTube App, when operating under a YouTube Red subscription, when a user downloads a video to view offline, and later reconnects to the internet, the presentation time elapsed is maintained and stored for later reporting. On information and belief, the presentation time elapsed during rendering of YouTube TV content is also maintained and stored.

97.   The client device with the installed YouTube App, Chrome App, or Chrome web browser and associated software, provide the value of the presentation time parameter to a first component of the rendering system. For example, during playback, the value of the presentation time is recorded and provided to a component of the rendering system in order to synchronize the content, determine ad placement, and to calculate Watch Time and other TV viewing statistics.

98.   The client device with the installed YouTube App, Chrome App, or Chrome web browser and associated software, and/or the Google YouTube servers maintains a value of a data time parameter tangibly stored in a third computer-readable medium and representing an amount of time required by the rendering system to render the portion of the temporal sequence presentation data at a default presentation rate. For example, when a user views a YouTube video on a web browser, such as Chrome, in the YouTube App (streaming or offline), or YouTube TV content in a browser, the data time is maintained and displayed at the bottom of the video as the video is being watched, regardless of the presentation rate at which the video is watched.

99.   On information and belief, the client device with the installed YouTube App, Chrome App, or Chrome web browser and associated software provide the value of the data time parameter to a second component of the rendering system. For example, in order to accurately display the data time that is maintained, the data time parameter is provided to a component of the rendering system.

100.   The client device with the installed YouTube App, Chrome App, or Chrome web browser and associated software further meet the limitation of exemplary Claim 1. For example, when a video is being watched at anything other than normal speed (e.g., .25x; .5x; .75x, 1.25x, 1.5x; 2x), the value of the presentation time parameter is not equal to the value of the data time parameter. When audio/video content is rendered using variable speed playback on a browser, such as Chrome, on information and belief, the audio renderer utilizes two different values for presentation time and data time. For example, on information and belief, the Chromium code, upon which Chrome is based, utilizes an audio renderer implementation and algorithm to queue audio data and stretch or shrink audio data when the content is rendered using variable speed playback.

101.   Defendants induce the above described acts on third-party client devices and

browsers knowing that the inducing acts cause infringement, or are willfully blind to the

possibility that the inducing acts would cause infringement.

102.   For example, Defendants have touted the release of Variable speed playback on

mobile, highlighting its popularity as a feature request after being released as a feature for

YouTube web browser versions:

> Variable speed playback was launched on the web several years ago and is one
> of our most highly requested features on mobile. Now, it's here! You can speed
> up or slow down videos in the YouTube app on iOS and on Android devices
> running Android 5.0+. Playback speed can be adjusted from 0.25x (quarter
> speed) to 2x (double speed) in the overflow menu of the player controls.
>
> The most commonly used speed setting on the web is 1.25x, closely followed
> by 1.5x. Speed watching is the new speed listening which was the new speed
> reading, especially when consuming long lectures or interviews. But variable
> speed isn't just useful for skimming through content to save time, it can also be
> an important tool for investigating finer details. For example, you might want
> to slow down a tutorial to learn some new choreography or figure out a guitar
> strumming pattern.

https://youtube-eng.googleblog.com/2017/09/variable-speed-playback-on-mobile.html.

103.   Defendants know and advertise that the YouTube HTML5 Video Player is

supported on the following browsers, in addition to Google Chrome: Microsoft Edge, Firefox,

Opera and Apple Safari. *See* https://www.youtube.com/supported_browsers. Defendants also

know that the Google Chrome web browser is available to download on all devices, and the

Google Chrome App and the YouTube App are further supported on all, and pre-installed on

many, Android devices and other mobile operating systems, as explained above. Further, as

explained above Defendants sometimes require that a manufacturer pre-install Google Apps such

as YouTube and Chrome in order to allow the manufacturers' devices to have access to the

Google Play Store. *See also*,

https://play.google.com/store/apps/details?id=com.google.android.youtube&hl=en_US;

Accordingly, Defendants have induced the manufacturers or makers of those third-party client devices and browsers to infringe the '903 Patent, knowing that such use constitutes infringement of the '903 Patent.

104.   As a result of Defendants' infringement of the '903 Patent, Enounce has suffered monetary damages, and seeks recovery in an amount adequate to compensate for Defendants' infringement, but in no event less than a reasonable royalty for the use made of the invention by Defendants together with interest and costs as fixed by the Court.

SECOND COUNT
(Infringement of U.S. Patent No. 8,068,108)

105.   Virentem incorporates by reference paragraphs 1 through 81.

106.   The '108 Patent was filed on March 3, 2010. The inventors of the '108 Patent are Richard S. Goldhor and Edward J. Bianchi.

107.   Defendants make, use, sell, offer to sell, and/or import methods and devices that incorporate the infringing features described below. The YouTube Products and Services and Google Products and Services infringe claims 1, 3, 5 and 7 of the '108 Patent.

108.   As a non-limiting example, to the extent the preamble of Claim 5 of the '108 Patent is limiting, the YouTube and Google Products and Services include a method performed by at least one machine (including at least the Pixel 3, Pixel 3a, Pixel 2, Pixel 2XL and Pixelbook and Pixel Slate and/or YouTube Servers) for use in a rendering system for rendering temporal sequence presentation data in a machine-implemented rendering system, the temporal sequence presentation data being tangibly stored in a first computer-readable medium. The method performed by these devices are for use in rendering YouTube video and YouTube TV content, for example. The video content may be stored on the Google and/or YouTube servers, or on the device itself when using a YouTube Red subscription.

109.   The YouTube Products and Services maintain a value of a presentation time parameter tangibly stored in a second computer-readable medium and representing an amount of time elapsed during rendering of a portion of the temporal sequence presentation data. For example, the devices contain a sound card and/or audio renderer which, in connection with memory, other hardware, software, firmware, and/or computer programs, maintains a value of a presentation time parameter. For example, YouTube's Watch Time statistics are based on YouTube and Google Products and Services maintaining record of the presentation time elapsed during rendering of a portion of the video. Similarly, in Android mobile devices using the YouTube App, including the Google Pixel 3, Pixel 3a, Pixel 2 and Google Pixel 2 XL, or in Chromebooks, including the Google Pixelbook, or Pixel Slate tablet, when a user downloads a video to view offline, and later reconnects to the internet, the presentation time elapsed is maintained and stored for later reporting. On information and belief, the presentation time elapsed during rendering of YouTube TV content is also maintained and stored.

110.   The Google and YouTube Products and Services further maintain a value of a data time parameter tangibly stored in a third computer-readable medium and representing an amount of time required by the rendering system to render the portion of the temporal sequence presentation data at a default presentation rate. For example, on information and belief, the devices contain a sound card and/or audio renderer which, in connection with memory, other hardware, software, firmware, and/or computer programs, maintains a value of a data time parameter. For example, when a user views a YouTube video on a web browser, such as Chrome, in the YouTube mobile app (streaming or offline), or YouTube TV content in a browser, the data time is maintained and displayed at the bottom of the video as the video is being watched, regardless of the presentation rate at which the video is watched.

111.   The Google and YouTube Products and Services provide the value of the data time parameter to a first component of the rendering system. For example, the devices contain a sound card and/or audio renderer which, in connection with memory, other hardware, software, firmware, and/or computer programs provide a value of a data time parameter to a first component of the rendering system. For example, in order to accurately display the data time that is maintained, the data time parameter is provided to a component of the rendering system.

112.   Further, when a video is being watched at anything other than normal speed (e.g., .25x; .5x; .75x, 1.25x, 1.5x; 2x), for example, the value of the presentation time parameter is not equal to the value of the data time parameter. When audio/video content is rendered using variable speed playback on a browser, such as Chrome, on information and belief, the audio renderer utilizes two different values for presentation time and data time. For example, on information and belief, the Chromium code, upon which Chrome is based, utilizes an audio renderer implementation and algorithm to queue audio data and stretch or shrink audio data when the content is rendered using variable speed playback.

113.   By making, using, testing, offering for sale, selling, and/or importing the YouTube and Google Products and Services, YouTube and Google have injured Enounce and are liable to Enounce for directly infringing all claims of the '108 Patent pursuant to 35 U.S.C. § 271(a).

114.   Defendants also actively induce infringement of the '108 Patent under 35 U.S.C. § 271(b). Defendants have known of the '108 Patent and Plaintiff's accusations of infringement of the '108 Patent since at least June 21, 2018 when they were provided with a copy of the original complaint in this case.

115.   Third-party manufactured mobile devices and tablets (collectively hereinafter the "client device" or "apparatus") with the Android Operating System or the Chrome Operating

System with the YouTube application ("YouTube App") and/or Chrome application ("Chrome App") and associated software installed directly infringe one or more of the claims of the '108 Patent, including without limitation Claims 1, 3, 5 and 7 any time a YouTube video, or VOD or post-live TV content (collectively media), is played in variable speed on such device. Third-party manufactures of these client devices include, without limitation, Samsung, LG, Sony, Motorola, Lenovo, Nokia, Xiaomi, and Oppo. https://www.android.com/phones-tablets/; https://www.android.com/certified/partners/; https://www.google.com/chromebook/shop/#laptop. Additionally, third-party browsers that support YouTube HTML5 Video Player, including without limitation, Microsoft Edge, Firefox, Opera and Apple Safari (*see* https://www.youtube.com/supported_browsers), operating on any device directly infringe one or more of the claims of the '108 Patent, including without limitation claims 1, 3,5 and 7 any time a YouTube video, or VOD or post-live TV content (collectively media), is played in variable speed on such device through a browser. Further, any client device that has the Google Chrome HTML5 web browser software installed (including devices running Windows 10/8.1/8/7 64-bit; Windows 10/8.1/8/7 32-bit; Mac OS X 10.10 or later or Linux) directly infringe one or more of the claims of the '108 Patent, including claims 1, 3, 5, and 7, any time media is played in variable speed on such device, including YouTube TV content.   Thus, the third-party manufacturers of such client devices and browsers directly infringe by making, using, selling, offering for sale and/or importing such devices and performing methods of the asserted claims.

