

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.

IPR2021-00219
Patent 9,135,635 B2

Before JONI Y. CHANG, THOMAS L. GIANNETTI, and
MICHAEL T. CYGAN, *Administrative Patent Judges*.

GIANNETTI, *Administrative Patent Judge*.

JUDGMENT
Final Written Decision
Determining All Challenged Claims Unpatentable
35 U.S.C. § 318(a)

I. INTRODUCTION

Hulu, LLC (“Petitioner”) filed a Petition requesting *inter partes* review of claims 1–5, 7, 11–13, 17, 18, 20, and 22 (“the challenged claims”) of U.S. Patent No. 9,135,635 B2 (Ex. 1001, “the ’635 patent”). Paper 2 (“Pet.”), 1. SITO Mobile R&D IP, LLC and SITO Mobile Ltd. (collectively, “Patent Owner”) filed a Preliminary Response (Paper 6). On May 10, 2021, we instituted *inter partes* review as to all challenged claims for all grounds of unpatentability asserted in the Petition. Paper 11 (“Inst. Dec.”).

After institution, Patent Owner filed a Response (Paper 20, “PO Resp.”) and a Sur-reply (Paper 24, “Sur-reply”). Petitioner filed a Reply (Paper 23, “Reply”). An oral hearing was held on February 8, 2022, and a transcript has been entered into the record as Paper 29 (“Hearing Tr.”).

This Final Written Decision is entered pursuant to 35 U.S.C. § 318(a). For the reasons that follow, Petitioner has demonstrated by a preponderance of the evidence that claims 1–5, 7, 11–13, 17, 18, 20, and 22 of the ’635 patent are unpatentable.

II. PRELIMINARY MATTERS

A. Related Matter

The parties indicate that the ’635 patent is involved in *SITO Mobile R&D IPI, LLC and SITO Mobile, Ltd. v. Hulu, LLC*, Case No. 6:20-cv-00472-ADA (W.D. Tex. 2020). Pet. 83; Paper 5, 1.

B. Real Parties-in-Interest

Petitioner identifies Hulu, LLC as the real party-in-interest. Pet. 83. Patent Owner identifies SITO Mobile R&D IP, LLC and SITO Mobile, Ltd. as the real parties-in-interest. Paper 5, 1.

C. The '635 Patent

The '635 patent is titled “System and Method for Routing Media.” Ex. 1001, (54). The patent “is related to the fields of management and administration of media streaming.” *Id.* at 1:36–37. According to the '635 patent, the demand for digital media streaming services was increasing because digital media streaming can be used to create enhanced consumer and business services. *Id.* at 1:48–52.

Figure 1 is reproduced below.

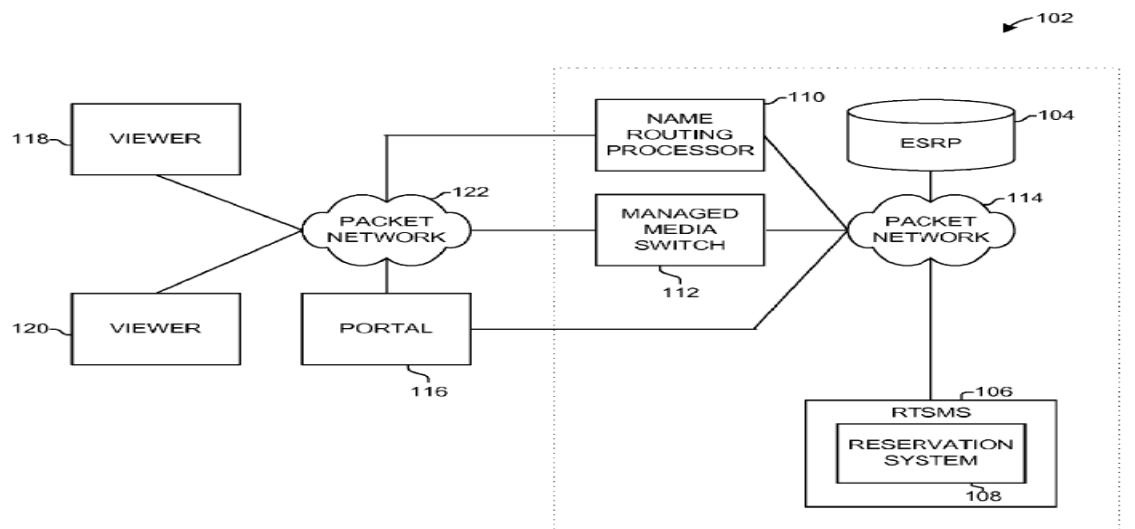


Figure 1 depicts an exemplary embodiment of a streaming system disclosed the '635 patent. *Id.* at 4:55–56. Streaming system 102 comprises enhanced service routing processor (ESRP) 104, real time switch management system

(RTSMS) 106, reservation system 108, name routing processor (NRP) 110, and managed media switch (MMS) 112. *Id.* at 4:55–62. Each of these communicates through packet network 114. *Id.* at 4:62–63. Portal 116 communicates with reservation system 108 of RTSMS 106 via packet network 114, and one or more viewers 118 and 120 may communicate with NRP 110, MMS 112, or portal 116 via packet network 122. *Id.* at 4:63–67.

