

IPR2021-00308

U.S. Patent No. 8,825,887

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

HULU, LLC,
Petitioner

v.

SITO MOBILE R&D IP, LLC and SITO MOBILE, LTD.,
Patent Owner

U.S. Patent No. 8,825,887

Issue Date: September 2 2014

Title: SYSTEM AND METHOD FOR ROUTING MEDIA

**CORRECTED PATENT OWNER'S RESPONSE TO PETITION FOR
INTER PARTES REVIEW OF U.S. PATENT NO. 8,825,887**

TABLE OF CONTENTS

	<u>Page</u>
I. THE PETITION RELIES ON COMBINATIONS OF <i>DISPARATE</i> TECHNOLOGIES, WHICH ARE <i>MISSING NUMEROUS</i> CLAIM ELEMENTS	1
II. LEVEL OF ORDINARY SKILL IN THE ART	2
III. STREAMING MEDIA TECHNOLOGY	3
A. Streaming media.....	3
B. Early development of streaming technology.	4
C. Existing technologies.	4
D. Early commercial streaming.....	5
E. Modern day commercial streaming.....	6
IV. U.S. PATENT NO. 8,825,887	9
A. Overview.	9
B. Problems with existing streaming networks.	9
C. The solution of the '887 patent.	10
D. Prosecution history.....	13
V. CLAIM CONSTRUCTION	15
VI. OVERVIEW OF THE ALLEGED PRIOR ART.....	16
A. U.S. Patent No. 6,389,467 to Eyal (“Eyal”).....	16
B. U.S. Patent No. 6,385,592 to Angles et al. (“Angles”).....	18
C. U.S. Patent No. 6,715,126 to Chang et al. (“Chang”).....	21
D. U.S. Patent Publication No. 2004/0083273 to Madison et al. (“Madison”).....	23

E.	U.S. Patent No. 5,931,901 to Wolfe et al. (“Wolfe”).....	25
VII.	MADISON IS <u>NOT</u> PRIOR ART	26
A.	The ’887 Patent has priority at least as early as January 13, 2001.	26
B.	The ’044 provisional further supports the inventors’ earlier conception date.....	29
C.	The claimed “instructions” are found in the 1/13/01 Application, ’949 patent, and ’519 application.....	31
VIII.	HULU HAS NOT SHOWN THAT THE CHALLENGED CLAIMS OF THE ’887 PATENT ARE UNPATENTABLE.....	33
A.	<u>GROUND 1</u> : Claims 39-40, 45, 47, 52, 68, 98-101, 103, 111 and 15-117 in view of Eyal and Angles.	33
1.	Claims 39, 45, 68 and 98	34
i.	Eyal and Angles do not disclose or suggest “instructions received from the at least one computing device to <i>obtain</i> at least one portion of the requested media” or “instructions as to <i>how</i> the at least one portion of the requested <i>media is to be streamed</i> to the communication device.”	34
ii.	Eyal and Angles do not disclose or suggest generating information based on the “capabilities of the communication device.”	36
iii.	Eyal and Angles do not disclose or suggest “generating” information including a “list” based on <i>both</i> the “capabilities of the communication device” <i>and</i> “characteristics” of a user.....	37
iv.	Eyal and Angles Do Not Disclose Or Suggest “One Portion of the Requested Media”	39
v.	Eyal and Angles Do Not Disclose Or Suggest a “revenue sharing rule” for sharing “revenue generated by streaming the . . . requested media.”	41

vi.	Eyal and Angles Do Not Disclose Or Suggest “sharing . . . revenue generated by streaming the . . . requested media.”	42
vii.	Eyal and Angles Do Not Disclose Or Suggest “the requested media . . . associated with at least one revenue sharing rule” for sharing “revenue generated by streaming.”	43
2.	Claims 40, 47, 52, 99-101, 103, 111 and 115-117.....	44
B.	GROUND 2: Claim 105 in view of Eyal, Angles and Chang.	46
C.	GROUND 3: Claims 39, 45, 52, 68, 98-101, 103, 105, 111, 115 and 117 in view of Madison and Wolfe.	48
1.	Claims 39, 45, 68 and 98.	48
i.	Madison and Wolfe do not disclose or suggest “one portion of the requested media.”	48
ii.	Madison and Wolfe do not disclose or suggest “ <i>identifying</i> . . . whether <i>the</i> requested media is <i>available</i> for streaming . . .”	51
iii.	Madison and Wolfe do not disclose or suggest “generating” information based on “ a “characteristic associated with a user of the communication device.”	52
iv.	Madison and Wolfe do not disclose or suggest “instructions received from the at least one computing device to <i>obtain</i> at least one portion of the requested media” or “instructions as to <i>how</i> the at least one portion of the requested <i>media is to be</i> <i>streamed</i> to the communication device.”	53
v.	Madison and Wolfe Do Not Disclose Or Suggest a “revenue sharing rule” for sharing “revenue generated by streaming . . . the portion of requested media.”	56

vi.	Madison and Wolfe Do Not Disclose Or Suggest “the requested media . . . associated with at least one revenue sharing rule” for sharing “revenue generated by streaming”	57
2.	Claims 52, 99-101, 103, 105, 111, 115 and 117.....	58
IX.	A POSITA WOULD NOT BE MOTIVATED TO COMBINE HULU’S REFERENCES	61
A.	Eyal and Angles disclose <i>fundamentally different</i> systems.	61
B.	Eval, Angles and Chang	65
C.	Madison and Wolfe	65
X.	CONCLUSION.....	67

PATENT OWNER’S EXHIBIT LIST

Exhibit No.	Description
2001	Complaint, <i>SITO Mobile R&D IP, LLC</i> and <i>SITO Mobile, LTD.</i> , v. <i>Hulu, LLC</i> , No. 6:20-cv-00472-ADA
2002	Second Amended Scheduling Order, <i>SITO Mobile R&D IP, LLC</i> and <i>SITO Mobile, LTD.</i> , v. <i>Hulu, LLC</i> , No. 6:20-cv-00472-ADA, Dkt. No. 38 (W.D. Tex., Dec. 3, 2020)
2003	Published Interview of Judge Albright, <i>IAM</i> (Apr. 7, 2020)
2004	Docket Order, <i>Kerr Machine Co. d/b/a Kerr Pumps v. Vulcan Industrial Holdings, LLC</i> , No. 6:20-cv-00200 (W.D. Tex. Aug. 2, 2020)
2005	Hulu’s Preliminary Invalidity Contentions, filed in <i>SITO Mobile R&D IP, LLC</i> and <i>SITO Mobile, LTD.</i> v. <i>Hulu LLC</i> , No. 6:20-cv-00472-ADA
2006	Hearing transcript from <i>ParkerVision, Inc. v. Intel Corp.</i> , No. 6:20-cv-00108 (W.D. Tex., Sept. 2, 2020)
2007	Order Resetting Markman Hearing, <i>SITO Mobile R&D IP, LLC</i> and <i>SITO Mobile, LTD.</i> , v. <i>Hulu, LLC</i> . No. 6:20-cv-00472-ADA, Dkt. No. 64 (W.D. Tex., Feb. 25, 2021)
2008	Order Denying Defendant’s Motion to Transfer, <i>SITO Mobile R&D IP, LLC</i> and <i>SITO Mobile, LTD.</i> , v. <i>Hulu, LLC</i> , No. 6:20-cv-00472-ADA (W.D. Tex., Mar. 24, 2021)
2009	Order Governing Procedures – Patent Case, Version 3.3, (W.D. Tex. Feb. 23, 2021) (Albright, J.)
2010	Claim Construction Order, <i>SITO Mobile R&D IP, LLC</i> and <i>SITO Mobile, LTD.</i> , v. <i>Hulu, LLC</i> , No. 6:20-cv-00472-ADA, Dkt. No. 67 (W.D. Tex., Mar. 25, 2021)
2011	Claim Construction Order (WDTX 3-25-2021)
2012	Declaration of Michael Adams
2013	Bate Declaration
2014	Welke Declaration

2015	Bowen Declaration
2016	System and Method for Routing Media, draft patent application dated 1/13/2001 (1/13/01 Application)
2017	Priority mapping conception chart (887 Claims to 1/13/01 Application)
2018	Operational Concept Description (OCD) For Media Routing Algorithm for World Streaming Network dtd 1/2/01
2019	Cross-examination Transcript of Henry H. Houh (7-23-2021)
2020	Comparison of 519 App/686 Pub. to 1/13/01 App
2021	Comparison of 949 Patent/993 App to 1/13/01 App
2022	Operational Concept Description (OCD) For Media Routing Algorithm for World Streaming Network dtd 1/17/2001
2023	App. No. 09/766,519 (U.S. Pub. No. 2003/0088686)
2024	App. No 09/838,993 (U.S. Pat. No. 7,054,949)
2025	App. No. 09-766,519 App as filed 1-19-2001 from PAIR
2026	CV of Michael Adams

Pursuant to 37 C.F.R. § 42.120, SITO Mobile R&D IP, LLC and SITO Mobile, Ltd. (collectively, “SITO”) hereby submits this Patent Owner Response to the Petition for *Inter Partes* Review of U.S. Patent No. 8,825,887 (“the ’887 patent”) filed by Hulu, LLC (“Hulu”). For the following reasons, challenged claims 39-40,45, 47, 52, 68, 98-101, 103, 105, 111, and 115-117 of the ’887 patent are patentable.

I. THE PETITION RELIES ON COMBINATIONS OF DISPARATE TECHNOLOGIES, WHICH ARE MISSING NUMEROUS CLAIM ELEMENTS

The ’887 Patent pertains to an improved method for streaming media (e.g., a video). The ’887 patent envisions that media is stored in portions and streamed portion-by-portion. The claims recite a method for streaming requested media in *portions* (e.g., one or more portions of a movie at a time), not streaming full media (e.g., a full movie) altogether.

Hulu relies on three purported obviousness grounds – (1) the Eyal patent in view of the Angles patent, (2) the Eyal and Angles patents, further in view of the Chang patent, and (3) the Madison publication in view of the Wolfe patent. At bottom, however, the Petition turns solely on the combination of Eyal and Angles, because the Madison publication is not prior art to the ’887 Patent – Madison’s earliest possible priority date is after the priority date of the ’887 Patent.

Regardless, none of the combinations renders the challenged claims obvious. *First*, as discussed in Section VIII below, Hulu’s prior art combinations fail to

disclose numerous claim elements. Hulu's analysis glosses over the specific requirements of the claims.

Second, as discussed in Section IX, there is no motivation to combine Eyal with Angles, Eyal with Angles and Chang, or Madison with Wolfe. The combinations are exercises in hindsight using the '887 patent as a template. Not only do these references disclose disparate technologies, but the combinations would have significant technical problems. Hulu overgeneralizes the technologies, providing overly simplistic reasons why one could combine the references, and fails to consider significant technical problems and incompatibilities that result from combining the technologies.

For at least the foregoing reasons, the Petition fails to make out a *prima facie* case of obviousness for the challenged claims of the '887 Patent. SITO respectfully requests a Final Written Decision affirming the validity of the '887 Patent.

II. LEVEL OF ORDINARY SKILL IN THE ART

A person of ordinary skill in the art ("POSITA") at the time of the invention of the '887 patent would have: (a) a Bachelor of Science degree in computer science, electrical engineering, or computer engineering (or a related academic field), and at least two additional years of work experience in the design and development of distributed network systems and/or media streaming, or (b) at least five years of work experience and training in the design and development of distributed network

systems and/or media streaming. Ex.-1012 (Declaration of Michael Adams), ¶¶27-29.

III. STREAMING MEDIA TECHNOLOGY

A. Streaming media.

Streaming media is a method of delivering live or on-demand/pre-recorded media (e.g., video) to a user device (e.g., computer). Streaming media involves transmitting media over a packet-based network (e.g., Internet). Ex.-2012, ¶¶30-32.

Today, television programs, movies, videos, and live events are streamed by cable providers, television networks and streaming media services (e.g., Amazon Prime, Netflix), and various other streaming media platforms (e.g., YouTube). Ex.-2012, ¶31.



Media is stored on computers known as servers. In response to a request for

media from a user device, the server streams media files (e.g., video) to the user device. Upon receiving media, the user device plays the files so that a user can view/listen to the media. Ex.-2012, ¶32.

B. Early development of streaming technology.

In the late 1990s and through 2001, streaming media was a relatively new area of technology. There was a significant amount of research, development, and discussion in the telecommunications industry and academia. At this time, standards-setting bodies were working on developing streaming technology standards that could be used industry-wide. Ex. 2012, ¶33. Hulu's expert agrees. Ex.-2019, 119:19-120:5.

As with any new/emerging technology, numerous approaches for implementing streaming were being considered and proposed. As such, at this time, streaming media was the subject of a significant number of patents, articles and papers. Ex.-2012, ¶34. Hulu's expert agrees. Ex.-2019, 112:25-113:7; 123:2-10; 123:24-125:6; 125:12-126:1; 129:25-131:17; 239:13-240:13.