116.   As a non-limiting example, to the extent the preamble of Claim 5 of the '108 Patent is limiting, the YouTube App, Chrome App, or Chrome web browser and associated software present media content using a method performed by at least one machine (e.g., the client device and/or YouTube Servers) for use in a rendering system for rendering temporal sequence presentation data in a machine-implemented rendering system, the temporal sequence

presentation data being tangibly stored in a first computer-readable medium. The method

performed by these devices are for use in rendering YouTube video and YouTube TV content,

for example. The video content may be stored on the Google and/or YouTube servers, or on the

device itself when using a YouTube Red subscription.

117.   The client device using the installed YouTube App, Chrome App, or Chrome web

browser and associated software maintain a value of a presentation time parameter tangibly

stored in a second computer-readable medium and representing an amount of time elapsed

during rendering of a portion of the temporal sequence presentation data. For example, the

devices contain a sound card and/or audio renderer which, in connection with memory, other

hardware, software, firmware, and/or computer programs, maintains a value of a presentation

time parameter. For example, YouTube's Watch Time statistics are based on maintaining record

of the presentation time elapsed during rendering of a portion of the video. Similarly, in client

devices using the YouTube App, when a user downloads a video to view offline, and later

reconnects to the internet, the presentation time elapsed is maintained and stored for later

reporting. On information and belief, the presentation time elapsed during rendering of

YouTube TV content is also maintained and stored.

118.   The client device using the installed YouTube App, Chrome App, or Chrome

web browser and associated software further maintain a value of a data time parameter tangibly

stored in a third computer-readable medium and representing an amount of time required by the

rendering system to render the portion of the temporal sequence presentation data at a default

presentation rate. For example, on information and belief, the devices contain a sound card

and/or audio renderer which, in connection with memory, other hardware, software, firmware,

and/or computer programs, maintains a value of a data time parameter. For example, when a

user of a client device views a YouTube video on a web browser, such as Chrome, in the

YouTube App (streaming or offline), or YouTube TV content in a browser, the data time is maintained and displayed at the bottom of the video as the video is being watched, regardless of the presentation rate at which the video is watched.

119.   The client device using the installed YouTube App, Chrome App, or Chrome web browser and associated software provide the value of the data time parameter to a first component of the rendering system. For example, the devices contain a sound card and/or audio renderer which, in connection with memory, other hardware, software, firmware, and/or computer programs provide a value of a data time parameter to a first component of the rendering system. For example, in order to accurately display the data time that is maintained, the data time parameter is provided to a component of the rendering system.

120.   Further, when a video is being watched at anything other than normal speed (e.g., .25x; .5x; .75x, 1.25x, 1.5x; 2x), for example, the value of the presentation time parameter is not equal to the value of the data time parameter. When a client device renders audio/video content is using variable speed playback on a browser, such as Chrome, on information and belief, the audio renderer utilizes two different values for presentation time and data time. For example, on information and belief, the Chromium code, upon which Chrome is based, utilizes an audio renderer implementation and algorithm to queue audio data and stretch or shrink audio data when the content is rendered using variable speed playback.

121.   Defendants induce the above described acts on third-party client devices and browsers knowing that the inducing acts cause infringement, or are willfully blind to the possibility that the inducing acts would cause infringement.

122.   For example, Defendants have touted the release of Variable speed playback on mobile, highlighting its popularity as a feature request after being released as a feature for YouTube web browser versions:

>Variable speed playback was launched on the web several years ago and is one of our most highly requested features on mobile. Now, it's here! You can speed up or slow down videos in the YouTube app on iOS and on Android devices running Android 5.0+. Playback speed can be adjusted from 0.25x (quarter speed) to 2x (double speed) in the overflow menu of the player controls.
>
>The most commonly used speed setting on the web is 1.25x, closely followed by 1.5x. Speed watching is the new speed listening which was the new speed reading, especially when consuming long lectures or interviews. But variable speed isn't just useful for skimming through content to save time, it can also be an important tool for investigating finer details. For example, you might want to slow down a tutorial to learn some new choreography or figure out a guitar strumming pattern.

https://youtube-eng.googleblog.com/2017/09/variable-speed-playback-on-mobile.html.

123.   Defendants know and advertise that the YouTube HTML5 Video Player is supported on the following browsers, in addition to Google Chrome: Microsoft Edge, Firefox, Opera and Apple Safari. *See* https://www.youtube.com/supported_browsers. Defendants also know that the Google Chrome web browser is available to download on all devices, and the Google Chrome App and the YouTube App are further supported on all, and pre-installed on many, Android devices and other mobile operating systems, as explained above. Further, as explained above Defendants sometimes require that a manufacturer pre-install Google Apps such as YouTube and Chrome in order to allow the manufacturers' devices to have access to the Google Play Store. *See also*, https://play.google.com/store/apps/details?id=com.google.android.youtube&hl=en_US; Accordingly, Defendants have induced the manufacturers or makers of those third-party client devices and browsers to infringe the '108 Patent, knowing that such use constitutes infringement of the '108 Patent.

124.   As a result of Defendants' infringement of the '108 Patent, Enounce has suffered monetary damages, and seeks recovery in an amount adequate to compensate for Defendants'

infringement, but in no event less than a reasonable royalty for the use made of the invention by

Defendants together with interest and costs as fixed by the Court.

THIRD COUNT
(Infringement of U.S. Patent No. 8,345,050)

125.   Virentem incorporates by reference paragraphs 1 through 81.

126.   The '050 Patent was filed on April 24, 2012. The inventors of the '050 Patent are

Richard S. Goldhor and Edward J. Bianchi.

127.   Defendants make, use, sell, offer to sell, and/or import methods and devices that

incorporate the infringing features described below.   The YouTube and Google Products and

Services infringe one or more of the claims of the '050 Patent, including without limitation

independent Claims 1, 2, 3, 4, 8, 20, 25, 34, 36, 40, 41, 45.

128.   As a non-limiting example, to the extent the preamble of Claim 8 of the '050

Patent is limiting, the YouTube and Google Products and Services include a device (including at

least the Pixel 3, Pixel 3a, Pixel 2, Pixel 2 XL, Pixelbook and Pixel Slate) for rendering temporal

sequence presentation data in a machine-implemented rendering system, the temporal sequence

presentation data being tangibly stored in a first computer-readable medium, the device

comprising at least one processor and at least one second computer-readable medium tangibly

storing computer program instructions that meet the further limitations of the claim. Temporal

sequence presentation data, for example, can be audio/video content that may be stored on the

Google/YouTube servers or on the device. Each device has at least one processor and a

computer-readable medium that stores computer program instructions.

129.   The computer program instructions allow for maintaining a value of a

presentation time parameter tangibly stored in a third computer-readable medium and

representing an amount of time elapsed during rendering of a portion of the temporal sequence

presentation data by the rendering system. For example, YouTube's Watch Time statistics are

based on YouTube and Google Products and Services maintaining record of the presentation time elapsed during rendering of a portion of the video. Similarly, in Android mobile devices using the YouTube app, including the Google Pixel 3, Pixel 3a, Pixel 2 and Google Pixel 2 XL, or in Chromebooks, including the Google Pixelbook, and Pixel Slate tablet, when a user downloads a video to view offline, and later reconnects to the internet, the presentation time elapsed is maintained and stored for later reporting.

130.   The computer program instructions allow for providing the value of the presentation time parameter to a first component of the rendering system. For example, on information and belief, during playback, the value of the presentation time is provided to a component of the rendering system in order to synchronize content, determine ad placement, and calculate Watch Time.

131.   The computer program instructions allow for maintaining a value of a data time parameter that is not equal to the value of the presentation time parameter and which represents an amount of time required by the rendering system to render the portion of the temporal sequence presentation data at a default presentation rate, the data time parameter being tangibly stored in a fourth computer-readable medium. For example, when a user views a YouTube video on a web browser, such as Chrome, or on the YouTube mobile app (streaming or offline), the data time is displayed at the bottom of the video as the video is being watched, regardless of the presentation rate at which the video is watched. Anytime that a video is being watched at anything other than normal speed (e.g., .25x; .5x; .75x, 1.25x, 1.5x; 2x), the value of the presentation time parameter is not equal to the value of the data time parameter. When audio/video content is rendered using variable speed playback on a browser, such as Chrome, on information and belief, the audio renderer utilizes two different values for presentation time and data time. For example, on information and belief, the Chromium code, upon which Chrome is

based, utilizes an audio renderer implementation and algorithm to queue audio data and stretch or shrink audio data when the content is rendered using variable speed playback.