The streaming system process flow begins when a viewer sends a request for media to the RTSMS. *Id.* at 9:61–67. The RTSMS then builds a “play script” that is sent to the viewer, builds a reservation that is sent to the selected NRP, and generates a reservation for network resources (e.g., MMS) for streaming the media. *Id.* at 10:6–26. The viewer uses the play script to request media, e.g., by using information in the play script to send a media locator request to the NRP for each clip. *Id.* at 13:19–14:2.

D. Illustrative Claim

Of the challenged claims, claim 1 is independent. Claims 2–5, 7, 11–13, 17, 18, 20, and 21 depend, directly or indirectly, from claim 1. Claim 1 follows:¹

1. A method comprising:

[1.a] receiving, by at least one computing device via a communication network, a request for media from a

¹ Reference numbers added by Petitioner appear in brackets.

communication device, the at least one computing device comprising a combination of hardware and software;

[1.b.] determining, by the at least one computing device, at least one portion of the requested media to be streamed to the communication device; and

[1.c.] transmitting, by the at least one computing device for reception by the communication device, at least one play script comprising:

[1.c.1] (i) at least one identification of the at least one portion of the requested media,

[1.c.2] (ii) an indication that an advertising media clip is to be streamed to the communication device,

[1.c.3] (iii) at least one universal resource locator (URL) associated with the identification of the at least one portion of the requested media, the at least one URL including at least one identification of at least one resource other than the at least one computing device to facilitate streaming of the at least one portion of the requested media, and

[1.c.4] (iv) one or more instructions for use by the communication device together with the at least one URL to cause the at least one portion of the requested media to be streamed to the communication device.

Ex. 1001, 50:52–51:12.

E. Prior Art and Other Evidence

Petitioner relies upon the references listed below (Pet. 10):

Name	Reference	Date	Exhibit No.
Eyal	U.S. Patent No. 6,389,467 B1	May 14, 2002	1005
Madison	U.S. Patent Pub. No. 2004/0015703A1	Jan. 22, 2004	1007

Name	Reference	Date	Exhibit No.
Holtz	U.S. Patent No. 6,760,916 B2	Jul. 6, 2004	1008
ASX Files	“All About ASX Files” (from archive.org) ²	1999	1017

Petitioner also relies on a Declaration of Dr. Henry Houh. Ex. 1003 (“Houh Decl.”). Patent Owner relies on a Declaration of Michael Adams. Ex. 2012 (“Adams Decl.”). The parties have submitted deposition transcripts for these witnesses.³

F. Asserted Grounds of Unpatentability

Petitioner asserts the following grounds of unpatentability (Pet. 10)⁴:

Claims Challenged	35 U.S.C. §	References
1–5, 7, 11–13, 17, 18, 20, 22	103(a)	Eyal, ASX Files
1–3, 7, 11, 13, 18	103(a)	Madison, Holtz

² Available at <https://web.archive.org/web/19990508200218/http://msdn.microsoft.com/workshop/imedia/windowsmedia/crcontent/asx.asp>). Pet. 10.

³ Ex. 1081 (“Adams Dep.”); Ex. 2019 (“Houh Dep.”).

⁴ For purposes of this Decision, we assume the claims at issue have an effective filing date prior to March 16, 2013, the effective date of the relevant amendments to the Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (“AIA”), and we apply the pre-AIA versions of 35 U.S.C. §103. *See* discussion of Priority Date, *infra*.

III. CLAIM CONSTRUCTION

In an *inter partes* review, we construe a patent claim “using the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. § 282(b).” 37 C.F.R. § 42.100(b) (2019). Under this standard, the words of a claim generally are given their “ordinary and customary meaning,” which is the meaning the term would have to a person of ordinary skill at the time of the invention, in the context of the entire patent including the specification. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–13 (Fed. Cir. 2005) (en banc).

Considering Petitioner’s arguments and supporting evidence in this present record, we find that it is necessary to construe only the claim terms identified below. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (noting that “we need only construe terms ‘that are in controversy, and only to the extent necessary to resolve the controversy’” (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999))).