C. Existing technologies.

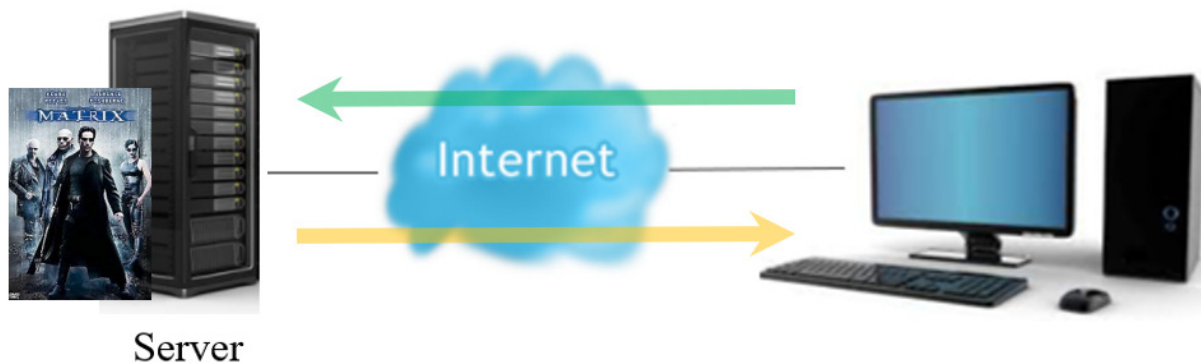
In the late 1990s and through 2001, there were a number of existing technologies related to transmission of data over the Internet. Ex.-2012, ¶35.

For example, a software application known as a web browser (e.g., Internet Explorer) could be installed on a user's computer to enable the computer to access

the Internet and, in particular, the world wide web (www or the Web). Software applications known as media players (e.g., RealPlayer, Windows Media Player) allowed computers to play video and music. Media players could be standalone, or act as an extension to a web browser, to support streaming media. *Ex.-2012*, ¶36.

D. Early commercial streaming.

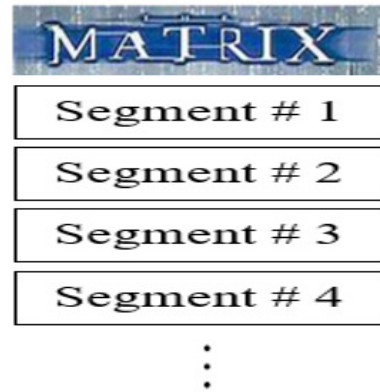
By and during 2001, the prevailing method of commercially streaming media was to store an entire program (e.g., an entire movie) on a single server and stream that media file from that server to a user device. Using this method, streaming was controlled by the server/backend streaming system. *Ex.-2012*, ¶40.



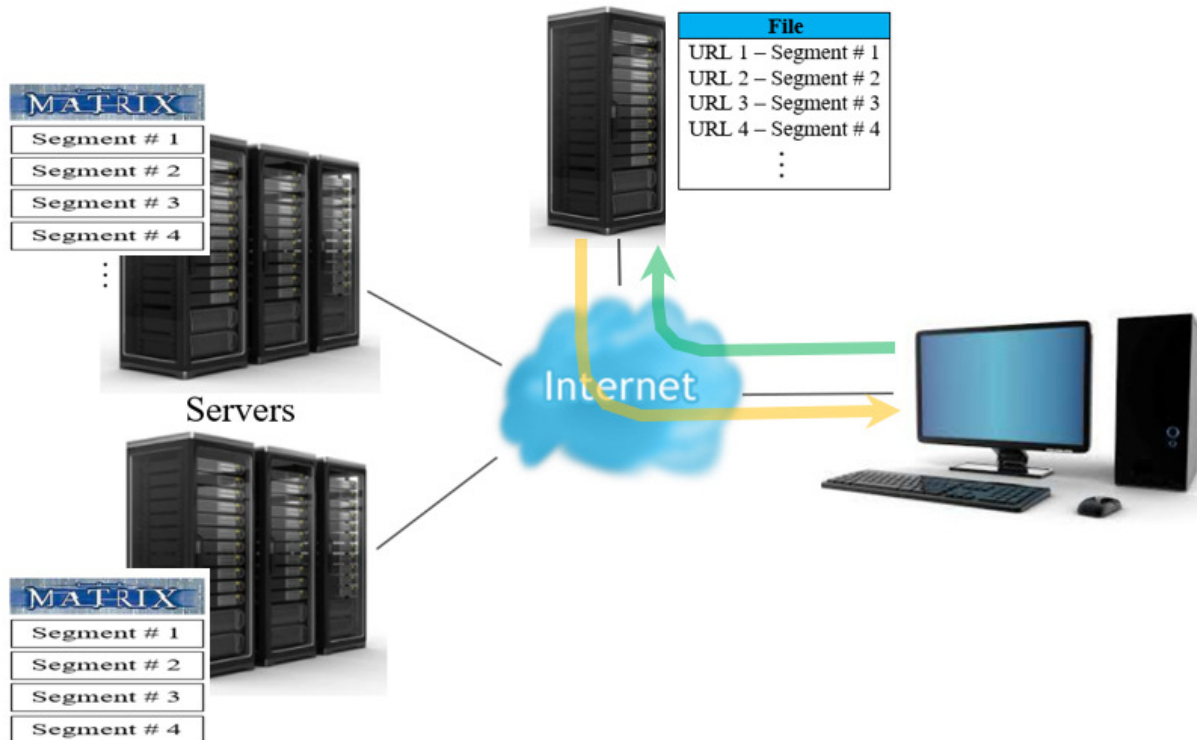
A server would store a video (e.g., *The Matrix*) as a *single* file. To watch the video, the user could access a streaming website or use a computer application. After selecting a video, the user device would send a request (green arrow) for the video to the server. The server streamed the video *in its entirety* to the user device (orange arrow). *Ex.-2012*, ¶41.

E. Modern day commercial streaming.

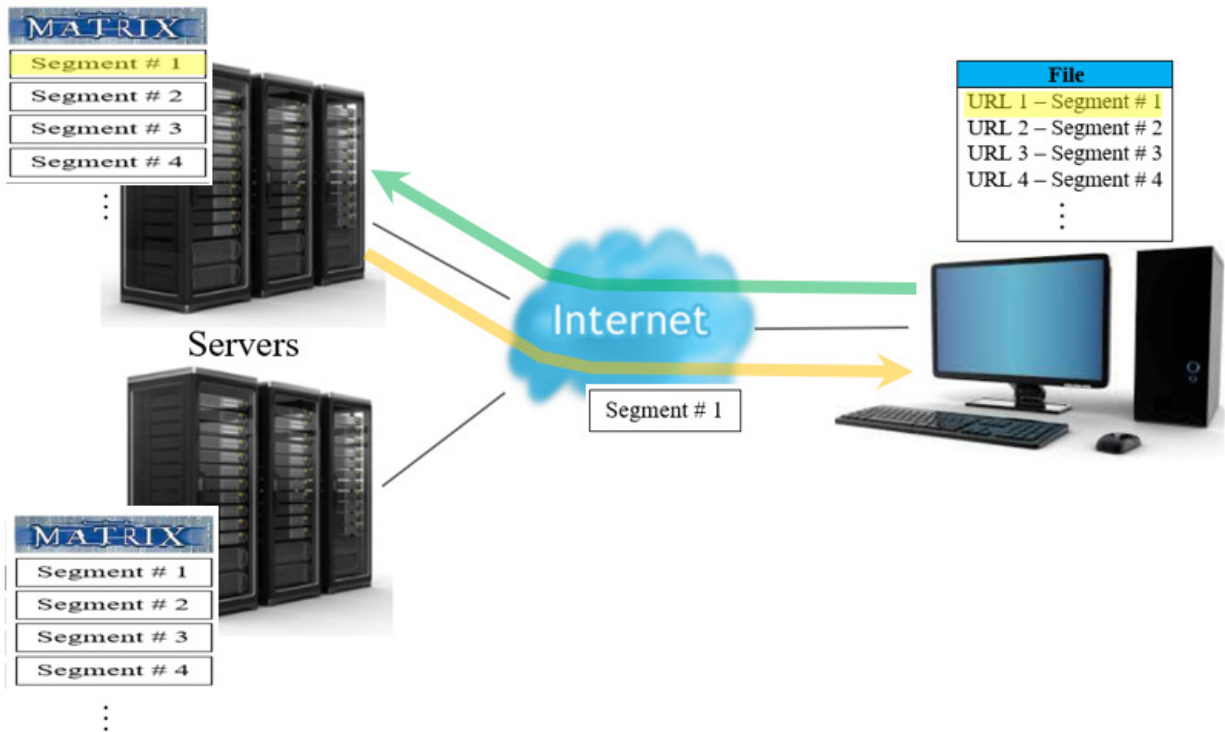
In modern streaming, a video (e.g., movie) is broken up into segments (portions) (e.g., a few seconds of the movie). *Ex.-2012, ¶42.*



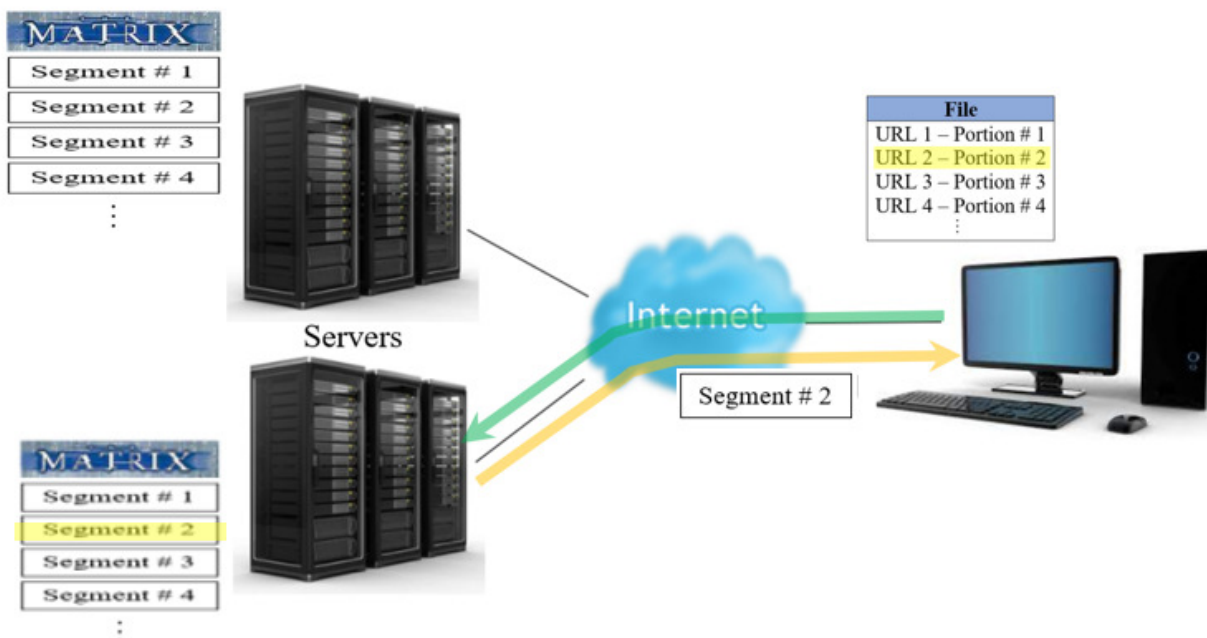
The user device controls the streaming of the video. Such a system can provide a user with a better viewing experience. *Ex.-2012, ¶43.*



One or more servers store the same portions of the movie. Unlike early streaming systems, a request (green arrow) for the movie is first directed to a server that transmits (orange arrow) a manifest file to the user device. The manifest file includes a number of URLs and other information that can be used by a user device to obtain segments or portions of the movie. *Ex.-2012*, ¶44.



The user device uses the file to obtain each segment. Using URL 1, the user device sends a request (green arrow) to a first server requesting Segment # 1. The first server transmits (orange arrow) Segment # 1 to the user device. *Ex.-2012*, ¶45.



Using URL 2, the user device sends a request (green arrow) to a second server requesting Segment # 2. The second server transmits (orange arrow) Segment # 2 back to the user device. This process is repeated to stream all segments of the requested media. *Ex.-2012*, ¶¶46-47.

IV. U.S. PATENT NO. 8,825,887

A. Overview.

The '887 patent pertains to a system and method for streaming media to a user device. *See, e.g., Ex.-1001*, 3:62-4:3.

B. Problems with existing streaming networks.

U.S. Provisional App. No. 60/263,044 (“the '044 provisional,” Ex. 1011), from which the '887 patent claims priority, and the '887 Patent specification identify the problems with existing streaming systems as being performance-related issues

including, e.g., lack of reliable service delivery infrastructure, poor picture quality, and quality of service issues. *See, e.g.*, Ex.-1011, 12; Ex.-1001, 2:1-3, 2:23-37; Ex.-2012, ¶¶51-56.

C. The solution of the '887 patent.

The inventors sought ways to overcome performance-related problems and improve the operation of streaming systems. Specifically, the inventors envisioned delivering requested media (e.g., a program) portion-by-portion and enabling the user device (not the server/backend streaming system) to control the process of streaming the portions in order to present the user with a complete media presentation. Ex.-2012, ¶57, ¶¶59-66.

The '887 Patent discloses a streaming media system in which a requested program can be streamed in *portions* (i.e., portion-by-portion). Ex.-2012, ¶66; Ex.-1001, 3:49-50 (“Media may include one or more media clips or a part of a media clip.”), 5:37-39. That a requested program can be streamed in portions is also evidenced by the specification’s discussion of “sequencing” of “media clips” making up a program, and “*media list*” for the program. Ex.-1001, 5:39-45; 5:44; 8:29-31; 9:9-14, 49-51.¹

Figure 1 illustrates streaming system 102 (blue) for delivering media to a viewer 118/120 (green). Ex.-2012, ¶67.

¹ All emphasis has been added herein unless otherwise noted.