132. The computer program instructions allow for providing the value of the data time parameter to a second component of the rendering system. For example, in order to accurately display the data time that is maintained, the data time parameter is provided to a component of the rendering system.

133. The computer program instructions allow for rendering at least a part of the temporal sequence presentation data using time TSM. For example, the YouTube user interface allows a video to be watched slower or faster than the default rate and uses TSM (e.g., .25x; .5x; .75x, 1.25x, 1.5x; 2x). When audio/video content is rendered using TSM on a browser, such as Chrome, on information and belief, the audio renderer utilizes two different values for presentation time and data time. For example, on information and belief, the Chromium code, upon which Chrome is based, utilizes an audio renderer implementation and algorithm to queue audio data and stretch or shrink audio data when the content is rendered using TSM.

134. By making, using, testing, offering for sale, selling, and/or importing the YouTube and Google Products and Services, YouTube and Google have injured Enounce and are liable to Enounce for directly infringing one or more claims of the '050 Patent, including without limitation Claims 1, 2, 3, 4, 8, 20, 25, 34, 36, 40, 41, 45, pursuant to 35 U.S.C. § 271(a).

135. Defendants also actively induce infringement of the '050 Patent under 35 U.S.C. § 271(b). Defendants have known of the '050 Patent and Plaintiff's accusations of infringement of the '050 Patent since at least June 21, 2018 when they were provided with a copy of the original complaint in this case.

136. Third-party manufactured mobile devices and tablets (collectively hereinafter the "client device" or "apparatus") with the Android Operating System or the Chrome Operating

System with the YouTube application ("YouTube App") and/or Chrome application ("Chrome App") and associated software installed directly infringe one or more of the claims of the '050 Patent, including without limitation Claims 8, 20, 25, 34 and directly infringe method claims 1, 2, 3, 4, 36, 40, 41, 45 any time a YouTube video, or VOD or post-live TV content (collectively media), is played in variable speed on such device. Third-party manufactures of these client devices include, without limitation, Samsung, LG, Sony, Motorola, Lenovo, Nokia, Xiaomi, and Oppo. https://www.android.com/phones-tablets/; https://www.android.com/certified/partners/; https://www.google.com/chromebook/shop/#laptop. Additionally, third-party browsers that support YouTube HTML5 Video Player, including without limitation, Microsoft Edge, Firefox, Opera and Apple Safari (*see* https://www.youtube.com/supported_browsers), operating on any device directly infringe one or more of the claims of the '050 Patent, including without limitation claims 1, 2, 3, 4, 36, 40, 41, 45 any time a YouTube video, or VOD or post-live TV content (collectively media), is played in variable speed on such device through a browser. Further, any client device that has the Google Chrome HTML5 web browser software installed (including devices running Windows 10/8.1/8/7 64-bit; Windows 10/8.1/8/7 32-bit; Mac OS X 10.10 or later or Linux) directly infringe one or more of the claims of the '050 Patent, including claims 8, 20, 25, 34 and directly infringe method claims 1, 2, 3, 4, 36, 40, 41, 45, any time media is played in variable speed on such device, including YouTube TV content.   Thus, the third-party manufacturers of such client devices and browsers directly infringe by making, using, selling, offering for sale and/or importing such devices and performing methods of the asserted claims.

137.   As a non-limiting example, to the extent the preamble of Claim 8 of the '050 Patent is limiting, the client device in connection with the YouTube App, Chrome App, or Chrome web browser and associated software is used for rendering temporal sequence presentation data in a machine-implemented rendering system, the temporal sequence

presentation data being tangibly stored in a first computer-readable medium, the device

comprising at least one processor and at least one second computer-readable medium tangibly

storing computer program instructions that meet the further limitations of the claim. Temporal

sequence presentation data, for example, can be audio/video content that may be stored on the

Google/YouTube servers or on the device. Each device has at least one processor and a

computer-readable medium that stores computer program instructions.

138.   The computer program instructions stored in the client device, including the

YouTube App, Chrome App, or Chrome web browser allow for maintaining a value of a

presentation time parameter tangibly stored in a third computer-readable medium and

representing an amount of time elapsed during rendering of a portion of the temporal sequence

presentation data by the rendering system. For example, YouTube's Watch Time statistics are

based on YouTube and Google Products and Services maintaining record of the presentation

time elapsed during rendering of a portion of the video. Similarly, in the YouTube App on a

client device when a user downloads a video to view offline, and later reconnects to the internet,

the presentation time elapsed is maintained and stored in the client device for later reporting.

139.   The computer program instructions allow for providing the value of the

presentation time parameter to a first component of the rendering system. For example, on

information and belief, during playback, the value of the presentation time is provided to a

component of the rendering system in order to synchronize content, determine ad placement, and

calculate Watch Time.

140.   The computer program instructions allow for maintaining a value of a data time

parameter that is not equal to the value of the presentation time parameter and which represents

an amount of time required by the rendering system to render the portion of the temporal

sequence presentation data at a default presentation rate, the data time parameter being tangibly

stored in a fourth computer-readable medium. For example, when a user views a YouTube video

on a web browser, such as Chrome, or on the YouTube App (streaming or offline), the data time

is displayed at the bottom of the video as the video is being watched, regardless of the

presentation rate at which the video is watched. Anytime that a video is being watched at

anything other than normal speed (e.g., .25x; .5x; .75x, 1.25x, 1.5x; 2x), the value of the

presentation time parameter is not equal to the value of the data time parameter. When

audio/video content is rendered using variable speed playback on a browser, such as Chrome, on

information and belief, the audio renderer utilizes two different values for presentation time and

data time. For example, on information and belief, the Chromium code, upon which Chrome is

based, utilizes an audio renderer implementation and algorithm to queue audio data and stretch

or shrink audio data when the content is rendered using variable speed playback.

141.   The computer program instructions allow for providing the value of the data time

parameter to a second component of the rendering system. For example, in order to accurately

display the data time that is maintained, the data time parameter is provided to a component of

the rendering system.

142.   The computer program instructions allow for rendering at least a part of the

temporal sequence presentation data using time TSM. For example, the YouTube user interface

allows a video to be watched slower or faster than the default rate and uses TSM (e.g., .25x; .5x;

.75x, 1.25x, 1.5x; 2x). When audio/video content is rendered using TSM on a browser, such as

Chrome, on information and belief, the audio renderer utilizes two different values for

presentation time and data time. For example, on information and belief, the Chromium code,

upon which Chrome is based, utilizes an audio renderer implementation and algorithm to queue

audio data and stretch or shrink audio data when the content is rendered using TSM.

143.   Defendants induce the above described acts on third-party client devices and

browsers knowing that the inducing acts cause infringement, or are willfully blind to the

possibility that the inducing acts would cause infringement.

144.   For example, Defendants have touted the release of Variable speed playback on

mobile, highlighting its popularity as a feature request after being released as a feature for

YouTube web browser versions:

> Variable speed playback was launched on the web several years ago and is one
> of our most highly requested features on mobile. Now, it's here! You can speed
> up or slow down videos in the YouTube app on iOS and on Android devices
> running Android 5.0+. Playback speed can be adjusted from 0.25x (quarter
> speed) to 2x (double speed) in the overflow menu of the player controls.

> The most commonly used speed setting on the web is 1.25x, closely followed
> by 1.5x. Speed watching is the new speed listening which was the new speed
> reading, especially when consuming long lectures or interviews. But variable
> speed isn't just useful for skimming through content to save time, it can also be
> an important tool for investigating finer details. For example, you might want
> to slow down a tutorial to learn some new choreography or figure out a guitar
> strumming pattern.

https://youtube-eng.googleblog.com/2017/09/variable-speed-playback-on-mobile.html.

145.   Defendants know and advertise that the YouTube HTML5 Video Player is

supported on the following browsers, in addition to Google Chrome: Microsoft Edge, Firefox,

Opera and Apple Safari. *See* https://www.youtube.com/supported_browsers. Defendants also

know that the Google Chrome web browser is available to download on all devices, and the

Google Chrome App and the YouTube App are further supported on all, and pre-installed on

many, Android devices and other mobile operating systems, as explained above. Further, as

explained above Defendants sometimes require that a manufacturer pre-install Google Apps such

as YouTube and Chrome in order to allow the manufacturers' devices to have access to the

Google Play Store. *See also*,

https://play.google.com/store/apps/details?id=com.google.android.youtube&hl=en_US;

Accordingly, Defendants have induced the manufacturers or makers of those third-party client

devices and browsers to infringe the '050 Patent, knowing that such use constitutes infringement

of the '050 Patent.

146.   As a result of Defendants' infringement of the '050 Patent, Enounce has suffered

monetary damages, and seeks recovery in an amount adequate to compensate for Defendants'

infringement, but in no event less than a reasonable royalty for the use made of the invention by

Defendants together with interest and costs as fixed by the Court.

FOURTH COUNT
(Infringement of the U.S. Patent No. 9,785,400)

147.   Virentem incorporates by reference paragraphs 1 through 81.

148.   The '400 Patent was filed on May 18, 2015. The inventors of the '400 Patent are

Richard S. Goldhor, and Edward J. Bianchi.

149.   Defendants make, use, sell, offer to sell, and/or import methods and devices that

incorporate the infringing features described below. The YouTube and Google Products and

Services infringe one or more of the claims of the '400 Patent, including without limitation

Claims1, 2, 3, 4, 7, 12, 13, 14, 15, 18.