A. “*at least one portion of the requested media*”

Claim element 1.b recites the step of:

determining, by the at least one computing device, *at least one portion of the requested media* to be streamed to the communication device.

Ex. 1001, 50:58–60 (emphases added).

Patent Owner asserts that the challenged claims require “streaming requested media in *portions*.” *See, e.g.*, PO Resp. 38–39. Patent Owner’s

argument implicitly construes the claim term “at least one portion of the requested media” to exclude the entirety of the “requested media,” or to require that the “requested media” be broken up into portions. *Id.*; Sur-reply 2–5, 12–15.

Patent Owner made similar arguments in CBM2020-00028, involving U.S. Patent No. 8,825,887 (“the ’887 patent”). The claims of that patent include the same term referring to “at least one portion,” and the ’887 patent shares its written description with the ’635 patent. In our Final Written Decision in CBM2020-00028 (Paper 33, 9–13), we found that the plain and ordinary meaning of this term encompasses one or more portions of the “requested media,” as well as the entirety of the “requested media.” CBM2020-00028, Paper 33 at 10–11. We declined to adopt Patent Owner’s implicit claim construction because it improperly imports extraneous limitations into the claims and excludes a preferred embodiment. *Id.* at 11–13. We rely further on the fact that the same embodiment of the ’887 patent excluded by Patent Owner’s implicit construction in CBM202-00028 is disclosed in the ’635 patent. Ex. 1001, 13:49–14:2. In that embodiment, the viewer sends a request for each media clip (the “requested media”) to a “computing device,” and each media clip is received in its entirety, not broken up or received one portion at a time, as Patent Owner alleges. *Id.*

Therefore, for the reasons stated above and in the Final Written Decision for CBM2020-00028 (Paper 33, 9–13), which we incorporate in this decision, we decline to adopt Patent Owner’s implicit claim construction for this term in this proceeding.

B. “instructions”

Claim element 1.c.4 recites “one or more instructions for use by the communication device together with the at least one URL to cause the at least one portion of the requested media to be streamed to the communication device.” Ex. 1001, 51:8–11. Neither party has proposed explicitly a construction for “instructions.” However, Patent Owner’s arguments attempt implicitly to exclude instructions relating to media formatting. PO Resp. 42–44; Sur-reply 17–18. As an example of Patent Owner’s attempt to limit this term, Patent Owner would exclude instructions (metadata) relating to how the media is displayed to the user. *See* PO Resp. 43; Sur-reply 15–16.

We do not agree with the limitations Patent Owner places on this term. Apart from being unsupported by the claim language, Patent Owner’s restrictions are inconsistent with the ’635 patent specification, which nowhere limits the term “instructions” as Patent Owner proposes. The specification refers to “special instructions, such as special media sequencing instructions, late binding media instructions, and/or special routing instructions.” Ex. 1001, 8:29–32 (emphasis added). The specification thus characterizes sequencing of media as “instructions.” *Id.* at 55:16–20 (emphasis added).

Patent Owner also focuses its argument on the alleged failure of Eyal to show URLs and instructions that are separate. Sur-reply 15. Patent Owner asserts “the claims require instructions separate from the URL.” *Id.* Petitioner disputes this, citing claim 1. Reply 17. We do not agree with

Patent Owner’s argument that the claims require separate instructions from the URL. The Federal Circuit has explained that a claim element should not be construed narrowly to require a separate and distinct component, when the claim or specification indicates that the claim element need not be a separate component, or the specification suggests that a single component can function as both elements. *Linear Tech. Corp. v. ITC*, 566 F.3d 1049, 1054–56 (Fed. Cir. 2009). Neither the claims nor the specification require the instructing information to be separate from the URLs. This is discussed further in Section V.C.5.c, *infra*.

Therefore, for these reasons, we do not adopt Patent Owner’s implicit claim construction for “instructions” that excludes the types of instructions recited in the specification, including media sequencing information.

C. “play script”

Petitioner asserts that the claim term “play script” should be construed as “a list customized for the communication device containing one or more media references and instructions executable by the communication device.” Pet. 24–25. In instituting trial, we adopted Petitioner’s construction. Inst. Dec. 19–20.

Patent Owner argues that the term “play script” should be construed as “a file containing one or more media references and other information used by a communication device to obtain media.” PO Resp. 22–25. Patent Owner contends that a script is “*not* merely a simple list.” *Id.* at 23. Patent Owner argues that a script “is a file, which can be processed by a computer

to obtain streaming media” because a play script contains “instructions.” *Id.* Patent Owner also cites the district court’s adoption of this construction. *Id.* at 21–22.