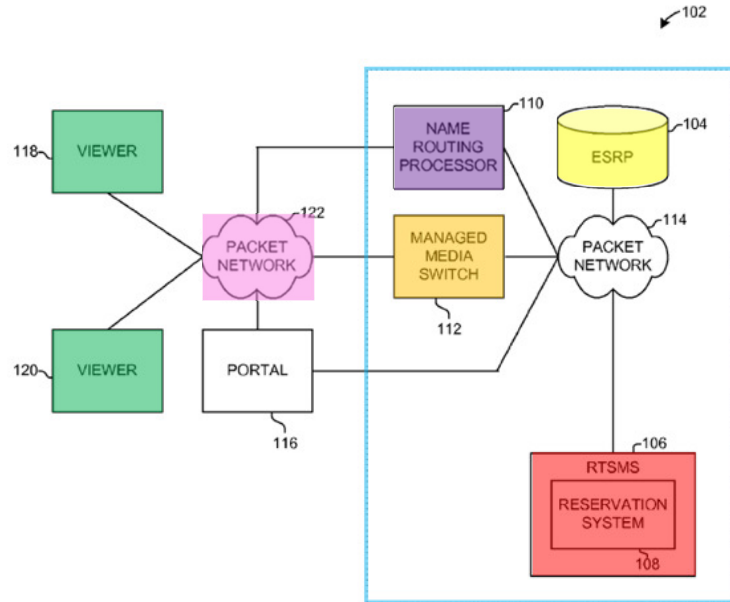


FIG. 1

Streaming system 102 includes an enhanced service routing processor (ESRP) 104 (yellow), real time switch management system (RTSMS) 106 (red), name routing processor (NRP) 110 (purple), and managed media switch (MMS) 112 (orange). Ex.-1001, 4:55-67. A packet network (pink) (e.g., the Internet) connects viewer 118/120 with the system 102 (blue). Ex.-2012, 4:29-37. The MMS (orange) includes one or more servers that can stream media. Ex.-2012, 14:63-66; Ex.-2012, ¶¶68.

System 102 “enables a media owner to identify a program or a portion of a program that is made available for streaming.” Ex.-1001, 5:37-39. The specification states that the program identifies *sequencing of media clips* making up the program. Ex.-1001, 5:39-43; Ex.-2012, ¶¶69-70.

The RTSMS receives a request from viewer 118/120 for a program (e.g., television program); the RTSMS determines if the requested program is available and has any restrictions (e.g., media rules) applied by the media owner. Ex.-1001, 9:61-65; 10:1-6; Ex.-2012, ¶72.

In response to receiving the request for a program, the RTSMS generates a play script for the requested program. Ex.-1001, 10:6-12; Ex.-2012, ¶73.

The play script includes URLs where each URL identifies a different media clip. *See* Ex.-1001, 8:61-63; 10:28-30; 21:56-58; 24:45-47; Ex.-2012, ¶74.

The play script is generated based on capabilities/attributes of viewer device 118/120. Ex.-1001, 10:12-18; Ex.-2012, ¶75.

The RTSMS 106 builds a reservation for viewer 118/120 for the play script and reserves resources for use by viewer 118/120. Ex.-1001, 10:20-23; 10:33-37; Ex.-2012, ¶76.

A presentation is generated based on the program and identifies the media to be streamed to viewer 118/120. Ex.-1001, 8:18-29; Ex.-2012, ¶76-77.

The RTSMS transmits the play script to viewer 118/120. Ex.-1001, 10:23-26; Ex.-2012, ¶78.

The viewer uses the play script to control the streaming of media and initiate a session with a switch/streaming server. Ex.-1001, 10:31-33.

The viewer requests the program portion-by-portion. Ex.-1001, 13:49-14:1; Ex.-2012, ¶¶79-80.

D. Prosecution history.

U.S. Patent Application No. 13/841,015 (now the '887 patent) was filed on March 15, 2013. On August 6, 2013, the USPTO issued a non-final office action rejecting claims 1-44 under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over U.S. Pat. No. 6,698,020 to Zigmond et al. in view of U.S. Pat. No. 6,516,338 to Landsman et al. Ex.-1002, 117-147.

On February 6, 2014, the applicants responded by traversing the § 103 rejections and adding new claims 45-70. Ex.-1002, 161-188. The applicants also distinguished the claimed invention over the cited art, in part, by adding the phrase “via a communication network” into the claim language (as shown below).

1. (Currently Amended) A method for accessing media comprising:
receiving, at at least one computing device via a communication network, a request for
media from at least one communication device capable of playing video;
identifying, at the at least one computing device, at least one program in which at least a
portion of whether the requested media is available for streaming to the at least
one communication device in accordance with at least one program;
identifying at least one rule for providing a streaming service associated with the
requested media;
generating, at the at least one computing device based on the at least one program, a
presentation list identifying the at least the a portion of the requested media based
on the at least one program and at least one order, the order comprising at least
one order component associated with the at least one program; and
identifying, at transmitting the list to the at least one communication device from the at
least one computing device via the communication network, at least one resource
to stream the presentation for reception by a viewer.

Ex.-1002, 163.

Applicants argued that unlike the communication network-based system and method of the claimed invention, the prior art teaches selecting and inserting content into a video programming feed “at the household level.” Ex.-1002, 182. The applicants further argued that the prior art, either alone or in combination, did not disclose the limitations of the independent claims, as amended. Ex.-1002, 183-184.

On May 8, 2014, the applicants initiated an interview with the Examiner to discuss the February 6, 2014 amendments. Ex.-1002, 258-260. During the interview, the Examiner agreed that the previously cited art used to reject the independent claims did not disclose the amended limitations. On May 23, 2014, the Examiner initiated another interview with the applicants, during which time the parties reached

an agreement for allowance. Ex.-1002, 313. The agreement is reflected as an Examiner's Amendment in the Notice of Allowability. Ex.-1002, 263-312. In particular, claims 1-70 were amended and new claims 71-126 were added. The Examiner provided a statement of reasons for allowance (shown below).

6. Examiner's amendment is persuasive. Therefore the rejection of Claims 1-44 under 35 U.S.C. 103(a) has been withdrawn.
7. Examiner's amendment is persuasive. Therefore the objection to Claim 42 has been withdrawn.
8. Applicant has stated on the record that the claimed "computing device" has a hardware structure. Therefore the claimed "computing device" strictly construed to have some hardware. Therefore the rejection of Claims 13-38 and 42-44 under 35 U.S.C. 101 has been withdrawn.
- Allowable Subject Matter*
9. Claims 1-126 are allowed.
10. The following is an examiner's statement of reasons for allowance: the prior art fails to disclose, either alone or in combination, the Examiner's amendment today. While each element standing alone is not novel, the combination of limitations together as claimed in independent form reaches into hindsight reasoning. See also form PTO-892 for additional prior-art references that are relevant, but lack critical elements necessary to reject the claims.

Ex.-1002, 311. In particular, the Examiner stated that "the *combination* of limitations together" is what resulted in the claims' novelty.

V. CLAIM CONSTRUCTION

SITO does not agree with Hulu's proposed construction of "settlement record." Pet., Paper 1, 11-12. But, SITO does not believe the invalidity challenges

raised against the '887 Patent turn on this construction. As such, to respect the Board's time, SITO does not propose an alternative construction.

VI. OVERVIEW OF THE ALLEGED PRIOR ART

A. U.S. Patent No. 6,389,467 to Eyal ("Eyal").

Eyal discloses a media search engine, which is specifically configured to locate media, and identify the location of the media to a user device. See Ex.-2012, ¶¶91-102.

Using the Eyal system, a user can request media by entering search criteria into the search engine. Based on the criteria, a network (web) server module can return a "play-list" to a media playback component (media player) on a user device. The play-list includes one or more links (URLs) to media files (e.g., songs) found on multiple media sites (websites) on the Internet. Ex.-1005, 4:3-4, 48-51. Using the URLs, the media playback component can access the media files on the various websites and automatically/continuously playback the media files. Ex.-2012, ¶¶96-97.

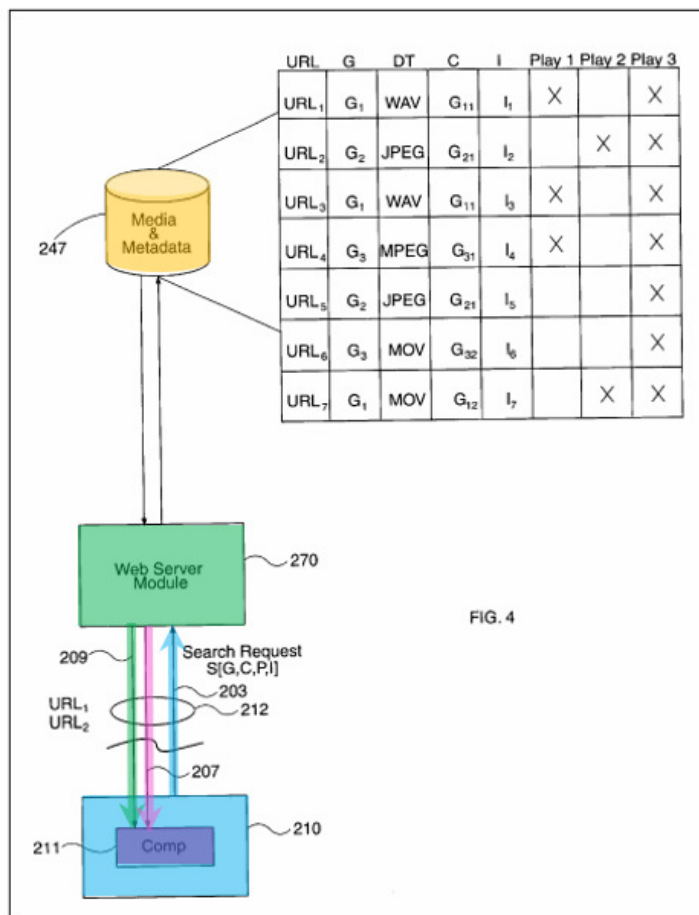


FIG. 4

As shown in Figure 4, the end terminal 210 (blue box) (user device) sends a search request 203 (blue arrow) to web server module 270 (green box). Ex.-1005, 19:30-35. The web server module 270 (green box) accesses the media and metadata database 247 (orange cylinder) to retrieve one or more URLs matching the search request. Ex.-1005, 19:35-38; 20:30-31. Each URL can provide direct access to a web resource (server) containing the media. Ex.-1005, 19:47-48. The web server module 270 sends a response 209 (green arrow) to the media playback component 211 (purple) (media player) on the end terminal 210. Ex.-1005, 19:38-40, 20:31-32. The response includes one or more URLs or play-lists. Ex.-1005, 20:32-35; Ex.-2012,

¶¶98-100.

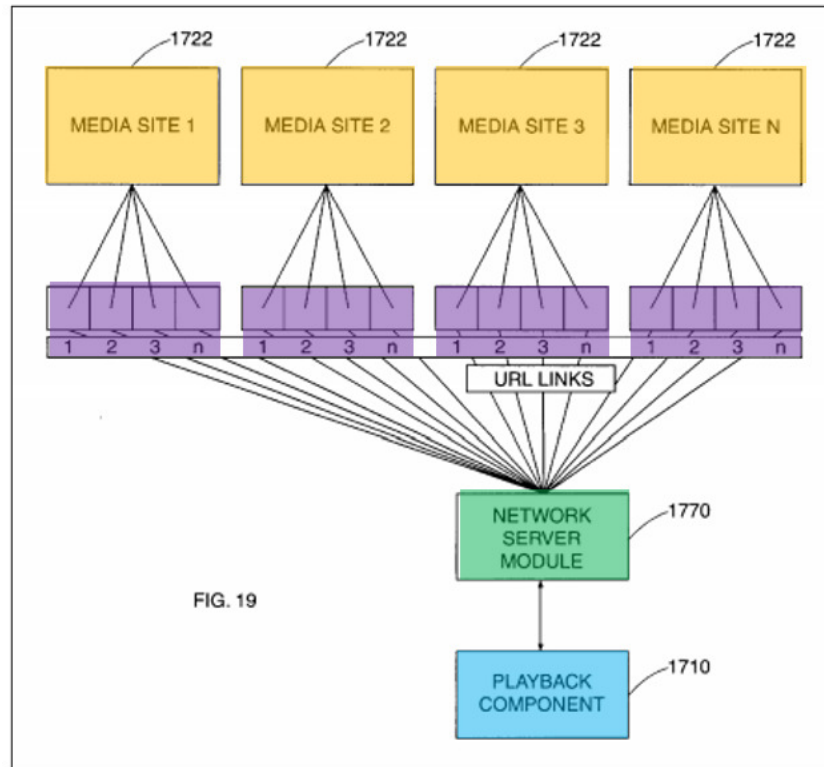


Figure 19 illustrates a playback architecture. A user terminal 1710 (blue box) (user device) has access to a number of media sites 1722 (e.g., different websites on the Internet) (orange boxes) through network (web) server module 1770 (green box). *Id.*, 32:44-47, 32:54-55. Each media site 1722 includes links (URLs 1-n) (purple) to media web resources. *Id.*, 32:47-49. The web server module 1770 (green box) can load resources onto a media playback component (media player) on user terminal 1710 (blue box) to be played. *Id.*, 32:49-53; Ex.-2012, ¶¶101-102.