150.   As a non-limiting example, to the extent the preamble of Claim 1 of the '400

Patent is limiting, the YouTube and Google Products and Services perform a method, performed

by at least one machine, for rendering temporal sequence presentation data in a machine-

implemented rendering system, the temporal sequence presentation data being tangibly stored in

a first computer-readable medium. For example, YouTube and/or Google servers tangibly store

YouTube video and audio content as well as recorded, paused, or OnDemand YouTube TV

content. Further, in Android mobile devices using the YouTube app, including the Google Pixel

3, Pixel 3a, Pixel 2 and Google Pixel 2 XL, or Chromebooks, including the Google Pixelbook, or tablets such as the Pixel Slate, when operating under a YouTube Red subscription, video content may also be stored offline (i.e. in the device).

151.   The YouTube and Google Products and Services maintain a value of a data time parameter tangibly stored in a second computer-readable medium and representing an amount of time required by the rendering system to render a portion of the temporal sequence presentation data at a default presentation rate. For example, when a user views a YouTube video on a web browser, such as Chrome, or in the YouTube mobile app (streaming or offline), the data time is maintained and displayed at the bottom of the video as the video is being watched, regardless of the presentation rate at which the video is watched.

152.   The YouTube and Google Products and Services provide the value of the data time parameter to a first component of the rendering system. For example, in order to accurately display the data time that is maintained, the data time parameter is provided to a component of the rendering system.

153.   The YouTube and Google Products and Services calculate, based on the value of the data time parameter, a value of a presentation time parameter tangibly stored in a third computer-readable medium and representing an amount of time elapsed during rendering of the portion of the temporal sequence presentation data. YouTube's Watch Time statistics are based on YouTube and Google Products and Services storing a record of the presentation time elapsed during rendering of a portion of the video. Similarly, in Android mobile devices using the YouTube app, including the Google Pixel 3, Pixel 3a, Pixel 2 and Google Pixel 2 XL, or in Chromebooks, including the Google Pixelbook, or tablet such as Pixel Slate, when a user downloads a video to view offline, and later reconnects to the internet, the presentation time elapsed is stored for later reporting. On information and belief, in both online viewing through a

web browser, such as Chrome, and in the YouTube or Chrome apps, the presentation time

parameter is calculated based on the value of the data time parameter. For example, Chromium

code, upon which Chrome is based, explains that there is a helper alias for converting media

timestamps into a wall clock timestamp.

154.   The YouTube and Google Products and Services provide the value of the

presentation time parameter to a second component of the rendering system. For example, on

information and belief, during playback, the value of the presentation time is provided to a

component of the rendering system in order to synchronize the content and to calculate Watch

Time.

155.   In the above method, performed by the YouTube and Google Products and

Services, the value of the presentation time parameter is not equal to the value of the data time

parameter. For example, when a video is being watched at anything other than normal speed

(e.g., .25x; .5x; .75x, 1.25x, 1.5x; 2x), the value of the presentation time parameter is not equal to

the value of the data time parameter. When audio/video content is rendered using variable speed

playback on a browser, such as Chrome, on information and belief, the audio renderer utilizes

two different values for presentation time and data time. For example, on information and belief,

the Chromium code, upon which Chrome is based, utilizes an audio renderer implementation and

algorithm to queue audio data and stretch or shrink audio data when the content is rendered using

variable speed playback.

156.   By making, using, testing, offering for sale, selling, and/or importing the

YouTube and Google Products and Services, YouTube and Google have injured Enounce and

are liable to Enounce for directly infringing one or more claims of the '400 Patent, including

without limitation at least Claims 1, 2, 3, 4, 7, 12, 13, 14, 15, 18, pursuant to 35 U.S.C. § 271(a).

157.   Defendants also actively induce infringement of the '400 Patent under 35 U.S.C. § 271(b). Defendants have known of the '400 Patent and Plaintiff's accusations of infringement of the '400 Patent since at least June 21, 2018 when they were provided with a copy of the original complaint in this case.

158.   Third-party manufactured mobile devices and tablets (collectively hereinafter the "client device" or "apparatus") with the Android Operating System or the Chrome Operating System with the YouTube application ("YouTube App") and/or Chrome application ("Chrome App") and associated software installed directly infringe one or more of the claims of the '400 Patent, including without limitation Claims 12, 13, 14, 15, 18, and directly infringe method claims 1, 2, 3, 4, 7, any time a YouTube video, or VOD or post-live TV content (collectively media), is played in variable speed on such device. Third-party manufactures of these client devices include, without limitation, Samsung, LG, Sony, Motorola, Lenovo, Nokia, Xiaomi, and Oppo. https://www.android.com/phones-tablets/; https://www.android.com/certified/partners/; https://www.google.com/chromebook/shop/#laptop. Additionally, third-party browsers that support YouTube HTML5 Video Player, including without limitation, Microsoft Edge, Firefox, Opera and Apple Safari (*see* https://www.youtube.com/supported_browsers), operating on any device directly infringe one or more of the claims of the '400 Patent, including without limitation claims 1, 2, 3, 4, 7 any time a YouTube video, or VOD or post-live TV content (collectively media), is played in variable speed on such device through a browser. Further, any client device that has the Google Chrome HTML5 web browser software installed (including devices running Windows 10/8.1/8/7 64-bit; Windows 10/8.1/8/7 32-bit; Mac OS X 10.10 or later or Linux) directly infringe one or more of the claims of the '400 Patent, including claims 12, 13, 14, 15, 18, and directly infringe method claims 1, 2, 3, 4, 7, any time media is played in variable speed on such device, including YouTube TV content.   Thus, the third-party manufacturers of such client

devices and browsers directly infringe by making, using, selling, offering for sale and/or importing such devices and performing methods of the asserted claims.

159.   As a non-limiting example, to the extent the preamble of Claim 1 of the '400 Patent is limiting, the client device with the installed YouTube App, Chrome App, or Chrome web browser and associated software, perform a method, performed by at least one machine, for rendering temporal sequence presentation data in a machine-implemented rendering system, the temporal sequence presentation data being tangibly stored in a first computer-readable medium. For example, YouTube and/or Google servers tangibly store YouTube video and audio content as well as recorded, paused, or OnDemand YouTube TV content. Further, in Android mobile devices or Chromebooks using the YouTube App, when operating under a YouTube Red subscription, video content may also be stored offline (i.e. in the device).

160.   The client device with the installed YouTube App, Chrome App, or Chrome web browser and associated software maintain a value of a data time parameter tangibly stored in a second computer-readable medium and representing an amount of time required by the rendering system to render a portion of the temporal sequence presentation data at a default presentation rate. For example, when a user views a YouTube video on a web browser, such as Chrome, or in the YouTube App (streaming or offline), the data time is maintained and displayed at the bottom of the video as the video is being watched, regardless of the presentation rate at which the video is watched.

161.   The client device with the installed YouTube App, Chrome App, or Chrome web browser and associated software provide the value of the data time parameter to a first component of the rendering system. For example, in order to accurately display the data time that is maintained, the data time parameter is provided to a component of the rendering system.

162.   The client device with the installed YouTube App, Chrome App, or Chrome web browser and associated software calculate, based on the value of the data time parameter, a value of a presentation time parameter tangibly stored in a third computer-readable medium and representing an amount of time elapsed during rendering of the portion of the temporal sequence presentation data. YouTube's Watch Time statistics are based on YouTube and Google Products and Services storing a record of the presentation time elapsed during rendering of a portion of the video. Similarly, in Android mobile devices or Chromebooks using the YouTube App, when operating under a YouTube Red subscription, when a user downloads a video to view offline, and later reconnects to the internet, the presentation time elapsed is stored for later reporting. On information and belief, in both online viewing through a web browser, such as Chrome, and in the YouTube or Chrome apps, the presentation time parameter is calculated based on the value of the data time parameter. For example, Chromium code, upon which Chrome is based, explains that there is a helper alias for converting media timestamps into a wall clock timestamp.

163.   The client device with the installed YouTube App, Chrome App, or Chrome web browser and associated software provide the value of the presentation time parameter to a second component of the rendering system. For example, on information and belief, during playback, the value of the presentation time is provided to a component of the rendering system in order to synchronize the content and to calculate Watch Time.

164.   In the above method, performed by the client device with the installed YouTube App, Chrome App, or Chrome web browser and associated software, the value of the presentation time parameter is not equal to the value of the data time parameter. For example, when a video is being watched at anything other than normal speed (e.g., .25x; .5x; .75x, 1.25x, 1.5x; 2x), the value of the presentation time parameter is not equal to the value of the data time parameter. When audio/video content is rendered using variable speed playback on a browser,

such as Chrome, on information and belief, the audio renderer utilizes two different values for presentation time and data time. For example, on information and belief, the Chromium code, upon which Chrome is based, utilizes an audio renderer implementation and algorithm to queue audio data and stretch or shrink audio data when the content is rendered using variable speed playback.

165.   Defendants induce the above described acts on third-party client devices and browsers knowing that the inducing acts cause infringement, or are willfully blind to the possibility that the inducing acts would cause infringement.