Whether or not a playlist is a file is not a meaningful distinction for the purposes of this Final Written Decision. As Petitioner asserts, all of the “play scripts” identified by Petitioner in the prior art are files, and Patent Owner “does not argue otherwise.” Reply 11. We agree with Petitioner and conclude that we need not determine which party’s construction of “play script” applies for purposes of our analysis. *Nidec*, 868 F.3d at 1017.

IV. PRIORITY DATE

Patent Owner asserts that Madison and Holtz do not qualify as prior art. PO Resp. 33–37. Patent Owner contends the ’635 patent is entitled to the benefit of the January 19, 2001, filing date of the ’519 application (application no. 09/766519) that predates Madison and Holtz. *Id.* at 33.

Petitioner contends that Patent Owner is not entitled to that earlier filing date because the ’519 application does not disclose the claimed “play script” or the claimed “instructions.” Pet. 11–12; Reply 11–14. We agree and find that the ’635 patent is not entitled to that earlier date for the reasons given by Petitioner. As Petitioner points out, the ’519 application does not refer to a play script. Reply 8. The written description of the play script was not added until 2002. *Id.* Patent Owner contends that in the priority documents, “play script is used interchangeabl[y] with play list.” PO Resp. 34–45. Patent Owner fails to demonstrate persuasively that lacking the

description added in 2002, the “play list” disclosed in the ’519 application has the required elements of the play script claimed in the ’635 patent.

Reply 12.

One of those required elements of the claimed play script is “one or more instructions for use by the communication device together with the at least one URL to cause the at least one portion of the requested media to be streamed to the communication device.” *See* claim element 1.c.4, Ex. 1001, 51:8–11. We find that there is inadequate written description in the ’519 application of “instructions . . . to enable the communication device to obtain the at least one portion of the requested media.” Reply 8–9. We agree with Petitioner that the “presentation identification” relied on by Patent Owner (Ex. 2015, 7) does not provide “instructions...to enable the communication device to obtain the at least one portion of the requested media.” Reply 13. Instead, the “presentation identification” “identifies a particular presentation . . . and its associated media.” *Id.* (quoting PO Resp. 36).

Absent an adequate written description in the ’519 application of these claimed features, Patent Owner’s attempt to obtain the benefit of the filing date of that application for the challenged claims of the ’635 patent fails. “It is elementary patent law that patent claims are entitled to the benefit of the filing date of an earlier filed application only if the disclosure of the earlier application provides support for the claims of the later application, as required by 35 U.S.C. § 112.” *PowerOasis, Inc. v. T-Mobile USA, Inc.*, 522 F.3d 1299, 1306 (Fed. Cir. 2008).

In its Sur-reply, Patent Owner attempts to introduce a new, alternative priority argument, based on Provisional Application No. 60/263,044. *See* Sur-reply 9. Introducing this new argument in a sur-reply is improper. *See Consolidated Trial Practice Guide* 74 (November 2019), (available at <https://www.uspto.gov/TrialPracticeGuideConsolidated>) (“While replies and sur-replies can help crystalize issues for decision, a reply or sur-reply that raises a new issue or belatedly presents evidence may not be considered.”). In any event, we find that the arguments presented on this issue by Patent Owner are conclusory, unsupported by the record, and in any case, unavailing for the reasons given for the ’519 application.

We find that Patent Owner has failed to demonstrate that the challenged claims of the ’635 patent are entitled to the benefit of a filing date that would disqualify Madison and Holtz as prior art.

V. ANALYSIS

A. Principles of Law

A patent claim is unpatentable under 35 U.S.C. § 103(a) if the differences between the claimed subject matter and the prior art are such that the subject matter, as a whole, “would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art;

(3) the level of ordinary skill in the art; and (4) objective evidence of non-obviousness.⁵ *See Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

B. Level of Ordinary Skill in the Art

In determining the level of ordinary skill in the art, various factors may be considered, including the “type of problems encountered in the art; prior art solutions to those problems; rapidity with which innovations are made; sophistication of the technology; and educational level of active workers in the field.” *In re GPAC, Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995) (quotation marks omitted).

Petitioner asserts that a person of ordinary skill in the art of the ’635 patent would have had “at least a bachelor’s degree in computer science, electrical or computer engineering, or equivalent, and at least two years of experience in distributed systems, multimedia streaming, and various HTTP-related technologies, or an equivalent amount of relevant work or research experience.” Pet. 20 (citing Houh Decl. ¶¶ 57–60).

Patent Owner contends a person of ordinary skill “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

⁵ Neither party presents evidence or arguments regarding objective evidence of non-obviousness.

years of work experience and training in the design and development of distributed network systems and/or media streaming.” PO Resp. 6–7.