B. U.S. Patent No. 6,385,592 to Angles et al. (“Angles”).

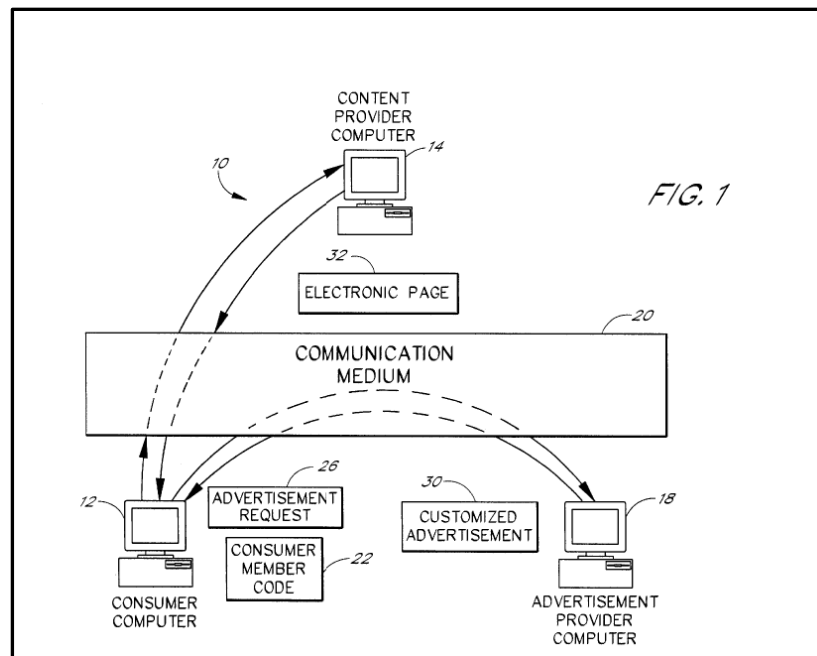
Angles discloses a system for inserting advertisements into a webpage. In particular, Angles discloses delivering customized advertisements selected based on

user profiles. Ex.-1045, Abstract.

Angles “is directed to delivering custom advertisements to consumers who use their computers to view information offered by different content providers existing on the Internet.” *Id.*, 2:63-66. “Preferably, when a consumer accesses a content provider, the content provider transmits an electronic document [e.g., web page] to the consumer. Embedded within the electronic document is a [*sic*] advertisement request.” *Id.*, 2:66-3:3. “When the consumer’s computer displays the electronic document, the embedded advertisement request directs the consumer computer to communicate with an advertisement provider. In response, the advertisement provider provides a customized advertisement. The advertisement provider then tracks the consumer’s response to the customized advertisement.” *Id.*, 3:3-9. See Ex.-2012, ¶¶103-108.

The system requires the user to register with the advertisement provider system which assigns the user a “unique member code” and maintains a “demographic profile” on the user. *Id.*, 3:21-27. Similarly, the system requires content providers (web sites) to register with the advertisement provider system which assigns each content provider a “custom member code” and provides a “content provider script” to enable the delivery of advertisements. An “advertisement request” is sent to the content provider system which has “commands

to invoke the content provider script.” *Id.*, 3:33-42; Ex.-2012, ¶108.



As shown in Fig. 1, the consumer computer 12 (user) makes a request 10 for a web page from content provider computer 14 (e.g., website), which returns an electronic page (e.g., web page using html) including an “embedded advertisement request 26.” The consumer computer then “executes the embedded advertisement request 26” (e.g., html tag) which “directs the consumer computer 12 . . . to the advertisement provider computer 18.” *Id.*, 7:65-8:10, 12:64-13:6, 15:14-22. The advertisement computer runs a “content provider script” based and, using the “consumer member code 22 . . . to access the consumer’s profile,” selects an “appropriate customized advertisement 30” which is sent to consumer computer 12 to be delivered with the electronic page (e.g., web page). *Id.*, 8:10-30; See Ex.-

2012, ¶107.

For billing purposes, the Angles system uses the “content provider code” to track the advertisements delivered for each content provider. It also uses the “unique member code” to track the advertisements delivered to each user. *Id.*, 8:14-18, 16:10-19 (using “accounting database 72” to track viewing of advertisements). The “advertisement audit information” stored in accounting database 72 “maintains a record of which advertisements have been viewed by consumers” to that “advertisers can be billed based on actual delivery of the advertisements.” *Id.*, 16:20-25. A content provider can be paid based on the number of viewed advertisements (*id.*, 16:43-45), and additionally, the consumer can be paid in “digital cash” based on the number of viewed advertisements (*id.*, 16:50-53). See *id.*, 21:27-36 (“debit[ing] the appropriate advertiser account” and “credit[ing] the content provider’s account” and “also credit[ing] the consumer’s Internet provider account number.”). See Ex.-2012, ¶108.

C. U.S. Patent No. 6,715,126 to Chang et al. (“Chang”).

Chang discloses the use of a “HotAudio” file for delivering streams of media content made up of primary content (e.g., audio or video) and secondary content (e.g., images). Ex.-1009, Abstract, 3:21-32. The method “delivers a presentation of web content comprised of a media such as audio or video content, having defined time increments, together with one or more other content sources, such as images or

events . . . synchronized so that the . . . images or events are displayed at predetermined time increments in the media presentation.” *Id.*, Abstract, 3:20-32. The “media data and other content need not reside at a single server source” and the presentation is delivered to the user in “streaming fashion.” *Id.*, Abstract, 3:37-41, 3:66-4:3. See Ex.-2012, ¶¶109-112.

According to Chang, the delivery of data consisting of two streams of information combined at the user’s computer is accomplished using a “content creation tool for preparing the data in an appropriate format with appropriate auxiliary information, the format (called HotAudio file, or haf) for the data, and a player (called HotAudio player . . .” *Id.*, 3:42-46. The HotAudio metadata file contains “metadata information regarding time-driven actions associated with a media source” reflected in various types of data blocks. *Id.*, 5:25-37. For example, a “media information block” may include frame rates and frame numbers. *Id.*, 7:1-20. The presentation may be designed for delivery “at a certain bit rate, B1 kbps” with the “audio [being] encoded at Ba kbps” such as “20 kbps.” *Id.*, 7:17-23; Ex.-2012, ¶¶110-111.

The HotAudio metadata file and “the actual presentation content” are sent to the special HotAudio player. *Id.*, Abstract. The HotAudio metadata file identifies the “primary media source” and the “secondary media source” and allegedly presents the secondary media at specific time increments with the primary media to present

a “simultaneous display.” *Id.*, 12:12-30; Ex.-2012, ¶112.

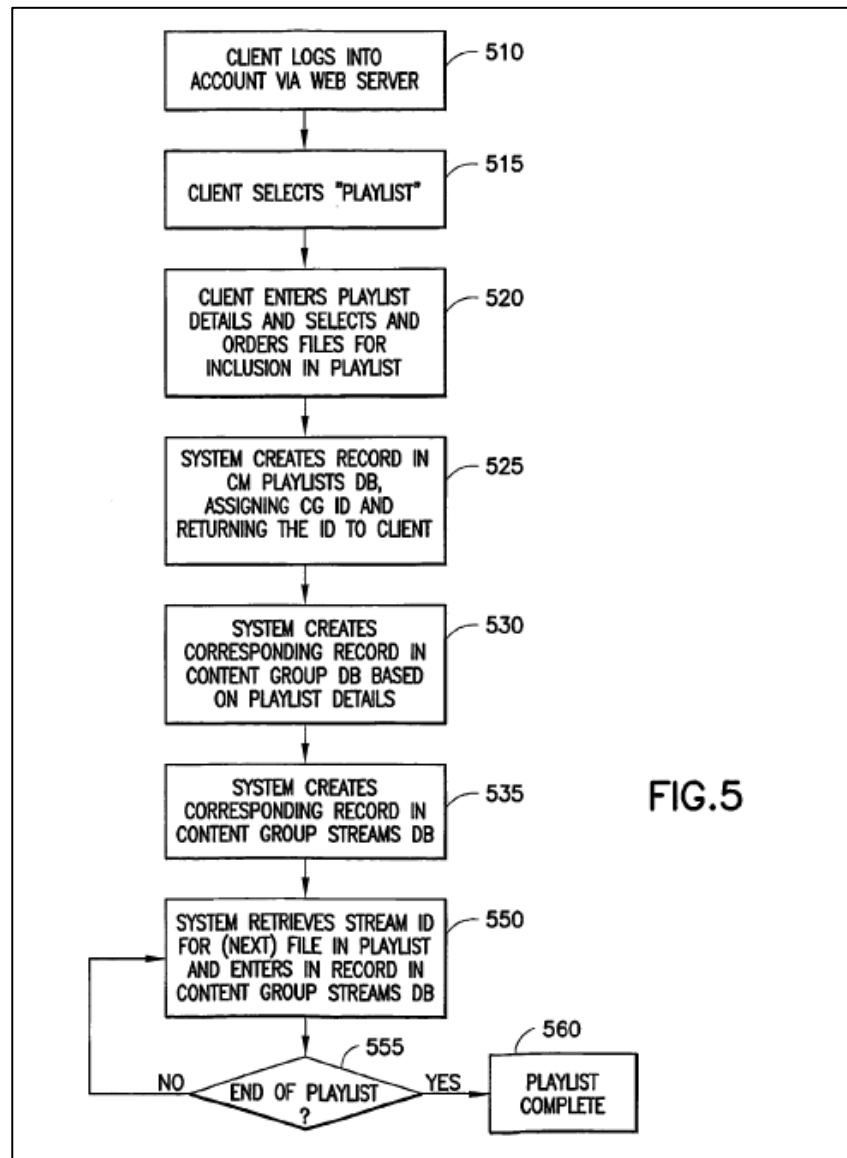
**D. U.S. Patent Publication No. 2004/0083273 to Madison et al.
 (“Madison”)**

Madison discloses a system for managing digital content and delivering digital content, including streaming media. Ex.-1051, Abstract. See Ex.-2012, ¶¶113-118.

Madison discusses that content providers may have significant number of content files and, thus, have turned to content management service providers to store/stream the content provider’s content. *Id.*, [0006]. Madison states that there is a need for a content management system that allows clients to “easily up-load, manage, and deliver streaming media content via the Internet.” *Id.*, [0007]. Madison purports to describe such a system. Ex.-2012, ¶115.

In the Madison system, a client (content provider) up-loads digital content to a content management system. *Id.*, [0022]. The system is managed by a service provider that delivers services (e.g., content storage and content streaming) to content providers. *Id.*, [0024], [0050]. When content is uploaded by the content provider, a stream identifier (ID) is associated with that content and the system stores the content. *Id.*, [0008], [0065], [0075]. The client is provided a playlist URL including the stream ID(s) that can be published on the client’s website. *Id.*, [0008], [0103]. An end user can select the playlist URL on the client’s website, which causes the content to be streamed to the user by streaming media servers 120 maintained by

the streaming services provider. *Id.*, Abstract, Fig. 1. The content is streamed pursuant to the playlist/content group identifier (CG ID) defined by the playlist URL. *Id.*, [0062]; Ex.-2012, ¶116.



As shown in Figure 5, to create a playlist of media, the client selects and orders the stream files to include in the playlist. *Id.*, [0103]. The playlist is made up of a list of content files or streams. *Id.*, [0061]. The system assigns a CG ID to the playlist.

Id., [0036]. The client is then provided with a playlist URL, which the client can include on its web page. *Id.*, [0106]. The URL includes the CG ID. *Id.*, [0036]-[0038], [0106].

When an end user selects the URL, the system generates a playlist that identifies the media associated with the CG ID and sends a playlist redirector file to the end user device. *Id.*, [0109]- [00110]. The playlist redirector file is a dynamically generated playlist generated in response to the playlist URL selected by the end user. *Id.*, [00106]-[00109]. The playlist redirector file creates a playlist including selected content defined by stream IDs. *Id.* The redirector file includes URLs for each stream making up the file. *Id.*, [0110]. The media player on the end user device, in turn, uses the redirector file to request each stream from the media server identified in the redirector file. *Id.*, [0111]; Ex.-2012, ¶¶117-118.

E. U.S. Patent No. 5,931,901 to Wolfe et al. (“Wolfe”)

Wolfe discloses a system for delivering music and targeted advertising messages to Internet based subscribers. Ex.-1044, Abstract. See Ex.-2012, ¶¶119-122.

Wolfe states that it is desirable to provide an Internet based system for disseminating media without any cost to a user/subscriber of the system (similar to network television and radio stations). *Id.*, 1:43-48. In order to provide a music streaming service at no cost to subscribers, Wolfe discloses making money by

inserting targeted ads into music streams. *Id.*, 1:54-65, 2:41-3:3; Ex.-2012, ¶121.

The Wolfe system tracks insertion of advertisements and frequency of play/transmission of music/data transmitted to subscribers. *Id.*, 5:26-31. And, in the case where an advertiser has pre-purchased a certain number of advertisements, the system decrements that number as advertisements are served. *Id.*, 5:32-33. According to Wolfe, “[t]ogether, this information is useful . . . for calculating (if necessary) royalty fees payable to the owners of the music” *Id.*, 5:33-35. The Wolfe system “prepares billing data for advertisers” and tracks total advertising airtime so that advertisers may be billed e.g., on a monthly basis. *Id.*, 5:37-43; Ex.-2012, ¶122.

VII. MADISON IS NOT PRIOR ART

Madison was filed on January 18, 2002 and has a priority assertion to provisional application 60/263,058 filed on January 18, 2001. Ex. 1051, 1. For the reasons set forth below, Madison is not prior art to the ’887 patent. See Ex.-2012, ¶¶123-140.

A. The ’887 Patent has priority at least as early as January 13, 2001.

The elements of the claims of the ’887 Patent challenged in view of Madison can be found in a draft patent application that was prepared no later than January 13, 2001 (“1/13/01 Application,” Ex.-2016). *See* Ex.-2013 (Bates Declaration), Ex.-2014 (Welke Declaration), Ex.-2015 (Bowen Declaration). As such, the ’887 Patent

is entitled to a priority date at least as early as January 13, 2001.