166.   For example, Defendants have touted the release of Variable speed playback on mobile, highlighting its popularity as a feature request after being released as a feature for YouTube web browser versions:

> Variable speed playback was launched on the web several years ago and is one of our most highly requested features on mobile. Now, it's here! You can speed up or slow down videos in the YouTube app on iOS and on Android devices running Android 5.0+. Playback speed can be adjusted from 0.25x (quarter speed) to 2x (double speed) in the overflow menu of the player controls.
>
> The most commonly used speed setting on the web is 1.25x, closely followed by 1.5x. Speed watching is the new speed listening which was the new speed reading, especially when consuming long lectures or interviews. But variable speed isn't just useful for skimming through content to save time, it can also be an important tool for investigating finer details. For example, you might want to slow down a tutorial to learn some new choreography or figure out a guitar strumming pattern.

https://youtube-eng.googleblog.com/2017/09/variable-speed-playback-on-mobile.html.

167.   Defendants know and advertise that the YouTube HTML5 Video Player is supported on the following browsers, in addition to Google Chrome: Microsoft Edge, Firefox, Opera and Apple Safari. *See* https://www.youtube.com/supported_browsers. Defendants also know that the Google Chrome web browser is available to download on all devices, and the Google Chrome App and the YouTube App are further supported on all, and pre-installed on

many, Android devices and other mobile operating systems, as explained above. Further, as explained above Defendants sometimes require that a manufacturer pre-install Google Apps such as YouTube and Chrome in order to allow the manufacturers' devices to have access to the Google Play Store. *See also*,

https://play.google.com/store/apps/details?id=com.google.android.youtube&hl=en_US; Accordingly, Defendants have induced the manufacturers or makers of those third-party client devices and browsers to infringe the '400 Patent, knowing that such use constitutes infringement of the '400 Patent.

168.   As a result of Defendants' infringement of the '400 Patent, Enounce has suffered monetary damages, and seeks recovery in an amount adequate to compensate for Defendants' infringement, but in no event less than a reasonable royalty for the use made of the invention by Defendants together with interest and costs as fixed by the Court.

FIFTH COUNT
(Infringement of the U.S. Patent No. 7,299,888)

169.   Virentem incorporates by reference paragraphs 1 through 81.

170.   The '888 Patent was filed on February 25, 2002. The inventor of the '888 Patent is Donald J. Hejna, Jr.

171.   Defendants make, use, sell offer to sell and/or import methods and devices that incorporate the infringing features described below. The YouTube and Google Products and Services, which include, without limitation, the Google Pixelbook, Pixel Slate, Pixel 3, Pixel 3a, Pixel 2 and Pixel 2 XL hardware that render YouTube content via Chrome, Chrome apps, YouTube apps, the Google/YouTube servers, and/or hardware that renders YouTube TV content via Chrome, directly infringe one or more of the claims of the '888 Patent, including without limitation Claims 15, 16, 17, 18 and 19.

172.   As a non-limiting example, to the extent the preamble of Claim 15 of the '888 Patent is limiting, YouTube and/or Google generate an audio or audio-visual work in conjunction with a CSA data structure. For example, YouTube and/or Google servers generate YouTube video and audio content and OnDemand YouTube TV content in conjunction with a CSA data structure that allows content to be played at any of the following speeds (.25x; .5x; .75x; 1.25x; 1.5x; and 2x) until the ad portion of the content is encountered at which point the playback speed changes to regular 1.0x speed.

173.   YouTube and/or Google generate one or more concepts for a portion of the audio or audio-visual work. For example, YouTube and/or Google include ads as a portion of the YouTube video and audio content and OnDemand YouTube TV content.

174.   YouTube and/or Google servers generate a TSM rate responsive to the one or more concepts using the CSA data structure. For example, YouTube and/or Google require that the ad portion of the YouTube video and audio content or the OnDemand YouTube TV content is played at the regular 1.0x speed.

175.   YouTube and/or Google generate a TSM portion of the audio or audio-visual work responsive to the TSM rate. For example, YouTube and/or Google generate YouTube video and audio content and OnDemand YouTube TV content in conjunction with a CSA data structure that allows content to be played at any of the following speeds (.25x; .5x; .75x; 1.25x; 1.5x; and 2x) until the ad portion of the content is encountered at which point the playback speed changes to regular 1.0x speed.

176.   By making, using, testing, offering for sale, selling, and/or importing the YouTube and Google Products and Services, YouTube and Google have injured Enounce and are liable to Enounce for directly infringing one or more claims of the '888 Patent, including at least Claim 15, pursuant to 35 U.S.C. § 271(a).

177.   As a result of Defendants' infringement of the '888 Patent, Enounce has suffered

monetary damages, and seeks recovery in an amount adequate to compensate for Defendants'

infringement, but in no event less than a reasonable royalty for the use made of the invention by

Defendants together with interest and costs as fixed by the Court.

SIXTH COUNT
(Infringement of the U.S. Patent No. 7,299,184)

178.   Virentem incorporates by reference paragraphs 1 through 81.

179.   The '184 Patent was filed on September 7, 2004. The inventor of the '184 Patent

is Donald J. Hejna, Jr.

180.   Defendants make, use, sell offer to sell and/or import methods and devices that

incorporate the infringing features described below. The YouTube and Google Products and

Services, which include, without limitation, the Google Pixelbook, Pixel Slate, Pixel 3, Pixel 3a,

Pixel 2 and Pixel 2 XL hardware that render YouTube content via Chrome, Chrome apps,

YouTube apps, the Google/YouTube servers, and/or hardware that renders YouTube TV content

via Chrome, directly infringe one or more of the claims of the '184 Patent, including without

limitation Claims 5, 7, 8, 16, 17 and 22.

181.   As a non-limiting example, to the extent the preamble of Claim 5 of the '184

Patent is limiting, YouTube and/or Google present an audio-visual work for a user. For example,

YouTube and/or Google present YouTube video and audio content and OnDemand YouTube TV

content.

182.   YouTube and/or Google provide an audio-visual work having concept

information associated with one or more portions of the audio-visual work. For example, in the

'184 Patent, concept information could be information that demonstrates that the content is an

advertisement. For example, YouTube and/or Google include ads as a portion of the YouTube

video and audio content and OnDemand YouTube TV content.

183.   YouTube and/or Google provide a CSA data structure containing information related to content contained in the audio-visual works. For example, YouTube and/or Google require that the ad portion of the YouTube video and audio content or the OnDemand YouTube TV content is played at the regular 1.0x speed.

184.   YouTube and/or Google present the audio-visual work utilizing the CSA data structure to alter the presentation rate of at least one of the portions of the audio-visual work. For example, YouTube and/or Google generate YouTube video and audio content and OnDemand YouTube TV content in conjunction with a CSA data structure that allows content to be played at any of the following speeds (.25x; .5x; .75x; 1.25x; 1.5x; and 2x) until the ad portion of the content is encountered at which point the playback speed is altered to regular 1.0x speed.

185.   By making, using, testing, offering for sale, selling, and/or importing the YouTube and Google Products and Services, YouTube and Google have injured Enounce and are liable to Enounce for directly infringing one or more claims of the '184 Patent, including at least Claim 5, pursuant to 35 U.S.C. § 271(a).

186.   Defendants also actively induce infringement of the '184 Patent under 35 U.S.C. § 271(b). Defendants have known of the '184 Patent and Plaintiff's accusations of infringement of the '184 Patent since at least June 21, 2018 when they were provided with a copy of the original complaint in this case.

187.   Third-party manufactured mobile devices and tablets (collectively hereinafter the "client device" or "apparatus") with the Android Operating System or the Chrome Operating System with the YouTube application ("YouTube App") and associated software installed directly infringe one or more of the claims of the '188 Patent, including without limitation Claims 1 2, 4, and 7. Third-party manufactures of these client devices include, without

limitation, Samsung, LG, Sony, Motorola, Lenovo, Nokia, Xiaomi, and Oppo. https://www.android.com/phones-tablets/; https://www.android.com/certified/partners/. Additionally, third-party browsers that support YouTube HTML5 Video Player, including without limitation, Microsoft Edge, Firefox, Opera and Apple Safari (*see* https://www.youtube.com/supported_browsers) directly infringe one or more of the claims of the '184 Patent, including without limitation Claims 5, 16, 17 and 22. Thus, the third-party manufactures of such client devices and browsers directly infringe by making, using, selling, offering for sale and/or importing such devices.

188.   As a non-limiting example, Defendants cause such third-party manufactured devices and browsers to perform the steps of the asserted method claims, e.g., Defendants cause third-party mobile phones, tablets, or computers or servers to perform the steps of Claim 16in order to use the YouTube platform and interface on such third-party devices or browsers.

189.   As a non-limiting example, with respect to Claim 16, the client device, with the installed YouTube App and associated software, presents information to an online search facility, *e.g.*, YouTube's search function. According to Forbes.com, "YouTube is not simply a website; it is a search engine. YouTube's user-friendliness, combined with the soaring popularity of video content, has made it the second largest search engine behind Google. With 3 billion searches per month, YouTube's search volume is larger than that of Bing, Yahoo, AOL and Ask.com combined." https://www.forbes.com/sites/forbesagencycouncil/2017/05/15/are-you-maximizing-the-use-of-video-in-your-content-marketing-strategy/#58629cd13584.

190.   The client device then obtains a reference, *e.g.* URL, to the audio or audio-visual work via the online search facility, *e.g.* YouTube's search function.

191.   The client device further then obtains the CSA data structure, *e.g.* the pairing of

the TSM rate and a concept, via the information that is returned in response to the YouTube

search.