Neither party points out any meaningful difference between the parties’ assessments. We therefore apply Patent Owner’s more detailed assessment on the level of ordinary skill in the art. This proposal is consistent with the ’635 patent, the prior art of record, and is supported by the testimony of Mr. Adams. Adams Decl. ¶¶ 27–29. However, our analysis would be the same under either party’s description.

C. Obviousness over Eyal and ASX Files

Petitioner asserts that claims 1–5, 7, 11–13, 17, 18, 20, and 22 are unpatentable under § 103(a) as obvious over Eyal and “All About ASX Files” (ASX Files). Pet. 25–54.⁶ Petitioner provides supporting testimony from Dr. Houh. Houh Decl. ¶¶ 138–202.

Patent Owner argues that Eyal and ASX Files fail to disclose certain claim limitations, and that Petitioner fails to articulate a reason to combine the prior art teachings. PO Resp. 38–48; Sur-reply 12–17. Patent Owner relies on the declaration of Mr. Adams. Adams Decl. ¶¶ 169–193.

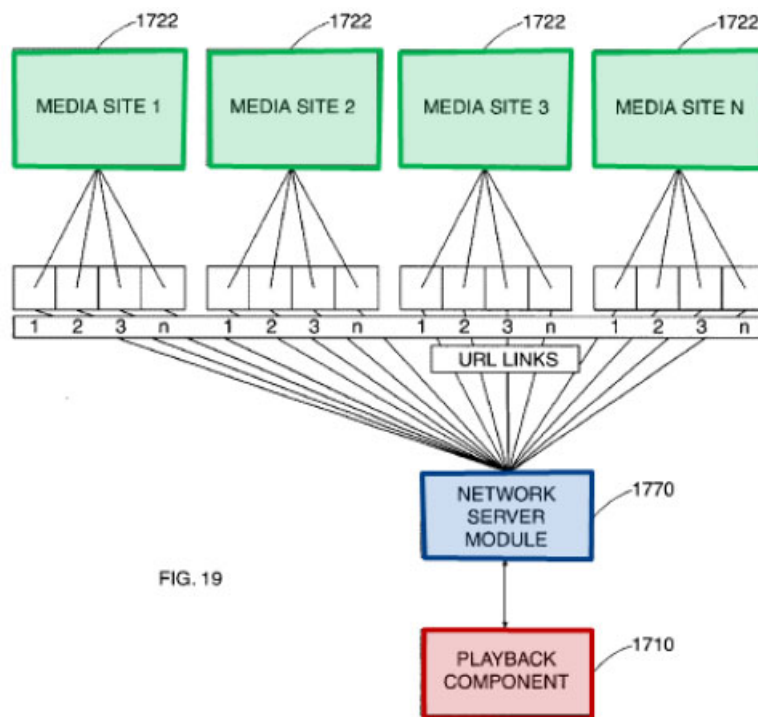
For the reasons stated below, we find that Petitioner has demonstrated by a preponderance of the evidence that claims 1–5, 7, 11–13, 17, 18, 20,

⁶ The heading for this section of the Petition (Pet. 25) is obviously incorrect. It refers only to Eyal, and to claims 1–24 of the ’635 patent. The analysis that follows includes ASX Files and covers claims 1–5, 7, 11–13, 17, 18, 20, and 22.

and 22 would have been obvious over Eyal and ASX Files. We do not find that Patent Owner's arguments or Mr. Adams's testimony refute Petitioner's showing. Our analysis follows.

1. Eyal (Exhibit 1005)

Eyal discloses “a computer system that enables a continuous streaming media playback from a distribution of sites available over a network such as the Internet.” Ex. 1005, 1:17–19. Figure 19 of Eyal is reproduced below (with color annotations added by Petitioner):



Pet. 26. Annotated Figure 19 of Eyal above illustrates a system that allows media streaming “from multiple sites on the Internet based on personalized criteria set forth by users.” Ex. 1005, 10:1–3, 32:43–44. User terminal 1710 (red), via network server module 1770 (blue), has access to network

media sites 1722 (green) that provide access to media. *Id.* at 32:43–46. Each of media sites 1722 has one or more links to media web resources, which are represented by URLs 1–N. *Id.* at 32:47–48. Media sites 1722 correspond to different locations on the Internet. *Id.* at 32:54–55.

After receiving a request for media, a play-list generator creates a play-list that includes a plurality of media links and sends it to the requesting device. *Id.* at 4:47–55, 9:13–21, 27:33–35. Each media link in the play-list locates a media file on the network. *Id.* The play-list may provide instructions to the playback device and include a variety of metadata, such as duration, media URL, source website, media type, clip broadcast quality, and image size for video. *Id.* at 12:37–63, 27:35–37. Other media, including targeted commercials, “may be inserted into the play-lists in various locations between media clips.” *Id.* at 13:1–8.