As described in the declarations submitted by the inventor, Don Bate, Mr. Bate exercised diligence from the time of conception (1/13/01 Application) until the constructive reduction to practice six days later by filing application number 09/766,519 (“the ‘519 Application”) Ex.-2013, ¶¶9-10. January 13, 2001 was a Saturday, and he worked every business day on the application until its filing as the ‘519 Application on Friday, January 19, 2001. *Id.*, ¶¶9-11. Mr. Bate has possession of the three documents demonstrating prior conception (Ex. 2016, 2018 and 2022 for the 1/13/01, 1/2/01, and 1/17/01 documents, respectively) and there have been no changes to the documents since the aforementioned dates. *Id.*, ¶¶17-22.

Ex.-2015 is a declaration of Gene Bowen, who was a co-worker of inventors Don Bate and Chuck Jennings (now deceased) and who worked with both inventors in documenting the invention (described in the 1/13/01 Application) which was conceived and diligently reduced to practice from January 13, 2001 until the filing of the ‘519 Application on January 19, 2001. Ex.-2015, ¶¶5-8. Mr. Bowen also corroborates the documents demonstrating prior conception, Ex. 2016 (1/13/01 document), Ex. 2018 (1/2/01 document) and Ex. 2022 (1/17/01 document), because he recognizes each document. *Id.*, ¶¶8-14.

Ex.-2014 is a declaration of Bryce Welke, who is an expert in computer forensics analysis engaged by SITO to examine the three documents demonstrating

prior conception, Ex. 2016 (1/13/01 document), Ex. 2018 (1/2/01 document) and Ex. 2022 (1/17/01 document). *Id.*, ¶¶1-5. Mr. Welke examined the metadata associated with the computer files for Ex. 2016, 2018 and 2022, and he confirmed the dates and integrity of those documents. *Id.*, ¶¶6-12.

Thus, the Bates Declaration, Welke Declaration and Bowen Declaration establish a date of conception of the invention no later than January 13, 2001.

Furthermore, all of the claims of the '887 Patent challenged in view of Madison find written description support in the 1/13/01 Application, as illustrated in the attached conception chart. See Ex.-2017; Ex.-2012, ¶¶125-126.

A redline comparison showing the common disclosure between the 1/13/01 Application and the '519 Application, which published as U.S. Pub. No. 2003/0088686 ("the '686 Publication") confirms that the latter contains the same subject matter found in the 1/13/01 Application that supports the challenged claims. Ex.-2020.² Accordingly, the '519 Application provides written description support for the claims of the '887 Patent. Ex.-2012, ¶127.

A redline comparison showing the common disclosure between the 1/13/01 Application and application number 08/838,993 (April 20, 2001), which issued as

² The 686 Publication has the same specification disclosure as the '519 Application.

U.S. Pat. No. 7,054,949 (“the ’949 Patent”),³ confirms that the application leading to the ’949 Patent supports the challenged claims. Ex.-2021. Accordingly, the application leading to the ’949 Patent provides written description support for the claims of the ’887 Patent. Ex.-2012, ¶128.

Therefore, with reference to the priority claim on the face of the ’887 Patent (Ex.-1001, 1), the claims of the ’887 Patent enjoy priority to the ’949 Patent (Apr. 20, 2001) and through the ’519 Application (Jan. 19, 2001) to a prior date of invention of at least as early as January 13, 2001. Ex.-2012, ¶129.

B. The ’044 provisional further supports the inventors’ earlier conception date.

The ’044 provisional from which the ’887 Patent claims priority provides further support that the inventors of the ’887 Patent had conceived the invention set forth in the challenged claims of the ’887 Patent *prior* to Madison’s earliest potential priority date. See Ex.-2012, ¶¶130-134.

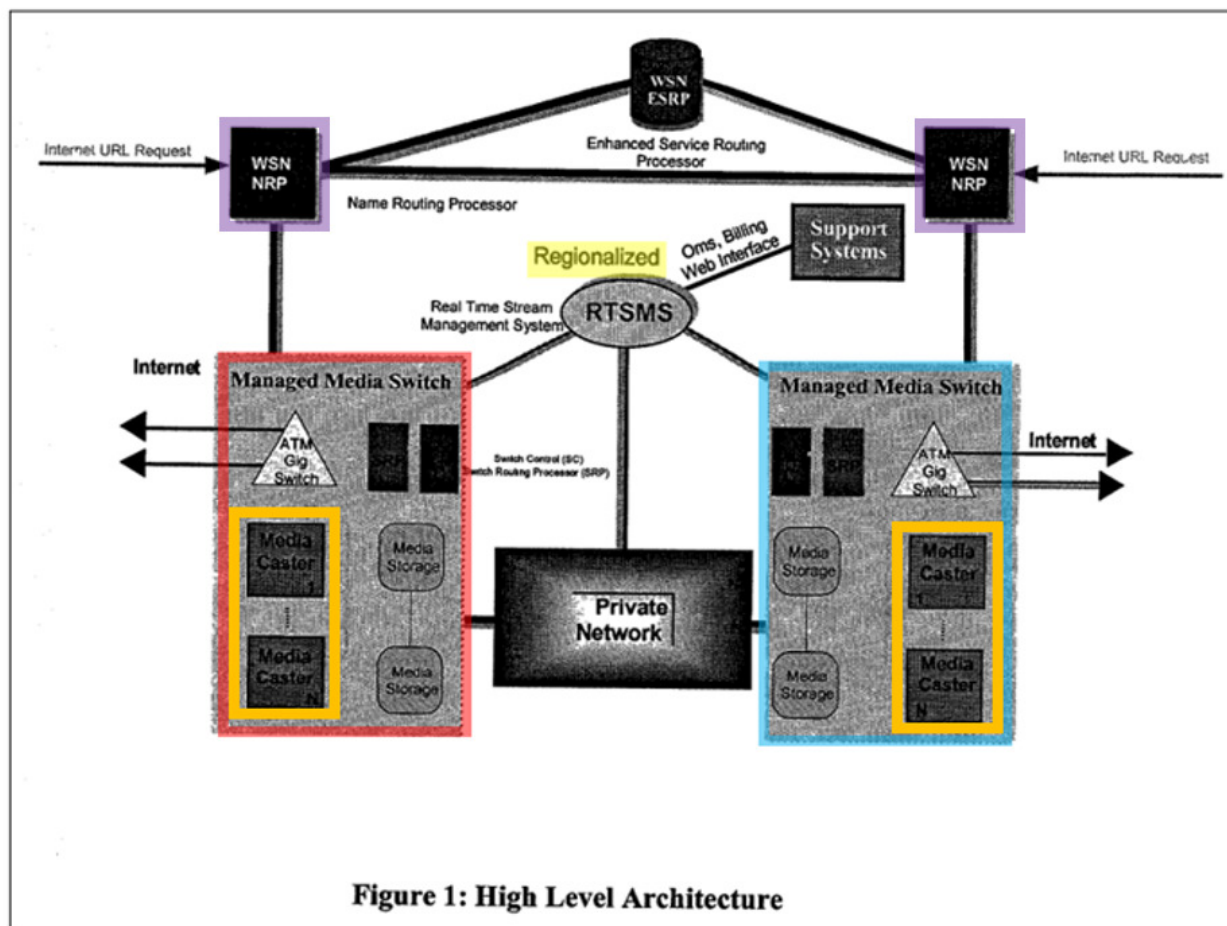
The ’044 provisional is based on a paper entitled “Operational Concept Description (OCD) For Media Routing Algorithm” (“OCD Paper”) and dated January 17, 2001. Ex.-1011; Ex.-2022. The OCD Paper was prepared no later than January 17, 2001. *See* Ex.-2022; Ex.-2013 (Bate Declaration), Ex.-2014 (Welke

³ The ’949 Patent has the same specification disclosure as the ’993 Application.

Declaration), and Ex.-2015 (Bowen Declaration).

As described in the declaration submitted by the inventor, Don Bate, Mr. Bate exercised diligence from the time of the OCD Paper until the constructive reduction to practice two days later by filing the '044 provisional. Ex.-2013 (Bate Declaration).

The OCD Paper includes Figure 1, which illustrates the inventors' streaming system and the components discussed in the 1/13/01 Application. Consistent with the disclosure in the 1/13/01 Application, Figure 1 illustrates a content distribution network.



A POSITA reviewing Figure 1 would understand that components such as a

name routing processor (NRP) (purple) and Managed Media Switch (MMS) (red and blue) are located in different geographic locations. Each MMS includes components referred to as media/stream casters (orange) which stream media to a communication device. *Id.*, ¶132.

The first Managed Media Switch (MMS) (red) would be located in a first geographic region and the second managed media switch (MMS) (blue) would be located in a second geographic region. Indeed, Figure 1 specifically describes the component that manages the MMSs, referred to as the real time switch management system (RTSMS), as being “Regionalized.” A POSITA would understand “Regionalized” means that there an RTSMS is located in and/or services MMSs in different geographical regions. In such a configuration, as discussed in the 1/13/01 Application, media will be streamed from a server in geographic proximity to the communication device. Ex.-2012, ¶¶133-134.

A POSITA would understand that reference to a “private network” does not limit the MMSs to being located in the same geographic location. To the contrary, a POSITA would understand that a private network as shown in Figure 1 could be, for example, a virtual private network that would use the Internet to connect geographically distributed resources such as servers. *Id.*, ¶134.

C. The claimed “instructions” are found in the 1/13/01 Application, ’949 patent, and ’519 application.

According to Hulu, the only reason the challenged claims are not entitled to

the earlier priority date of the '949 Patent is because it allegedly does not disclose the claimed “instructions.” Pet., 6-7. Presumably, Hulu will make the same argument with regard to the '519 Application and 1/13/01 Application. Hulu is wrong. All of the priority documents disclose the claimed “instructions” in the form of a presentation identification (ID). See Ex.-2012, ¶¶136-140.

The claims of the '887 patent recite “one or more instructions as to how the at least one portion of the requested media is to be streamed to the communication device.”

As discussed in Ex.-1011, 11-12, a presentation ID is included in a play list that is sent to a communication device: “[T]he RTSMS 106 transmits to the viewer 116 the *play list that has* the host name of the NRP, the reservation number, and *the presentation identification.*” Ex.-2016, p. 20 (1/13/01 Application).

A POSITA would understand that the presentation ID is an “instruction” used to obtain media, because the inclusion of the presentation ID in the play script/play list causes the communication device to include the presentation ID in a request to the streaming server: “The *media player 206 transmits a setup message* to the stream caster 304. The *setup message includes* the reservation identification, the media identification, and a *presentation identification* for the play list.” Ex.-2016, p. 31; Ex.-2012, ¶138.

The presentation ID is also an instruction to the backend system (e.g., the NRP

and/or media switch/stream casters) to enable the communication device to obtain media. Ex.-2012, ¶139. Sending the presentation ID to the backend system enables the communication device to obtain the at least one portion of the requested media. Ex.-2016 at p. 31 (1/13/01 App.) (“The *media player 206* transmits a *setup message* to the stream caster 304. The *setup message* includes the reservation identification, the media identification, and a *presentation identification* for the play list. The *stream caster 304* acknowledges to the *media player 206*, thereby confirming that the reservation was accepted and that *the media will be streamed to the media player.*”) Ex.-2016, p. 31.

Redline comparisons (Exs.-2021, 2022) showing the common disclosure between the 1/13/01 Application and the ’519 Application and the 1/13/01 Application and the ’949 Patent confirms that the ’519 Application and the ’949 patent contain at least the same subject matter as the 1/13/01 Application regarding presentation identification. Ex.-2012, ¶140.

VIII. HULU HAS NOT SHOWN THAT THE CHALLENGED CLAIMS OF THE ’887 PATENT ARE UNPATENTABLE.

A. GROUND 1: Claims 39-40, 45, 47, 52, 68, 98-101, 103, 111 and 15-117 in view of Eyal and Angles.

As set forth in Section IX.A below, there is no motivation to combine Eyal and Angles. The combination is purely based on hindsight using the ’887 Patent as a guide. Hulu overgeneralizes the technologies, provides overly simplistic reasons

why one *could* combine, and fails to consider significant technical problems resulting from combining these references.

1. Claims 39, 45, 68 and 98

- i. Eyal and Angles do not disclose or suggest “instructions received from the at least one computing device to *obtain* at least one portion of the requested media” or “instructions as to *how* the at least one portion of the requested *media is to be streamed* to the communication device.”**

Claims 39, 45, 68 and 98 recite “*instructions* received from the at least one computing device to *obtain* at least one portion of the requested media” and “instructions as to *how* the at least one portion of *the requested media is to be streamed* to the communication device.” Hulu relies solely on Eyal for these elements. Pet., 18, 19, 22. Eyal, however, does not disclose them.

First, the claims recite “instructions” separately from “identification of the at least one resource.” Hulu asserts that the “identification” of the resource is a URL. Pet., 21. For the “instruction,” however, Hulu identifies the mere order of URLs in Eyal’s play-list as instructions. But Eyal simply discloses that once playback is complete for one media file, the media player goes to the next URL on the list to obtain more media. Ex.-1005, 38:11-14 (“After the playback is complete for one media file, a URL to a next media file is signaled to the media player component on the terminal. The next URL may be determined by a sequence of a play-list”); 27:47-51; 27:53-55. The mere *order* of URLs (without more) is not separate

instructions from the URL regarding obtaining requested media or how the requested media is streamed. Indeed, Hulu itself admits that “instructions” are not merely a list of URLs. Pet., 6 (asserting that ’887 patent priority application does not disclose “instructions” because it merely describes a list of URLs). Ex.-2012, ¶161.

Second, Hulu also identifies the “instructions” as metadata that is associated with media. Pet., 22. Hulu states that this metadata “instruct[s] the communication device how to obtain, present, and adjust the media” *Id.* Eyal explains that this metadata is extracted and stored in a database. Ex.-1005, 12:37-42. The metadata provided to a user device, however, relates to how the media is *displayed* on the user device. Ex.-2012, ¶162. Hulu purposefully omits this detail.