192.   The client device further utilizes the CSA data structure, *e.g.* the pairing of the

TSM rate and a concept, to present a portion of the audio-visual work at different presentation

rates.

193.   Defendants induce the above described acts on third-party client devices and

browsers knowing that the inducing acts cause infringement, or are willfully blind to the

possibility that the inducing acts would cause infringement.

194.   For example, Defendants have touted the release of Variable speed playback on

mobile, highlighting its popularity as a feature request after being released as a feature for

YouTube web browser versions:

> Variable speed playback was launched on the web several years ago and is one
> of our most highly requested features on mobile. Now, it's here! You can speed
> up or slow down videos in the YouTube app on iOS and on Android devices
> running Android 5.0+. Playback speed can be adjusted from 0.25x (quarter
> speed) to 2x (double speed) in the overflow menu of the player controls.
>
> The most commonly used speed setting on the web is 1.25x, closely followed
> by 1.5x. Speed watching is the new speed listening which was the new speed
> reading, especially when consuming long lectures or interviews. But variable
> speed isn't just useful for skimming through content to save time, it can also be
> an important tool for investigating finer details. For example, you might want
> to slow down a tutorial to learn some new choreography or figure out a guitar
> strumming pattern.

https://youtube-eng.googleblog.com/2017/09/variable-speed-playback-on-mobile.html.

195.   Defendants know and advertise that the YouTube HTML5 Video Player is

supported on the following browsers, in addition to Google Chrome: Microsoft Edge, Firefox,

Opera and Apple Safari. *See* https://www.youtube.com/supported_browsers. Defendants also

know that the Google Chrome web browser is available to download on all devices, and the

Google Chrome application and YouTube application are further supported on all, and pre-installed on many, Android devices and other mobile operating systems, as explained in Paragraphs 50-53 above. Further, as explained above Defendants sometimes require that a manufacturer pre-install Google Apps such as YouTube and Chrome in order to allow the manufacturers' devices to have access to the Google Play Store. *See also*, https://play.google.com/store/apps/details?id=com.google.android.youtube&hl=en_US; Accordingly, Defendants have induced the manufacturers or makers of those third-party client devices and browsers to infringe the '184 patent.

196.   As a result of Defendants' infringement of the '184 Patent, Enounce has suffered monetary damages, and seeks recovery in an amount adequate to compensate for Defendants' infringement, but in no event less than a reasonable royalty for the use made of the invention by Defendants together with interest and costs as fixed by the Court.

SEVENTH COUNT
(Infringement of the U.S. Patent No. 7,043,433)

197.   Virentem incorporates by reference paragraphs 1 through 81.

198.   The '433 Patent was filed on September 16, 1999. The inventor of the '433 Patent is Donald J. Hejna, Jr.

199.   Defendants make, use, sell offer to sell and/or import methods and devices that incorporate the infringing features described below. The YouTube and Google Products and Services, which include, without limitation, the Google Pixelbook, Pixel Slate, Pixel 3, Pixel 3a, Pixel 2 and Pixel 2 XL hardware that render YouTube content via Chrome, Chrome apps, YouTube apps, the Google/YouTube servers, and/or hardware that renders the YouTube HTML5 player via Chrome, directly infringe one or more claims of the '433 Patent, including without limitations Claims 1, 2, 3, 4, 7, 8 and 9. Additionally, the Google Nest Products, which include,

without limitation, the Nest Hello Doorbell, Nest App, Nest Aware, Nest Cam Indoor, Nest Cam

IQ Indoor, Nest Cam Outdoor, and Nest Cam IQ Outdoor, directly infringe Claim 9.

200.   As a non-limiting example, and to the extent the preamble of Claim 7 is a

limitation, YouTube and/or Google perform a method for testing aptitude of an audience for

content or properties of portions of a media work, as shown in the following paragraphs.

201.   YouTube and/or Google present the media work to the audience. For example,

YouTube allows a user to upload videos that may be played by a viewer. When the user-created

video is played, YouTube may accompany it with a video advertisement, which can be placed at

the beginning, the middle, or the end of a user-created video. One example of a media work is a

user-created video combined with a video advertisement. YouTube and/or Google present user-

created videos combined with video advertisements to YouTube viewers.

202.   YouTube and/or Google obtain user input regarding presentation rates for the

portions of the media work. For example, the user-created video and the accompanying

advertisement can each be considered a portion of the media work.   For the user-created video

portion of the media work, YouTube obtains user input by, e.g., allowing the viewer to increase

the presentation rate up to twice normal speed or to decrease the presentation rate down to 0.25

normal speed. For the advertising portion of the media work, YouTube and/or Google may

obtain user input regarding presentation rates by, e.g., allowing the viewer to skip the advertising

portion after five second of viewing.

203.   YouTube and/or Google correlate the presentation rates with the aptitude for the

content or properties of the portions. For example, for the user-created video portion of the

media work, YouTube and/or Google correlate the presentation rates with the aptitude for the

content or properties of the portion by means of the Watch Time parameter. Speeding up a video

results in a smaller Watch Time, and slowing down a video results in a larger Watch Time.

Videos with larger Watch Times are likely to show up higher in search results. For the advertising portion of the media work, YouTube and/or Google correlate the presentation rate with aptitude for the content or properties of the advertising portion by keeping track of whether a viewer skips an advertisement. Whether a viewer skips or watches an advertisement is one measure of the viewer's aptitude for the content or properties of the advertisement portion.

204.   By making, using, testing, offering for sale, selling, and/or importing the YouTube and Google Products and Services, YouTube and Google have injured Enounce and are liable to Enounce for directly infringing one or more claims of the '433 Patent, including at least Claim 7, pursuant to 35 U.S.C. § 271(a).

205.   As a result of Defendants' infringement of the '433 Patent, Enounce has suffered monetary damages, and seeks recovery in an amount adequate to compensate for Defendants' infringement, but in no event less than a reasonable royalty for the use made of the invention by Defendants together with interest and costs as fixed by the Court.

EIGHTH COUNT
(Infringement of the U.S. Patent No. 9,185,380)

206.   Virentem incorporates by reference paragraphs 1 through 81.

207.   The '380 Patent was filed on July 1, 2013. The inventor of the '380 Patent is Donald J. Hejna, Jr.

208.   Defendants make, use, sell, offer to sell, and/or import methods and devices that incorporate the infringing features described below. The Google Nest Products, which include, without limitation, the Nest Hello Doorbell, Nest App, Nest Aware, Nest Cam Indoor, Nest Cam IQ Indoor, Nest Cam Outdoor, and Nest Cam IQ Outdoor, directly infringe one or more claims of the '380 Patent, including without limitation Claim 2 (dependent on Claim 1 of the '380 Patent).

209.   As a non-limiting example, and to the extent the preamble of Claim 1 is a limitation, Google Nest Products perform a method for presenting an audio-visual work. For example, the Google Nest Products present an audio-visual work as a series of video clips arranged on a timeline.

210.   Google Nest Products detect media work content properties in a visual portion of the audio-visual work using a media work content properties detection apparatus. For example, the Google Nest Products allow the user to filter video by detecting motion, a person, or an unfamiliar face. These are all content properties in the visual portion of the audio-visual work, and they are detected using a detection apparatus in the Google Nest Products.

211.   Google Nest Products associate a presentation rate of the portion of the audio-visual work with the detected media work content properties. For example, the Google Nest Products associate a specific presentation rate when one of the content properties is detected. Otherwise, the audio-visual work skips to the next detected content property.

212.   Google Nest Products present the portion of the audio-visual work using the media work content properties detection apparatus. For example, the Google Nest Products present the audio-visual work on a timeline, in which events associated with one of the content properties are arranged as clips on the timeline.

213.   In the Google Nest Products, the media work content properties comprise one or more of a predetermined number of items in a video frame, a predetermined number of moving items in a video frame, and one or more predetermined individuals. For example, the "motion" content property allows the Google Nest Products to detect one or more moving items in a video frame. The "person" content property allows the Google Nest Products to detect when one or more persons enter the video frame. The "unfamiliar face" content property allows the Google Nest Products to detect one or more predetermined individuals, e.g., individuals whom the user

has not identified by the facial recognition feature of the Google Nest Products, and only present

video of unfamiliar faces.

214.   In the Google Nest Products, the audio-visual work is output from a surveillance

camera – the Google Nest Products are surveillance cameras.

215.   By making, using, testing, offering for sale, selling, and/or importing the Google

Nest Products, Google has injured Enounce and is liable to Enounce for directly infringing one

or more claims of the '380 Patent, including at least Claim 1, pursuant to 35 U.S.C. § 271(a).

216.   As a result of Google's infringement of the '380 Patent, Enounce has suffered

monetary damages, and seeks recovery in an amount adequate to compensate for Google's

infringement, but in no event less than a reasonable royalty for the use made of the invention by

Google together with interest and costs as fixed by the Court.

NINTH COUNT
(Infringement of the U.S. Patent No. 6,598,228)

217.   Virentem incorporates by reference paragraphs 1 through 81.

218.   The '228 Patent was filed on June 3, 1999. The inventor of the '228 Patent is

Donald J. Hejna, Jr.