To playback the requested media, “[t]he user terminal then accesses the URL and loads the web resource[s] associated with that media link into a streaming media playback component on the user terminal.” *Id.* at 27:37–40. A play-list that has a plurality of media links allows the media playback component to play media continuously from numerous sites on a network. *Id.* at 27:47–60.

2. All About ASX Files (“ASX Files”) (Exhibit 1017)

ASF (Advanced Streaming Format) files were Microsoft’s native file format for streaming media, and individual ASF clips were combined into

play lists by creating ASX files. Ex. 1018, 1.⁷ These files were used in Windows Media Player. *Id.*

All About ASX Files explains that “ASX files are simply text files that act as links from Web pages to ASF files on Windows Media Services or HTTP servers.” Ex. 1017, 1. They “transfer control of the data from the HTTP browser to the Windows Media Player so that the data can stream.” *Id.*

All About ASX Files explains that ASX files can be used to access on-demand ASF files that contain live audio or video, among other types of files. Ex. 1017, 1. After a “user hits a link to an ASX file, the user’s browser downloads the entire ASX file . . . [and] looks in the ASX for instructions on where to get the ASF file, and then starts the stream playing.” *Id.*

ASX files can be used to create playlists that “allow you 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.” *Id.* at 4. Advertisements included in the playlist may be personalized to the user, for example based on the “user’s region or profile.” *Id.*

3. Claim 1

Petitioner asserts that the combination of Eyal and ASX Files discloses or suggests the limitations recited in claim 1. Pet. 32–43.

⁷ Unless otherwise specified, citations to exhibits use the page numbers assigned by the parties, and not the original page numbers.

Petitioner provides supporting testimony from Dr. Houh. Houh Decl.

¶¶ 144–170. Upon review of Petitioner’s argument and supporting evidence, as well as Patent Owner’s responsive arguments and evidence, we agree with Petitioner’s analysis and for the reasons given, find that each element of claim 1 is met by Eyal and ASX Files.

For example, for element 1.a (“receiving . . . a request for media from a communication device . . .”), Petitioner asserts that Eyal discloses a “user terminal” (i.e., the “communication device”), sending a request for media playback to a server which constitutes the claimed “computing device.” Pet. 32 (citing Ex. 1005, 10:17–18). The “web server module” of the server in Eyal receives the request for media via a communication network. *Id.* at 33 (citing Ex. 1005, 10:33–38; 19:30–40; Fig. 4 (annotated)). Petitioner contends also that the claimed “computing device” encompasses other server modules besides the web server module, including the play-list generator module, and that these modules may be implemented in hardware or software. *Id.* at 33–34.

For element 1.b (“determining . . . at least one portion of the requested media to be streamed to the communication device”), Petitioner contends that “[i]n Eyal, the play-list generator module of the server determines at least one portion of the requested media to be streamed to the communication device.” *Id.* at 35. Petitioner further contends that “[b]ecause the user streams media using the play-list, the determination by the play-list generator of what to include on the play-list is a determination

of at least one portion of the requested media to be streamed to the user terminal.” *Id.*

For element 1.c (“transmitting, by the at least one computing device for reception by the communication device, at least one play script”), Petitioner asserts that “[i]n response to the request from the communication device, Eyal’s server uses its modules to generate a play-list, which is the claimed ‘play script.’” *Id.* at 35. Alternatively, Petitioner contends: “To the extent the play-lists in Eyal do not teach the claimed ‘play script,’ a [person of ordinary skill] would have been motivated to combine Eyal with All About ASX Files.” *Id.* at 37. Petitioner points out that ASX is the file format for Windows Media Player (*see* discussion *supra*), and Eyal “explicitly suggests using Windows Media Player.” *Id.* (citing Ex. 1005, 11:2, 27:17–18). Petitioner explains that “[l]ike the play-lists described by Eyal, ASX files ‘allow [a system] 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.’” *Id.* (quoting Ex. 1017, 4) (alteration in original).

The next four limitations of the claim relate to the play script. Element 1.c.1, calls for the play script to contain “at least one identification of the at least one portion of the requested media.” Petitioner contends this is taught by Eyal: “Eyal teaches that the media links in the play-list may include metadata, including an identification of the requested media.” *Id.* at 38. Petitioner contends that ASX Files also teaches this limitation. *Id.* at 38–39.

Element 1.c.2 calls for the play script to have “an indication that an advertising media clip is to be streamed to the communication device.” Petitioner contends that the links to streaming media commercials inserted into the play-lists in Eyal are “an indication that an advertising media clip is to be streamed to the user terminal.” *Id.* at 39 (citing Ex. 1005, 13:1–5). Petitioner contends ASX Files also meets this limitation in describing inserting advertising into a stream. *Id.* (citing Ex. 1017, 4). Element 1.c.3 calls for the play script having “least one universal resource locator (URL) associated with the identification of the at least one portion of the requested media” Petitioner contends this is met by the response to the “media-playback component” that “includes one or more URLs” in Eyal, and by the “Ref tag” specifying a URL for a content stream in ASX Files. *Id.* at 40–41.