Other than a URL (which Hulu admits is not an instruction), there is no disclosure, teaching or suggestion that any metadata from the database in the Eyal system is sent to the communication device to instruct the device how to *obtain* requested media or *how* requested media is to be streamed. A POSITA would understand that only certain data – the URL (which is not an instruction) and data related to display of the media – would be included in Eyal’s play-list. Ex.-2012, ¶163.

Indeed, as set forth in Eyal, the only metadata disclosed as being included in Eyal’s play-list other than a URL relates to how the user’s device displays/presents the media (e.g., identifying the title, artist, rating, duration on the screen; adjusting

the size of the media on the screen). Ex.-1005, 27:33-46; 36:49-59. Notably, Hulu itself recognizes that “[i]nstructions about how the player should present the media to the viewer,” “are not the claimed ‘instructions as to how . . . requested media is to be *streamed*.’” Pet., 7-8. Hulu’s expert agrees. Ex.-2019, 290:12-291:8 (admitting that instructions about *how* a media play presents media are not instruction enabling communication device to *obtain* media). Ex.-2012, ¶164.

ii. Eyal and Angles do not disclose or suggest generating information based on the “capabilities of the communication device.”

Claims 39, 45, 68 and 98 recite that the system generates specific information: (i) at least one list identifying/identification of at least a portion of the requested media, (ii) at least one identification of the at least one resource to facilitate streaming of the at least one portion of the requested media, and (iii) one or more instructions as to how the at least one portion of the requested media is to be streamed to the communication device. The claims require that this is generated based on the “capabilities of the communication device.” See, e.g., Ex.-1001, 55:31-36 (claim 39). Hulu relies solely on Eyal (Pet., 20). But Eyal does not disclose this element.

Tellingly, Hulu is completely silent regarding how the claimed information is generated based on capabilities of the communication device. Instead, Hulu merely points to Eyal’s discussion of replacing the protocol “HTTP” at the beginning of a

URL in Eyal’s play-list with the protocol “PNM.” Pet., 20.⁴ Ex.-1005, 21:35-46.

<http://www.website.com/media1> → <pnm://www.website.com/media1>

But modifying a protocol at the beginning of a *URL* string is not “generating” the claimed information based on capabilities of the communication device. Ex.-2012, ¶¶234-235. Indeed, there is no indication in Eyal that the Eyal system has any knowledge regarding details about the capabilities of a specific communication device requesting media nor does Eyal indicate how the system would even obtain such capability information. Ex.-2012, ¶¶166-167.

iii. Eyal and Angles do not disclose or suggest “generating” information including a “list” based on *both* the “capabilities of the communication device” and “characteristics” of a user.

Claims 39, 45, 68, and 98 recites that the system generates specific information: (i) at least one list identifying or an identification of at least a portion of the requested media, (ii) at least one identification of the at least one resource . . . facilitate streaming of the at least one portion of the requested media, and (iii) one or more instructions as to how the at least one portion of the requested media is to be streamed to the communication device. The claims recite that this information is generated based on *both* (1) “one or more *capabilities* of the *communication device*”

⁴ Hulu also references Eyal, 13:52-54. Pet., 20. But this passage merely states that software/hardware are used for playback.

and (2) “at least one *characteristic* associated with a *user* of the communication device.”

Relying solely on Eyal, Hulu handwaves its way through this element. Pet., 20. Eyal, however, does not disclose, teach or suggest using *both* capabilities and characteristics when generating any information, let alone the claimed information.

So, Hulu points to *separate and unrelated* discussions in Eyal regarding adjusting URLs (which Hulu asserts relates to capabilities of a communication device) as well as Eyal’s discussion of play lists that are personalized to a user. Pet., 20. Not only is Hulu’s analysis of a communication device wrong (as discussed in Section VIII.A.1.ii above), but the mere mention of a personalized play list does not disclose any details about what specific information is being personalized, let alone that any of the claimed information is personalized. Indeed, Hulu never ties characteristics and capabilities together or why a POSITA would include both when generating any specific type of information let alone the claimed information. Not only does Eyal fail to disclose all of the claimed information but, other than with hindsight of the ’887 patent, a POSITA would not generate information, let alone the claimed information, based on *both* capabilities of the user device *and* characteristics of a user. Ex.-2012, ¶¶169-170.

iv. Eyal and Angles Do Not Disclose Or Suggest “One Portion of the Requested Media”

Claims 39, 45, 68, and 98 are directed to a method of streaming requested media in *portions* (i.e., portion-by-portion or more *portions* at a time), *not* the entire media all together.⁵ Claims 39, 45, 68, and 98 each recite that the communication device (user device) receives “one portion of the requested media.” See, e.g., Ex.-1001, 55:24-25. The claims and specification of the ’887 Patent distinguish between requested media (e.g., an *entire* movie) and “portions” of requested media (e.g., a portion of a movie).

In particular, the claims recite receiving a “request for media” (a request for the *full* media). In response to the request, the communication device is sent information enabling it to obtain “at least one *portion* of the requested media.” See, e.g., Ex.-1001, 55:24-25 (claim 39), 56:52-53 (claim 45), 59:51-52 (claim 68), 63:31-32 (claim 98). To capture that the method involves streaming one or more *portions* at a time (*not* the entire media all together), the claims reference “at least one portion of the requested media.” Ex.-2012, ¶¶171-172.

⁵ Hulu completely ignore the claims’ requirement of *portions* and the discussion of *portions* in the intrinsic record.

Claim 117 provides clarity as to the meaning of the claims by reciting “generating at least one identification of at least *one other portion* of *the* requested media in the communication.” Ex.-1001, 65:35-38. That there is “one *other* portion” (a *second* portion) of *the* requested media further demonstrates that the claims are directed to a *single* piece of requested media that is delivered portion-by-portion. Ex.-2012, ¶173.

Moreover, the specification describes a *single* media clip being made up on *multiple* portions of media: “when the viewer 120 has received *all* of the media for the *first* media clip” Ex.-1001, 22:11-12; Ex.-2012, ¶174.

And the ’044 provisional application, which is incorporated by reference into the ’887 patent, provides support that the claims involve portion-by-portion delivery of requested media. The ’044 provisional states that the media file name (i.e., “mediaid”) in a URL “represents the unique identifier for an *individual piece of content* that is *part of the presentation*.” Ex.-1011, 19; Ex.-2012, ¶174.

Eyal, on the other hand, does *not* disclose identifying, streaming or obtaining *portions* of requested media (e.g., a portion of a movie) as set forth in the claims. Instead, the Eyal system merely provides links (URLs) to the *full* media (e.g., an *entire* movie). This is because the Eyal system is not itself streaming or controlling the streaming of media; rather Eyal is just a search engine that identifies the location of media on third-party websites. Given that third-party websites are

streaming the media and managing links to the media as well as the media itself, the Eyal system cannot possibly provide for delivering only *portions* of requested media. That Eyal’s system is dealing with full pieces of media is evident from Eyal’s specification, which states that media associated with the URL is characterized by “one or more parameters” such as genre (e.g., rock song, romance movie) or category (e.g., soft rock song, 1980s movie). Ex.-1005, 19:48-59, 20:1-3. Only the *full* media, not portions, would be characterized in this way. Ex.-2012, ¶175.

Likewise, Angles does not disclose identifying, streaming or obtaining portions of requested media. Instead, Angles explicitly discloses a web page merged with an advertisement. Ex.-1045, 8:10-30, 12:64-13:6, Fig. 1. Ex.-2012, ¶¶176-177.

**v. Eyal and Angles Do Not Disclose Or Suggest a
“revenue sharing rule” for sharing “revenue
generated by streaming the . . . requested media.”**

Claims 39, 45, 69 and 98 recite a “revenue sharing rule” for sharing revenue “generated by streaming the . . . requested media.”

Hulu concedes that Eyal does not teach the “revenue sharing rule” claim element. So, Hulu relies solely on Angles for this element based on the mere mention of advertisements in Eyal.

Hulu asserts that Angles teaches an “advertising module” that “implements a revenue sharing rule between content providers, Internet service providers and pay consumers.” Pet., 23-24 (citing Angles at 15:25-43 and 16:20-56). Ex.-2012, ¶¶179-180. As discussed in Section IX.A below, however, there is no motivation to combine the teaching of Angles with Eyal.

For example, Angles is directed to inserting advertisements into *the face of a webpage* e.g., a banner advertisement on a webpage. Eyal, on the other hand, is completely different technology and has nothing to do with inserting advertisements into the face of a webpage. In particular, Eyal is directed to a media streaming search engine and, as admitted by Hulu, inserts advertisements *between streaming media clips*. Pet., 23 (citing Eyal at 13:1-4). Moreover, Eyal does not disclose, teach or suggest that advertisements inserted between streams are revenue generating advertisements that can be shared. A POSITA would not look to webpage advertising of Angles to apply to how advertisements are inserted into media streams in Eyal. Ex.-2012, ¶180.

vi. Eyal and Angles Do Not Disclose Or Suggest “sharing . . . revenue generated by streaming the . . . requested media.”

Claims 39, 45, 69 and 98 recites “sharing . . . revenue *generated by streaming . . . the requested media.*” Hulu admits that Eyal does not disclose this

element. Eyal simply does not disclose any revenue sharing or that advertisements discloses in Eyal are revenue generating advertisements that can be shared.

Hulu relies solely on Angles for this element. But Angles also does not disclose this element. In particular, Angles is directed to advertisements provided on the *face of a webpage*. Angles is not dealing with inserting advertisements into media stream and, thus, Angles does not disclose any sharing of revenue that is “generated by streaming” media. Instead, Angles discloses sharing revenue based on advertisements places of the *face of a webpage*. And a POSITA would not take the concept of revenue sharing associated with advertisements on the face a webpage and apply that to advertisements inserted in streaming media (e.g., ads inserted between media clips being streamed to a user device). Ex.-2012, ¶180. As such, without any disclosure in Angles of sharing of revenue that is “generated by streaming” media, the combination of Eyal and Angles cannot disclose the claim element.

vii. Eyal and Angles Do Not Disclose Or Suggest “the requested media . . . associated with at least one revenue sharing rule” for sharing “revenue generated by streaming.”

Claims 45, 69 and 98 recite that the requested media must be “associated with at least one revenue sharing rule” and the rule is for sharing “revenue generated by streaming.” Hulu relies solely on Angles for this element. Hulu makes the conclusory assumption that media is associated with a revenue sharing rule through

the use of targeted advertisements. Pet., 26. Hulu is wrong. That Angles discloses targeted advertisements says nothing about whether a specific requested media is (1) associated with a revenue sharing rule or further (2) associated with a revenue sharing rule for sharing “revenue generated by streaming.” Ex.-2012, ¶183.

Claim 45 recites that the system generates certain information (claim elements (i), (ii), (iii)) based on "at least one rule." Hulu relies solely on Eyal for this element. Pet., 28. According to Hulu, Eyal teaches generating a play-list based on a rule for selecting media for inclusion in the play-list. Id.

That Eyal's play-list is generated based on purported rules for selecting media, however, is irrelevant. The claims require generated claimed information based on a rule. Hulu has failed to identify any rule that is used to generate the claimed information.

2. Claims 40, 47, 52, 99-101, 103, 111 and 115-117.

Claims 40, 47, 52, 99-101, 103, 111 and 115-117 are patentable over Eyal and Angles for at least the reasons set forth in their respective independent claims.

The dependent claims are not obvious for the additional reasons set forth below.

Claim 52 recites various rules. Hulu relies solely on Angles for this element. As discussed in Sections VIII.A.1.v and IX.A, there is no motivation to combine the teaching of Angles with Eyal. Ex.-2012, ¶185.

Claim 101 recites that in addition to the three pieces of information (elements (i), (ii) and (iii)) set forth in claim 98, a fourth piece of information is generated: “(iv) a unique identifier for use by the . . . communication device to enable the . . . portion of requested media to be streamed to the communication device.” Ex.-1001, 64:5-9. Hulu points to each URL and metadata associated with the URL in Eyal as allegedly being the recited “unique identifier.” Pet., 38. But Hulu already relied on the metadata as the “identification of the at least a portion of the requested media” and the URL as the “at least one identification of the at least one resource.” Pet., 21, 35. Ex.-2012, ¶186.

Claim 111 recites that the “instructions” relate to media format, a media language, a media sequence, and an advertisement insertion. As discussed above in Section VIII.A.1.i, these instructions must be (1) separate from the other disclosed elements (i) and (ii) and (2) the instructions are used to *obtain* requested media and related to *how* requested *media is to be streamed*.

Hulu merely relies on Eyal’s disclosure of a media format, media sequence and advertisement insertion. Pet., 40. A media format, by itself, is used is not an instruction that is generated and transmitted to the communication device as required by claim 98 from which claim 111 depends. Moreover, media sequence and advertising insertion relate to the mere *order* that the URLs appear in Eyal’s playlist. But Hulu asserts that the URL(s) is the claimed “identification of the at least one

resource.” The claims, however, require that the instructions to be separate from the “identification of the at least one resource.” Thus, as discussed in Section VIII.A.1.i, the mere ordering of URLs is not a separate instruction as the claims require. Accordingly, the media sequence and advertising insertion are also not the claimed instructions. Ex.-2012, ¶¶187-188.

Claim 117 recites “generating at least one identification of at least one *other* portion of *the* requested media in the communication.” Claim 117 depends from claim 98, which recites “at least one portion of the requested media.” Claim 117 recites “one *other* portion” (a second portion) of the *same* requested media. Neither Eyal nor Angles disclose the same piece of requested media being streamed in multiple portions. Ex.-2012, ¶189.