219.   Defendants make, use, sell offer to sell and/or import methods and devices that

incorporate the infringing features described below. The YouTube Products and Services and

Google Products and Services infringe one or more of the claims of the '228 Patent, including

without limitation Claims 4, 5, 6, 7, 9, 12, 13, 14, 16, 17, 31, 33, and 34

220.   As a non-limiting example, to the extent the preamble of Claim 9 of the '228

Patent is limiting, the YouTube interfaces and supporting infrastructure and Chrome browsers

present information received from a broadcaster by a client device, which utilizes presentation

rates to present information at various presentation rates. The YouTube interface allows a video

to be watched slower or faster than the default rate (e.g., .25x; .5x; .75x, 1.25x, 1.5x; 2x) using TSM.

221.   The YouTube interfaces and supporting infrastructure and Chrome browsers receive broadcast information, e.g. videos and guidance information related to the broadcast information. The YouTube interfaces and supporting infrastructure and Chrome browsers analyze the guidance information, which is used to restrict or direct a playback rate for an entire media work or one or more specific portions of the media work. The YouTube interfaces and supporting infrastructure and Chrome browsers present the videos at the determined presentation rate.

222.   The YouTube interfaces and supporting infrastructure and Chrome browsers further analyze guidance information which comprises information to provide presentation rates related to conceptual information content. For example, in the '228 Patent, conceptual information content could be information that demonstrates that the content is an advertisement. YouTube interfaces and supporting infrastructure and Chrome browsers analyze guidance information related to video ads which indicate that presentation rates related to that concept – advertisement – must be regular speed 1.0x.

223.   YouTube interfaces and supporting infrastructure and Chrome browsers further analyze guidance information that specifies that predetermined portions of a media work must be viewed at a predetermined presentation rate or skipped. For example, YouTube interfaces and supporting infrastructure and Chrome browsers analyze the described guidance information to determine that video ads must be played at either the regular 1.0x speed or skipped – the video ad portions of media works can be presented at any playback rate other than 1.0x. This can be observed when viewing YouTube playlists or videos where the playback speed has been set to a non-normal playback rate (e.g., .25x; .5x; .75x, 1.25x, 1.5x; 2x) and then encountering a video

ad. The video ad will always play at 1.0x rate and then the video will continue to play at the

previously-set non-normal playback rate.

224.   By making, using, testing, offering for sale, selling, and/or importing the

YouTube and Google Products and Services, YouTube and Google have injured Enounce and

are liable to Enounce for directly infringing one or more claims of the '228 Patent, including at

least Claim 5, pursuant to 35 U.S.C. § 271(a).

225.   Defendants also actively induce infringement of the '228 Patent under 35 U.S.C.

§ 271(b). Defendants have known of the '228 Patent and Plaintiff's accusations of infringement

of the '228 Patent since at least June 21, 2018 when they were provided with a copy of the

original complaint in this case.

226.   Third-party manufactured mobile devices and tablets (collectively hereinafter the

"client device" or "apparatus") with the Android Operating System or the Chrome Operating

System with the YouTube application ("YouTube App") and associated software installed

directly infringe one or more of the claims of the '228 Patent, including without limitation

Claims 4, 5, 6, 7, 9, 12, 13, 14, 16, 17, 31, 33, and 34. Third-party manufactures of these client

devices include, without limitation, Samsung, LG, Sony, Motorola, Lenovo, Nokia, Xiaomi, and

Oppo. https://www.android.com/phones-tablets/; https://www.android.com/certified/partners/.

Additionally, third-party browsers that support YouTube HTML5 Video Player, including

without limitation, Microsoft Edge, Firefox, Opera and Apple Safari (*see*

https://www.youtube.com/supported_browsers) directly infringe one or more of the claims of the

'228 Patent, including without limitation Claims 4, 5, 6, 7, 9, 12, 13, 14, 16, 17, and 34. Thus,

the third-party manufacturers of such client devices and browsers directly infringe by making,

using, selling, offering for sale and/or importing such devices.

227.   As a non-limiting example, to the extent the preamble of Claim 31 of the '228 Patent is limiting, the client device, with the installed YouTube App and associated software, presents information, e.g., videos, received from a broadcaster (e.g., YouTube server) and utilizes playback rates (e.g., .25x; .5x; .75x, 1.25x, 1.5x; 2x) to present the information at various presentation rates.

228.   The client device comprises, when the YouTube App and associated software are installed, a receiver for receiving the broadcast information, e.g., videos, and guidance information, e.g., presentation rates, relating to the presentation of the broadcast information.

229.   The client device further comprises a rate determiner that analyzes the guidance information to determine a presentation rate. For example, the client device with the installed YouTube App includes the associated software that analyzes the guidance information, e.g., presentation rates, to determine the presentation rate.

230.   The client device further comprises a presentation apparatus (e.g., video display and audio) that in response to the broadcast information and the presentation rate presents the broadcast information.

231.   Defendants induce the above described acts on third-party client devices and browsers knowing that the inducing acts cause infringement, or are willfully blind to the possibility that the inducing acts would cause infringement.

232.   For example, Defendants have touted the release of Variable speed playback on mobile, highlighting its popularity as a feature request after being released as a feature for YouTube web browser versions:

> Variable speed playback was launched on the web several years ago and is one of our most highly requested features on mobile. Now, it's here! You can speed up or slow down videos in the YouTube app on iOS and on Android devices running Android 5.0+. Playback speed can be adjusted from 0.25x (quarter speed) to 2x (double speed) in the overflow menu of the player controls.

> The most commonly used speed setting on the web is 1.25x, closely followed by 1.5x. Speed watching is the new speed listening which was the new speed reading, especially when consuming long lectures or interviews. But variable speed isn't just useful for skimming through content to save time, it can also be an important tool for investigating finer details. For example, you might want to slow down a tutorial to learn some new choreography or figure out a guitar strumming pattern.

https://youtube-eng.googleblog.com/2017/09/variable-speed-playback-on-mobile.html.

233. Defendants know and advertise that the YouTube HTML5 Video Player is supported on the following browsers, in addition to Google Chrome: Microsoft Edge, Firefox, Opera and Apple Safari. *See* https://www.youtube.com/supported_browsers. Defendants also know that the Google Chrome web browser is available to download on all devices, and the Google Chrome application and the YouTube App are further supported on all, and pre-installed on many, Android devices and other mobile operating systems, as explained in Paragraphs 50-53, above. Further, as explained above Defendants sometimes require that a manufacturer pre-install Google Apps such as YouTube and Chrome in order to allow the manufacturers' devices to have access to the Google Play Store. *See also*, https://play.google.com/store/apps/details?id=com.google.android.youtube&hl=en_US; Accordingly, Defendants have induced the manufacturers or makers of those third-party client devices and browsers to infringe the '228 Patent, knowing that such use constitutes infringement of the '228 Patent.

234. As a result of Defendants' infringement of the '228 Patent, Enounce has suffered monetary damages, and seeks recovery in an amount adequate to compensate for Defendants' infringement, but in no event less than a reasonable royalty for the use made of the invention by Defendants together with interest and costs as fixed by the Court.

TENTH COUNT
(Infringement of the U.S. Patent No. 7,100,188)

235.   Virentem incorporates by reference paragraphs 1 through 81.

236.   The '188 Patent was filed on June 2, 2003. The inventor of the '188 Patent is Donald J. Hejna, Jr.

237.   Defendants make, use, sell, offer to sell, and/or import methods and devices that incorporate the infringing features described below. The YouTube and Google Products and Services infringe one or more of the claims of the '188 Patent, including without limitation Claims 1, 2, 4, and 7.

238.   As a non-limiting example, to the extent the preamble of Claim 1 of the '188 Patent is limiting, the YouTube and Google Products and Services present information received from a broadcaster by a client device, which client device utilizes presentation rates to present information at various presentation rates. The YouTube interface allows a video to be watched slower or faster than the default rate (e.g., .25x; .5x; .75x, 1.25x, 1.5x; 2x) using TSM.

239.   YouTube and/or Google broadcast information, e.g. videos. They further broadcast guidance information used to determine presentation rates for use by the client device in presentation of the information. YouTube and/or Google broadcast information that is used to restrict or direct a playback rate for an entire media work or one or more specific portions of the media work, for example by broadcasting information that directs the playback rate of video ads to be the regular 1.0x playback rate.

240.   YouTube and/or Google may transmit the guidance information either at the time of the broadcast of the broadcast information or not at that time. For example, YouTube and/or Google may transmit the guidance information with the broadcast information to be implemented immediately. And the guidance information comprises insistence information that specifies a measure of importance of utilizing presentation rate information contained in the guidance

-65-

information. For example, YouTube and/or Google broadcast guidance information comprising

insistence information which indicates that the playback rate of a video ad must be 1.0x even if

the user has selected a different playback rate for the remainder of the video. This can be

observed when viewing YouTube playlists or videos where the playback speed has been set to a

non-normal playback rate (e.g., .25x; .5x; .75x, 1.25x, 1.5x; 2x) and then encountering a video

ad. The video ad will always play at 1.0x rate and then the video will continue to play at the

previously-set non-normal playback rate.

241.   By making, using, testing, offering for sale, selling, and/or importing the

YouTube and Google Products and Services, YouTube and Google have injured Enounce and

are liable to Enounce for directly infringing one or more claims of the '188 Patent, including at

least Claim 1, pursuant to 35 U.S.C. § 271(a).