Final element 1.c.4 calls for “one or more instructions for use by the communication device together with the at least one URL to cause the at least one portion of the requested media to be streamed to the communication device.” Petitioner contends this limitation is met by Eyal: “Eyal teaches including instructions relating to obtaining media from the URLs in a particular sequence.” *Id.* at 42 (citing Ex. 1001, 27:53–55). Petitioner also contends ASX Files describes this limitation because “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.* at 43 (quoting Ex. 1017, 1).

We find that Petitioner provides persuasive reasoning to combine the teachings of Eyal and ASX Files. Pet. 29–32. Petitioner contends that a

person of ordinary skill “would have found it obvious to use ASX files in the system taught by Eyal and to apply All About ASX File[s]’s teachings regarding implementing playlists using ASX files.” *Id.* at 29 (citing Houh Decl. ¶ 138). Petitioner argues that “[b]oth teach similar distributed systems for responding to user requests for media using an intermediary server to generate a response and identifying media from one or more other servers.” *Id.* (citing Ex. 1001, 1:63–2:6; Ex. 1017, 1–2, 4–5.)

As noted *supra*, Petitioner points out that “Eyal itself suggests using Windows Media Player.” *Id.* at 30 (citing Ex. 1005, 27:16–18). Thus, according to Petitioner, “Eyal teaches a [person of ordinary skill] to combine its play-lists with Microsoft Windows Media Player and related formats, such as ASX as described in All About ASX [Files], which provides instructions for how to create playlists compatible with Windows Media Player.” *Id.* (citing Houh Decl. ¶ 140).

Dr. Houh testifies that “[a person of ordinary skill] would have been motivated to modify Eyal to utilize the ASX files taught in All About ASX Files to improve the ability of its play-lists to work effectively with Windows Media Player end user terminals.” Houh Decl. ¶ 140. Further, he testifies “[a person of ordinary skill] would also have been motivated to combine Eyal’s disclosure with All About ASX Files to improve advertising features disclosed in Eyal.” *Id.* ¶ 141. As he explains, “All About ASX Files explains how to insert an advertisement into a stream and explains how Microsoft Site Server, with its Personalization and Ad Server functionality allows a system to customize the advertisements the user receives, for

instance, by serving ads personalized to the user's region or profile.” *Id.* (quoting Ex. 1017, 4) (internal quotation marks omitted).

Dr. Houh further testifies a person of ordinary skill “would have had a reasonable chance of success because the ASX file format is in XML format, a common format for data exchange on a network.” *Id.* at ¶ 142.

4. Patent Owner's Response to Claim 1

Patent Owner responds that “[t]here is no motivation to add the use of ASX files to Eyal because the Eyal system builds a simple play list and nothing more.” PO Resp. 54. Patent Owner continues, that “[b]ecause Eyal discloses a complete play list functionality, a [person of ordinary skill] would not be motivated to add any additional functionality disclosed by All About ASX Files.” *Id.* Patent Owner asserts that Eyal “works perfectly well” without ASX files. *Id.* at 55 (citing Adams Decl. ¶ 141).

Petitioner responds that is not the “correct test” for whether it would have been obvious to combine two references. Reply 14. We do not agree with Patent Owner's argument, that just because Eyal's system “works perfectly well,” a person of ordinary skill would not seek to improve its performance. We rely, instead, on Dr. Houh's testimony, summarized above, that there would be advantages in combining the teachings of Eyal and ASF Files. Houh Decl. ¶¶ 140–141. For example, as discussed *supra*, Dr. Houh testifies that a person of ordinary skill would have been motivated to modify Eyal to utilize the ASX files “to improve the ability of its play-lists to work effectively with Windows Media Player end user terminals.”

Id. ¶ 140. Further, we credit his testimony that a person of ordinary skill would have been motivated to combine Eyal’s disclosure with ASX Files to improve advertising features disclosed in Eyal. *Id.* at 141. He testifies that a person of ordinary skill would have had “a reasonable chance of success” because the ASX file format is XML, “a common format for data exchange on a network.” *Id.* ¶ 142.

In contrast, Mr. Adams testifies that “there is no motivation to add the use of ASX files to Eyal.” Adams Decl. ¶ 139. Mr. Adams supports this testimony by asserting that “the Eyal system builds a simple play list and nothing more.” *Id.* We disagree with this assertion by Mr. Adams and with the implication that follows, that because the Eyal system is “simple,” a person of ordinary skill would not seek to improve it. *See* discussion of Dr. Houh’s testimony, *supra*.