B. GROUND 2: Claim 105 in view of Eyal, Angles and Chang.

As set forth in Section IX.B below, there is no motivation to combine Eyal, Angles and Chang. The combination is purely based on hindsight of the ’887 patent. Hulu overgeneralizes the technologies, provides overly simplistic reasons why one *could* combine, and fails to consider significant technical problems resulting from combining these references.

Claim 105 depends from claim 98 and recites “generating and transmitting the communication based on one or more other rules associated with the requested media that specify at least one of a frame rate, a bit rate, a sequence associated with

the requested media, and a format associated with the requested media.” Ex.-1001, 64:35-40. Ex.-2012, ¶190.

Hulu refers to Chang for fields allegedly specifying frame rate, bit rate and sequence. Pet., 44. However, Chang does not disclose a communication sent to the end user that is generated *based on rules* that specify frame rate, bit rate or sequence. Chang merely discloses that frame rate, bit rate and sequence are *included* in a HotAudio file. See Ex.-1009, 7:1-20 and Table 4 (frame rate), 6:17-44 and Table 2 (bit rate and sequence) and 11:17-33 (bit rate). Even if Chang could be combined with Eyal and Angles, the combination fails to teach generating a communication sent to the “communication device” (end user) that is *based on rules* specifying bit rate, frame rate or sequence. Ex.-2012, ¶191.

SITO’s expert, Michael Adams, explains that Chang does not cure the deficiencies of Eyal/Angles for claim 105 and, moreover, that a POSITA would not combine Chang with Eyal and Wolfe. Ex.-2012, ¶¶190-191. Mr. Adams states that contrary to Hulu’s assertion, the play-list of Eyal, the fee sharing of Angles, and the HotAudio File of Chang are very different elements. *Id.*, ¶151. Mr. Adams also explains that only Eyal specifically refers to playlists and that the “Chang patent is focused on synchronizing a number of separate streams delivered from different sources to produce a multimedia presentation for a user.” *Id.*

Accordingly, Chang is addressing a very different problem from Eyal, which

is concerned with streaming a single media file, and thus Chang’s approach is inapplicable to Eyal’s system. *Id.* Accordingly, claim 105 is patentable over the combination of this ground.

C. GROUND 3: Claims 39, 45, 52, 68, 98-101, 103, 105, 111, 115 and 117 in view of Madison and Wolfe.

As set forth in Section IX.C below, there is no motivation to combine Madison and Wolfe. The combination is purely based on hindsight using the ’887 patent as a template. Hulu overgeneralizes the technologies, provides overly simplistic reasons why one *could* combine, and fails to consider significant technical problems resulting from combining these references.

1. Claims 39, 45, 68 and 98.

i. Madison and Wolfe do not disclose or suggest “one portion of the requested media.”

As discussed above in Section VIII.A.1.iv, claims 39, 45, 68, and 98 are directed to a method of streaming requested media in *portions* (i.e., portion-by-portion or more *portions* at a time), *not* the entire media all together. Claims 39, 45, 68 and 98 each recite that the communication device (user device) receives “one portion of the requested media.” See, e.g., Ex.-1001, 55:24-25. The claims and specification of the ’887 Patent distinguish between the requested media (e.g., an *entire* movie) and “portions” of requested media (e.g., a portion of a movie). Ex.-2012, ¶¶193-198.

In particular, the claims recite receiving a “request for media” (a request for

the *full* media). In response to the request, the communication device is sent information enabling it to obtain “at least one *portion* of the requested media.” See, e.g., Ex.-1001, 55:24-25 (claim 39), 56:52-53 (claim 45), 59:51-52 (claim 68), 63:31-32 (claim 98). To capture that the method involves streaming requested media one or more *portions* at a time (not the entire media all together), the claims reference “at least one portion of the requested media.” See, e.g., Ex.-1001, 63:29-32 (claim 98); Ex.-2012, ¶194.

Claim 117 provides some clarity as to the meaning of the claims by reciting “generating at least one identification of at least *one other portion* of the requested media in the communication.” Ex.-1001, 65:35-38. That there is “one *other portion*” (a *second* portion) of *the* requested media further demonstrates that the claims are directed to a *single* piece of requested media that is delivered portion-by-portion. Ex.-2012, ¶195.

Moreover, the specification describes a *single* media clip being made up on *multiple* portions of media: “when the viewer 120 has received *all* of the media for the *first* media clip” Ex.-1001, 22:11-12. And the ’044 provisional application, which is incorporated by reference into the ’887 patent, states that the media file name (i.e., “mediaid”) in a URL “represents the unique identifier for an *individual piece of content* that is part of the presentation.” Ex.-1011, 19. Ex.-2012, ¶196.

Madison and Wolfe, on the other hand, do not disclose identifying, streaming or obtaining *portions* of requested media (e.g., a portion of a movie) as set forth in the claims. Hulu does not rely on Wolfe for this element; Hulu relies solely on Madison. Pet., 55, 59-60. Madison, however, does not disclose, teach or suggest streaming a video in portions (i.e., portion-by-portion). Hulu attempts to gloss over this issue by pointing to a redirector file containing a number of URLs, which each identify a stream file. Pet., 55 (citing Ex.-1051, [0109]-[0110]).

```
<ASX>
  <ENTRY>
    <REF HREF="mms://mediaserver.company.com/stream1.asf">
    <REF HREF="mms://mediaserver.company.com/stream2.asf">
    <REF HREF="mms://mediaserver.company.com/stream3.asf">
  </ENTRY>
</ASX>
```

Id., [0110]. As shown above in yellow highlights, Madison’s redirector file includes “stream1,” “stream2,” “stream3.” But Madison does not disclose, teach or suggest that these are separate portions of the same video (requested media). And a POSITA would not understand that each stream is a portion of a *single* video. To the contrary, a POSITA would understand that each stream is its own media, i.e., the Madison playlist contains multiple separate videos (separate streams), not *portions* of a *single* video. Ex.-2012, ¶¶197-198.

ii. Madison and Wolfe do not disclose or suggest “*identifying . . . whether the requested media is available for streaming . . .*”

Claims 39, 45 and 68 recite a “computing device” “receiving . . . a request for media” and “*identifying . . . whether the requested media is available for streaming to the . . . communication device.*” See, e.g., Ex.-1001, 55:20-22, 55:27-30 (claim 39). In other words, the claims require an identification of availability of requested media *in response to* the computing device receiving a request for media. Hulu only cites Madison for this element. Pet., 55-56.

In particular, Hulu points to Madison’s disclosure that the Streams2 table has expiration dates so that the associated stream ID will be removed if its expiration date has passed. Pet., 55-56 (citing Ex.-1051, [0034], [0047], [0109]). Madison, however, is simply describing a routine function of database *maintenance* to delete old files, *not* the claimed step of “*identifying . . . whether the requested media is available for streaming to the . . . communication device*” *in response to* the computing device receiving a request for media.

Hulu cites Madison at [0047], which discloses that “a Stream may be deleted either upon request of the client 102” or “based upon the content expiring” as recognized by a “script running on the system [that] *periodically scans* the Streams2 Table 214 for records having an expiration date equal to or greater than . . . the then current time.” Hulu also cites Madison at [0109] as disclosing that “the

Streams2 Table” is “in the CM database.” Pet., 56.

None of these passages, however, discloses, teaches or suggests the claimed step of “*identifying*. . . whether *the* requested media is *available* for streaming to the . . . communication device” *in response to* the computing device receiving a request for media. Ex.-2012, ¶¶200-202. Instead, these passages pertain to routine maintenance of files.

iii. Madison and Wolfe do not disclose or suggest “generating” information based on “a ‘characteristic associated with a user of the communication device.’”

Claims 39, 45, 68 and 98 each recite “generating” information based on “a ‘characteristic associated with a user of the communication device.’” See, e.g., Ex.-1001, 55:33-34 (claim 39). See Ex.-2012, ¶¶203-205.

With regard to Madison, Hulu simply asserts that the inclusion of an “ad tag,” which “specifie[s] where an advertisement is to be insert” is a characteristic of a user. Pet., 57. That the Madison system includes an advertisement, however, has nothing to do with the characteristic of a user. Indeed, Hulu relies on the disclosure of advertisements in Madison only as a hook to point to targeted advertising in Wolfe. In particular, Hulu points to Wolfe’s disclosure of targeted advertisement insertion and asserts that targeted advertisement is based on a user “characteristic.” *Id.* This is beside the point.

Hulu simply ignores the actual requirement of the claim language. The

claims do *not* merely require advertisements or any type of information to be based on a user “characteristic.” To the contrary, the claims recite that the system generates a group of *specific* information based on user “characteristics”: (i) at least one list identifying/identification of at least a portion of the requested media, (ii) at least one identification of the at least one resource to facilitate streaming of the at least one portion of the requested media, and (iii) one or more instructions as to how the at least one portion of the requested media is to be streamed to the communication device. That Wolfe discloses targeted advertising says nothing about whether Wolfe discloses the claimed information being based on a user “characteristic.” Ex.-2012, ¶¶204-205.

- iv. **Madison and Wolfe do not disclose or suggest “instructions received from the at least one computing device to *obtain* at least one portion of the requested media” or “instructions as to *how* the at least one portion of the requested *media is to be streamed* to the communication device.”**

Claims 39, 45, 68 and 98 recite “*instructions* received from the at least one computing device to *obtain* at least one portion of the requested media” and “*instructions* as to *how* the at least one portion of *the requested media is to be streamed* to the communication device.” Hulu relies solely on Madison for this element. Pet., 18, 19, 22. Madison, however, does not disclose this element. See Ex.-2012, ¶¶206-211.

Hulu points to entries in the Stream2 table – ad tags (which relates to *where* an ad is inserted), start time, and bit rate. Pet., 59. This information relates to how media is *displayed/presented* to the user; the information is *not* used to *obtain* requested media nor it is related to how media is to be streamed. Notably, Hulu itself recognizes that “[i]nstructions about *how* the player should *present* the media to the viewer,” “are not the claimed ‘instructions as to *how* . . . requested media is to be streamed.’” Pet., 7-8. Hulu’s expert agrees. Ex.-2019, 290:12-291:8 (admitting that instructions about *how* a media play *presents* media are not instruction enabling communication device to *obtain* media).

Recognizing the weakness of its position, Hulu relies on a *third* reference – “All About AXS Files” (“ASXF”) – to demonstrate this element. Pet., 59. ASXF is *not part of any ground* asserted by Hulu in this IPR (Pet., 2) and *it should be disregarded for that reason alone*. Nor has Hulu argued that it would be obvious to combine ASXF with both Madison and Wolfe [[Wiser]]. Instead, Hulu attempts to backdoor this unasserted combination because Hulu recognizes that relying on three separate references to assert obviousness on an independent claim is tenuous. Nevertheless, the claimed instructions are not disclosed by the combination of Madison and ASXF.

In particular, Hulu points to Madison’s disclosure of ASX files and asserts that ASX files include instructions. Pet., 58-59. But the claim does not merely

require any type of instructions. Instead, the claims require instructions to *obtain* media as well as related to *how* media is to be streamed. Hulu glosses over this requirement and instead merely looks for any instance where the term “instructions” is used.

Hulu asserts that “when a user’s device receives an ASX file, it launches Windows Media Player, which ‘looks in the ASX for instructions on where to get the ASF file, and then starts the stream playing.’” *Id.* But the instructions being referred to here are the URLs. And URLs cannot be the claimed “instructions” because the claims require “instructions” *separate* from the “identification of the at least one resource” (which Hulu asserts is a URL (Pet., 58)).

Hulu also asserts that the ASX playlists allows one “to schedule content to play in succession, or to insert advertising or special interest clips into a stream after a specific period of time or at a specific point.” Pet., 59. Scheduling and where/when to insert advertising/other clips pertain to *how* media is *displayed/presented* to the user. Hulu itself recognizes that “[i]nstructions about *how* the player should *present* the media to the viewer,” “are not the claimed ‘instructions as to *how* . . . requested *media is to be streamed*’” as required by the claims. Pet., 7-8. Hulu’s expert agrees. Ex.-2019, 290:12-291:8. Ex.-2012, ¶¶208-211.

v. Madison and Wolfe Do Not Disclose Or Suggest a “revenue sharing rule” for sharing “revenue generated by streaming . . . the portion of requested media.”

Claims 39, 45, 69 and 98 recite a “revenue sharing rule” for sharing revenue “generated by streaming the . . . requested media.” Ex.-1001, 55:49-52. See Ex.-2012, ¶¶212-214.

Hulu concedes that Madison does not teach the “revenue sharing rule” claim element. So, Hulu relies solely on Wolfe for this element based on the mere mention of advertisement in Madison. As discussed in Section IX.C below, however, there is no motivation to combine the teachings of Wolfe with Madison.

Hulu asserts that Madison teaches an “account tallying and royalty calculation.” Pet., 60 (citing Wolfe at 5:26-44).