242.   Defendants also actively induce infringement of the '188 Patent under 35 U.S.C.

§ 271(b). Defendants have known of the '188 Patent and Plaintiff's accusations of infringement

of the '188 Patent since at least June 21, 2018 when they were provided with a copy of the

original complaint in this case.

243.   Third-party manufactured mobile devices and tablets (collectively hereinafter the

"client device" or "apparatus") with the Android Operating System or the Chrome Operating

System with the YouTube application ("YouTube App") and associated software installed

directly infringe one or more of the claims of the '188 Patent, including without limitation

Claims 1 2, 4, and 7. Third-party manufactures of these client devices include, without

limitation, Samsung, LG, Sony, Motorola, Lenovo, Nokia, Xiaomi, and Oppo.

https://www.android.com/phones-tablets/; https://www.android.com/certified/partners/.

Additionally, third-party browsers that support YouTube HTML5 Video Player, including

without limitation, Microsoft Edge, Firefox, Opera and Apple Safari (*see*

https://www.youtube.com/supported_browsers) directly infringe one or more of the claims of the '188 Patent, including without limitation Claims 1 2, 4, and 7. Thus, the third-party manufactures of such client devices and browsers directly infringe by making, using, selling, offering for sale and/or importing such devices.

244.   As a non-limiting example, to the extent the preamble of Claim 1 of the '188 Patent is limiting, a third-party manufactured client device with the installed YouTube App and associated software employs a method for presenting information, e.g., video, which the client device utilizes playback rates (e.g., .25x; .5x; .75x, 1.25x, 1.5x; 2x) to present the information at various presentation rates.

245.   The client device comprises, when configured via installation of the YouTube App and associated software, a receiver for receiving the broadcast information, e.g., videos, and guidance information, e.g., presentation rates, relating to the presentation of the broadcast information.

246.   The client device analyzes the guidance information, e.g., presentation rates, and state values to provide one or more presentation rates. For example, the client device receives information, *e.g.*, state value, that indicates a video ad must be played at 1.0x speed even if the user has selected a different playback rate for the remainder of the video. As a result, the state value is used to alter or override a portion of the guidance information, *e.g.*, a presentation rate that has been selected by a user. Alternatively, or additionally, the client device receives information, *e.g.* state value, that indicates that a video ad can be skipped which can be used to override a portion of the guidance information, *e.g.*, presentation rate.

247.   The client device further comprises a presentation apparatus (e.g., video display and audio) that presents the information at the one or more presentation rates.

248.   Defendants induce the above described acts on third-party client devices and browsers knowing that the inducing acts cause infringement, or are willfully blind to the possibility that the inducing acts would cause infringement.

249.   For example, Defendants have touted the release of Variable speed playback on mobile, highlighting its popularity as a feature request after being released as a feature for YouTube web browser versions:

> Variable speed playback was launched on the web several years ago and is one of our most highly requested features on mobile. Now, it's here! You can speed up or slow down videos in the YouTube app on iOS and on Android devices running Android 5.0+. Playback speed can be adjusted from 0.25x (quarter speed) to 2x (double speed) in the overflow menu of the player controls.
>
> The most commonly used speed setting on the web is 1.25x, closely followed by 1.5x. Speed watching is the new speed listening which was the new speed reading, especially when consuming long lectures or interviews. But variable speed isn't just useful for skimming through content to save time, it can also be an important tool for investigating finer details. For example, you might want to slow down a tutorial to learn some new choreography or figure out a guitar strumming pattern.

https://youtube-eng.googleblog.com/2017/09/variable-speed-playback-on-mobile.html.

250.   Defendants know and advertise that the YouTube HTML5 Video Player is supported on the following browsers, in addition to Google Chrome: Microsoft Edge, Firefox, Opera and Apple Safari.   *See* https://www.youtube.com/supported_browsers. Defendants also know that the Google Chrome web browser is available to download on all devices, and the Google Chrome application and the YouTube Appl are further supported on all, and pre-installed on many, Android devices and other mobile operating systems, as explained in Paragraphs 50-53, above. Further, as explained above Defendants sometimes require that a manufacturer pre-install Google Apps such as YouTube and Chrome in order to allow the manufacturers' devices to have access to the Google Play Store. *See also*, https://play.google.com/store/apps/details?id=com.google.android.youtube&hl=en_US;

Accordingly, Defendants have induced the manufacturers or makers of those third-party client devices and browsers to infringe the '188 patent, knowing that such use constitutes infringement of the '188 patent.

251.   As a result of Defendants' infringement of the '188 Patent, Enounce has suffered monetary damages, and seeks recovery in an amount adequate to compensate for Defendants' infringement, but in no event less than a reasonable royalty for the use made of the invention by Defendants together with interest and costs as fixed by the Court.

ELEVENTH COUNT
(Infringement of the U.S. Patent No. 8,566,885)

252.   Virentem incorporates by reference paragraphs 1 through 81.

253.   The '885 Patent was filed on April 1, 2010. The inventor of the '885 Patent is Donald J. Hejna, Jr.

254.   Defendants make, use, sell, offer to sell, and/or import methods and devices that incorporate the infringing features described below. The YouTube and Google Products and Services infringe one or more of the claims of the '885 Patent, including without limitation Claims 1, 11 and 13.

255.   As a non-limiting example, to the extent the preamble of Claim 1 of the '885 Patent is limiting, YouTube and/or Google broadcast information to one or more client devices, e.g. smart phones, tablets, laptops, and TVs, from a broadcaster that is not a client device, e.g. YouTube and/or Google servers. The client devices utilize presentation rates to present audio in broadcast information at various presentation rates using TSM. For example, the YouTube interface allows audio-visual works to be watched slower or faster than the default rate (e.g., .25x; .5x; .75x, 1.25x, 1.5x; 2x) using TSM.

256.   YouTube and/or Google broadcast information, e.g. audio-visual works. They further broadcast guidance information used to determine presentation rates for use by the client

device in presentation of the audio in the broadcast information. YouTube and/or Google

broadcast information that is used to restrict or direct a playback rate for an entire media work or

one or more specific portions of the media work, for example by broadcasting information that

directs the playback rate of the audio and video in video ads to be the regular 1.0x playback rate.

257.   YouTube and/or Google may transmit the guidance information either at the time

of the broadcast of the broadcast information or not at that time. For example, YouTube and/or

Google may transmit the guidance information with the broadcast information to be implemented

immediately. And the guidance information comprises insistence information that specifies a

measure of importance of utilizing presentation rate information contained in the guidance

information. For example, YouTube and/or Google broadcast guidance information comprising

insistence information which indicates that the playback rate of the audio in a video ad must be

1.0x even if the user has selected a different playback rate for the remainder of the video. This

can be observed when viewing YouTube playlists or videos where the playback speed has been

set to a non-normal playback rate (e.g., .25x; .5x; .75x, 1.25x, 1.5x; 2x) and then encountering a

video ad. The audio of the video ad will always play at 1.0x rate and then the audio of the

remaining video will continue to play at the previously-set non-normal playback rate.

258.   By making, using, testing, offering for sale, selling, and/or importing the

YouTube and Google Products and Services, YouTube and Google have injured Enounce and

are liable to Enounce for directly infringing one or more claims of the '885 Patent, including at

least Claim 1, pursuant to 35 U.S.C. § 271(a).

259.   As a result of Defendants' infringement of the '885 Patent, Enounce has suffered

monetary damages, and seeks recovery in an amount adequate to compensate for Defendants'

infringement, but in no event less than a reasonable royalty for the use made of the invention by

Defendants together with interest and costs as fixed by the Court.

PRAYER FOR RELIEF

WHEREFORE, Enounce prays for judgment and seeks relief against Defendants as follows:

(a)   For judgment that the Defendants have infringed and/or continue to infringe one or more claims of the patents-in-suit;

(b)   For judgment that the Defendants have indirectly infringed and/or continue to indirectly infringe one or more claims of the patents-in-suit;

(c)   For judgment awarding Enounce damages adequate to compensate it for Defendants' infringement of the patents-in-suit, including all pre-judgment and post-judgment interest;

(d)   For judgment awarding enhanced damages pursuant to 35 U.S.C. § 284;

(e)   For judgment imposing a mandatory future royalty payable on each and every product or service sold by Defendants in the future that is found to infringe one or more of the patents-in-suit and on all future products and services which are not colorably different from products found to infringe;

(f)   For judgment awarding attorneys' fees pursuant to 35 U.S.C. § 285 or otherwise permitted by law;

(g)   For judgment awarding costs of suit; and

(h)   For judgement awarding Enounce such other and further relief as the Court may deem just and proper.

DEMAND FOR JURY TRIAL

Pursuant to Rule 38(b) of the Federal Rules of Civil Procedure and D. Del. LR 38.1, Enounce demands a trial by jury of this action.

ASHBY & GEDDES

/s/ Andrew C. Mayo

_____

Of Counsel:

Henry C. Bunsow
Denise De Mory
Christina M. Finn
BUNSOW DE MORY LLP
701 El Camino Real
Redwood City, CA 94063
(650) 351-7248

Dated: September 26, 2019

John G. Day (#2403)
Andrew C. Mayo (#5207)
500 Delaware Avenue, 8th Floor
P.O. Box 1150
Wilmington, DE 19899
(302) 654-1888
jday@ashbygeddes.com
amayo@ashbygeddes.com

Attorneys for Plaintiff