Wolfe describes that a “program proceeds to block 72 where the program tallies accounts listing the frequency of play and transmission of music and data . . . to subscribers.” Ex.-1044, 5:28-31. “The program proceeds . . . to decrement advertising availability.” *Id.*, 5:31-32. “Together, this information is useful . . . for calculating (if necessary) royalty fees payable to the owners of the music . . .” *Id.*, 5:33-36. The passages above—the only ones relied upon by Hulu—generally describe that a portion of ad revenue can be given to owners of the content. The language “useful . . . for calculating (if necessary) royalty fees” does not disclose a programmed “revenue sharing rule” that is used by the system to calculate royalties

as recited by the claims (as opposed to a person taking various pieces of collected information and performing a calculation by hand). That Wolfe also mentions “preparing billing data or advertisers” as opposed to preparing an actual bill further indicates that the system itself is not performing billing tasks or using rules. Ex.-2012, ¶214.

vi. Madison and Wolfe Do Not Disclose Or Suggest “the requested media . . . associated with at least one revenue sharing rule” for sharing “revenue generated by streaming”

Claims 45, 69 and 98 recite that the requested media must be “associated with at least one revenue sharing rule” and the rule is for sharing “revenue generated by streaming.” Hulu relies solely on Wolfe for this element. Hulu makes the conclusory assumption that media is associated with a revenue sharing rule because royalty fees are payable to a music owner. Pet., 61. Hulu is wrong. That Wolfe discloses paying royalties says nothing about whether a specific requested media is associated with a revenue sharing rule for sharing “revenue generated by streaming.” See e.g., Section VIII.C.1.v above; Ex.-2012, ¶215.

Claim 45 recites that the system generates certain information (claim elements (i), (ii), (iii)) based on "at least one rule." Hulu relies on Madison's disclosure of records about the content (e.g., platform to which content relates, expiration date of content) and Wolfe's disclosure of user information and

preferences for targeted advertising. Pet., 61-63. According to Hulu, combining Madison and Wolfe teaching generating a redirector file based on a rule for selecting media for inclusion in the redirector file.

That a redirector file is generated based on purported rules for selecting media, however, is irrelevant. The claims require generated claimed information based on a rule. Hulu has failed to identify any rule that is used to generate the claimed information.

2. Claims 52, 99-101, 103, 105, 111, 115 and 117.

Claims 52, 99-101, 103, 105, 111, 115 and 117 are patentable over Eyal and Wolfe for at least the reasons set forth in their respective independent claims.

The dependent claims are not obvious for the additional reasons set forth below.

Claim 52 recites various rules which are used to generate information (element (i), (ii), (iii)) set forth in claim 45. Hulu relies solely on Madison for this element and simply points to Madison's discussion of storing media on particular servers and content owner's identifying whether files are secure. Hulu, however, ignores what rules are used for in the claim. Neither of the features that Hulu identifies are rules that are used to generate the information as required by the claims. Ex.-2012, ¶217.

Claim 99 recites the user “characteristic” is a “user identification” and the “user identification” is used to generate and transmit information (element (i), (ii), (iii)) set forth in claim 98, from which claim 99 depends. As set forth in Section VIII.C.1.iii, neither Madison nor Wolfe disclose using a user identification to generate a communication with the information as required by the claim. Ex.-2012, ¶218.

Claim 100 recites other types of user “characteristics.” Claim 98, from which claim 100 depends, recites that such characteristics are used to generate and transmit a communication containing certain information (element (i), (ii), (iii)) set forth in claim 98. Hulu ignores this requirement. Hulu simply identifies numerous features in Madison and Wolfe that purportedly show user “characteristics.” Hulu, however, ignores that the characteristics serve a certain function. Neither Madison nor Wolfe disclose using a user identification to generate the communication having the claimed information as required by the claim. Ex.-2012, ¶100.

Claim 101 recites that in addition to the three pieces of information (elements (i), (ii) and (iii)) set forth in claim 98, a fourth piece of information is generated: “(iv) a unique identifier for use by the . . . communication device to enable the . . . portion of requested media to be streamed to the communication device.” Ex.-1001, 64:5-9. Hulu points to each URL in Madison as allegedly being the recited “unique identifier.” Pet., 69. But Hulu already relied on the URL as the “identification of the

at least one portion of the requested media” and “at least one identification of the at least one resource.” Pet., 58. Accordingly, the URL cannot also meet the fourth piece of information set forth in claim 101. Ex.-2012, ¶220.

Claim 111 recites that the “instructions” relate to media format, a media language, a media sequence, and an advertisement insertion. As discussed above in Section VIII.C.1.iv, these instructions must be (1) separate from the other disclosed elements (i) and (ii) and (2) instructions to *obtain* requested media and related to *how* requested *media is to be streamed*. Ex.-2012, ¶¶221-222.

Hulu merely relies on Madison’s disclosure of a media format, media sequence and advertisement insertion. Pet., 70. A media format, by itself, is used is not an instruction that is generated and transmitted to the communication device as required by claim 98 from which claim 111 depends. Ex.-2012, ¶222. Moreover, media sequence and advertising insertion relate to the mere *order* that the URLs appear in Madison’s playlist. But Hulu asserts that the URL(s) is the claimed “identification of the at least one resource.” The claims, however, require that the instructions to be separate from the “identification of the at least one resource.” Thus, as discussed in Section VIII.C.1.iv, the mere ordering of URLs is not a separate instruction as the claims require. Accordingly, the media sequence and advertising insertion are also not the claimed instructions.

Claim 117 recites “generating at least one identification of at least one *other* portion of *the* requested media in the communication.” Claim 117 depends from claim 98, which recites “at least one portion of the requested media.” Claim 117 recites “one *other* portion” (a second portion) of the *same* requested media. Neither Madison nor Wolfe disclose the same piece of requested media being streamed in multiple portions. Ex.-2012, ¶223.

IX. A POSITA WOULD NOT BE MOTIVATED TO COMBINE HULU’S REFERENCES

Hulu chose its references purely based on hindsight knowledge of the ’887 patent. Indeed, when asked “[a]s of 2000 and 2001, there were many different and alternative ways being proposed to implement streaming media systems,” Hulu’s expert, Dr. Houh, admitted that “[t]here are so many combinations of the different proposed methods, and papers, and, you know, different ways of doings things, that there are -- **there are a lot of things to try.**” Ex.-2019, 130:1-3, 21-24; 125:12-23 (admitting that in 2000/2001 timeframe when implementing streaming systems, “I wouldn’t have expected there to be some sort of consensus” and “there were lots of people trying lots of different things”).

A. Eyal and Angles disclose *fundamentally different* systems.

While Eyal and Angles *generally* relate to the delivery of media, the two systems are *fundamentally different*. Eyal discloses a *search engine* that enables a user computer to search for and obtain media from multiple third party websites (i.e.,

websites that the Eyal system does not control, manage or operate) (see Section VI.A). Eyal discusses inserting advertisements *between media streams*. Angles, on the other hand, discloses a system for simply inserting advertisements into *the face of a webpage*. In Angles, a content provider web site delivers a web page along with an embedded ad request. The ad request causes the user computer to insert a customized advertisement into the web page itself (see Section IV.B). Angles has nothing to do with inserting advertisements between media streams or a search engine. See Ex.-2012, ¶¶141-150.

Moreover, Eyal does not disclose, teach or suggest advertisements inserted between streams are revenue generating advertisements that can be shared. As such, Eyal has no concept of revenue sharing and, thus, a POSITA would have no reason to look to Angles' disclosure of revenue sharing. This is especially true given that Angles relates to advertisements on the face of webpages whereas Eyal relates to advertisements inserted between streaming media clips.

Another fundamental difference is that Eyal discloses information about user computer behavior (e.g., end user computer) but not information about third party server-side behavior (e.g., third party web sites). On the other hand, Angles discloses information about server-side behavior including the content provider 14 and the advertisement provider 18. Ex.-1045, Figs. 1, 4.

Moreover, whereas Eyal seeks to identify media that is freely available from

numerous third-party websites over a network such as the Internet, Angles requires the media content provider and consumers to register with the advertisement computer system which restricts access to requested content (e.g., music) to only those consumers who “pay” for the content by viewing advertisements. Ex.-1045, 3:3-9, 3:21-27, 3:31-38, Fig. 1. This is yet another reason why a POSITA would not be motivated to combine Angles with Eyal.

The requirement in Angles is that the “content provider websites also register[s] with the advertisement provider before they can receive the customized advertisement services.” Ex.-1045, 3:32-34. Eyal is unable to apply such a requirement because Eyal has no contractual arrangements with the hundreds or thousands of third party websites the Eyal system allows the end user client to search. Thus, a POSITA would understand that Angles is truly incompatible with Eyal.

Moreover, Eyal teaches away from the approach for content distribution taken by Angles. Indeed, attempting to “improve” the Eyal system by applying the principles from Angle would eliminate Eyal’s benefit of providing access to thousands of third-party websites and would instead lock Eyal into a single media site governed by Angle’s content provider computer 14 and advertisement provider computer 18. A POSITA would not modify or combine Angles into Eyal because of these problems.

Further, Eyal delivers to the end user a play-list with URLs enabling access to

the various corresponding websites to allow a playback of the media files corresponding to the URLs. Angles, on the other hand, does not include a play-list of URLs delivered to the end user but instead provides for the user to access a single website using its link. Ex.-1045, 7:65-8:10, 12:64-13:6, 15:14-24, Fig. 1. A POSITA would not seek to combine Eyal and Angles because of the opposing approaches they take in accessing content.

In sum, Eyal and Angles are truly disparate systems with completely different approaches to delivering content to users. A POSITA would not be motivated or otherwise inclined to attempt to combine Eyal and Angles. Ex.-2012, ¶¶141-150.

Hulu focuses on Eyal's passing statement that "media advertisements may be inserted into the play-lists in various locations between media clips" (Eyal at 13:1-8) and tries to link it to Angles' delivery of an advertisement along with a single web page. Pet., 14-15. Angles discloses that "the advertising module 62 selects and retrieves the customized advertisement 30 from the advertising database and sends the customized advertisement 30 to the consumer." Ex.-1045, 21:9-12. In Angles, there is no actual *insertion* of an advertisement into the media, it is simply displayed in some way to the consumer as indicated by "[u]pon receiving the advertising request, the advertising provider computer generates a custom advertisement . . . [which] is then combined with the offering from the content provider computer and

displayed to the consumer.” *Id.*, Abstract. Ex.-2012, ¶¶149-150.

A POSITA would not be inclined to attempt to combine Angle’s system for delivering an advertisement with a single web page from a single website with Eyal’s system which inserts advertisements between media clips in a play-list linked to many websites because they are completely opposing systems.

B. Eval, Angles and Chang

A POSITA would not combine Chang with Eyal and Angles. Ex.-2012, ¶151. The play-list of Eyal, the fee sharing of Angles, and the HotAudio File of Chang are very different elements. Further, only Eyal specifically refers to playlists and the “Chang patent is focused on synchronizing a number of separate streams delivered from different sources to produce a multimedia presentation for a user.” *Id.* Accordingly, Chang is addressing a very different problem from Eyal, which is concerned with streaming a single media file, and thus Chang’s approach is inapplicable to Eyal’s system. *Id.* Accordingly, a POSITA would not be motivated to combine Chang into Eyal and Angles.

C. Madison and Wolfe

Madison and Wolfe are distinctly different types of systems. See Ex.-2012, ¶¶152-159. Madison discloses a system that allows clients to upload content to a server and to manage that content by creating pre-defined playlists comprised of the uploaded content. Before they can do this they must register and create a client

account. These playlists can then be shared (e.g., on a website) so that other users of the system can retrieve and play them. Madison is thus focused on sharing content between a community of clients/users which are not distinguished. As such, it is simply a system for sharing media content within a community of clients/users.

Madison makes only a singular reference to an ad tag that could be used to place an advertisement in the media and is otherwise silent on the matter. It is clear Madison does not rely on or see advertising as particularly important.

Wolfe describes a system with a subscriber database that contains “subscriber dossiers.” However, in Wolfe the subscribers can only stream music after they are authenticated which is provided by a content owner. As such the content owner in Wolfe is a very different entity than in Madison.

Because the goals of Madison and Wolfe are so different, it would be unlikely for a POSITA to see any reason to combine them, and it would be entirely impractical to do so. Madison and Wolfe have different models of subscriber/client management, and while Madison simply allows a client to register and create an account, Wolfe requires a subscriber dossier to be created in a database with a much more complete profile of the subscriber. Ex.-2012, ¶¶156-157.

As such Wolfe is focused on advertising support for the cost of content while in Madison the community of clients uploads that content without any compensation.

For the reasons stated above, a POSITA would not be motivated to combine

Madison and Wolfe. Ex.-2012, ¶¶158-159.

X. CONCLUSION

For the foregoing reasons, the Petition should be denied.

Respectfully submitted,

CARMICHAEL IP, PLLC

/James T. Carmichael/

James T. Carmichael (Reg. No. 45,306)

Attorney for Petitioner

Date: August 11, 2021

8000 Towers Crescent Drive

13th Flr.

Tysons Corner, VA 22182

(703) 646-9255

CERTIFICATE OF COMPLIANCE

Pursuant to 37 C.F.R. § 42.24(d), Patent Owner certifies that this Patent Owner's Response includes 13,080 words, as measured by Microsoft Word, exclusive of the table of contents, table of authorities, certificate of service or word count, and appendix of exhibits or claim listing.

Dated: August 11, 2021

By: /s/ Jason S. Charkow

Jason S. Charkow

Registration No. 46,418

CERTIFICATE OF CORRECTED BRIEF

The undersigned hereby certifies that this Corrected Patent Owner's Response contains no substantive changes from the Patent Owner's Response filed August 11, 2021.

Dated: December 16, 2021

By: /s/ Minghui Yang
Minghui Yang
Registration No. 71,989

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the foregoing **CORRECTED PATENT OWNER'S RESPONSE TO PETITION *FOR INTER PARTES* REVIEW OF U.S. PATENT NO. 8,825,887** was served in its entirety by filing these documents through the PTAB E2E System, as well as by email on the counsel of record for the Petitioner.

Dated: December 15, 2021

By: /s/ Minghui Yang
Minghui Yang
Registration No. 71,989