We are also not persuaded by Mr. Adams’s testimony that Eyal’s disclosure of Windows Media Player is “not in [and] of itself” a reason to consider using ASX files in Eyal, “when Eyal works perfectly well without it.” Adams Decl. ¶ 141. This testimony is unavailing for several reasons. First, the evidence of record links Windows Media Player with use of ASX Files. *See* Ex. 1017, 1 (“ASX files are simply text files that act as links from Web pages to ASF files on Windows Media Services or HTTP servers.”). Also, Mr. Adams’s testimony assumes (incorrectly) that because Eyal may work with other files, a person of ordinary skill would ignore the teachings that ASX files are used by Windows Media Player.

We are not persuaded by Patent Owner’s argument that Dr. Houh’s

testimony on the motivation to combine these references is “flawed.” PO Resp. 55–56. Patent Owner’s principal argument is that adding commercials to the play list would “require nothing more than Eyal’s simple play list to implement.” *Id.* at 55. Patent Owner also asserts that “Eyal has pushed this advertising function off to the media-player and the feature is out of the scope of the playlist, which at this point in the flow has already been generated and passed to the media player.” *Id.* at 56.

We do not agree with either of these arguments. As Petitioner points out, while Eyal discloses adding personalized advertising to the play list, ASX Files provides a more detailed disclosure of how to implement that feature. Reply 14–15 (citing Houh Decl. ¶¶ 141, 143). Moreover, we agree with Petitioner that in Eyal, the commercials are inserted in the play-list by the play-list generator, not the viewer. *Id.* at 15 (citing Ex. 1005, 13:1–8; Houh Decl. ¶¶ 122, 149, 152, 201).

We find that after considering Patent Owner’s arguments, for the reasons given by Petitioner, including those summarized above, Petitioner demonstrates by a preponderance of the evidence that a person of ordinary skill would have combined the teachings of Eyal and ASX Files as proposed by Petitioner, with a reasonable expectation of success. Pet. 29–32; Houh Decl. ¶¶ 138–143.

5. Alleged Missing Elements

Patent Owner contends also that Eyal and ASX Files fail to “disclose or suggest” several claim limitations. PO Resp. 38–44.

a. “at least one portion of the requested media”

Claim 1 requires “determining, by the at least one computing device, at least one portion of the requested media to be streamed to the communication device.” Ex. 1001, 50:58–60. As discussed *supra*, in Section V.C.3, we find that Petitioner demonstrates that Eyal and ASX Files meet this limitation. Pet. 34–35; Reply 16–17.

Patent Owner contends that Eyal and ASX Files do not meet this limitation because “[t]he claims of the ’635 patent 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.” PO Resp. 38. For the reasons discussed in Section III.A, *supra*, we do not adopt Patent Owner’s implicit claim construction that would require “streaming requested media in portions” and excluding the entirety of the “requested media,” i.e., to require that the “requested media” be broken up into portions. We, therefore, do not agree with Patent Owner’s “one portion” argument here because it is based on a rejected theory of the claims. *See* PO Resp. 38–40; Sur-reply 12–15.

Even under Patent Owner’s construction, however, we find that Eyal would meet this limitation. Eyal’s play-list includes links to multiple portions of the requested media. *See* Ex. 1005, 20:50–64, 32:62–67. Eyal discloses delivering portions of the requested media, such as movie clips, movie trailers, highlights from sporting events, music videos, and individual songs of a program. *See, e.g.*, Ex. 1005, 11:21–37.

We find, for the reasons given, that Eyal and ASX Files, independently and together, meet this limitation in claim 1.

b. “play script”

Claim element 1.c recites a “play script” having four sub-elements, designated by Petitioner as 1.c.1–1.c.4. Ex. 1001, 50:61–51:12; Pet. 38–43. Patent Owner asserts that Eyal and ASX Files do not disclose or suggest the claimed play script because they lack disclosure of one or more of the claimed sub-elements. PO Resp. 40–41. According to Patent Owner, Eyal’s play-list is not the claimed “play script” because “[a] play-list is merely a list of URLs that identify media.” *Id.* at 41. Patent Owner contends Eyal is “missing elements” that comprise the claimed playlist, namely, (1) “identification of the at least one portion of the requested media,” (2) a URL including an identification of a resource “to facilitate streaming of the at least one portion of the requested media,” and (3) “one or more instructions for use together with” the URL(s) “to cause the at least one portion of the requested media to be streamed to the communication device.” *Id.* at 41.

We disagree with Patent Owner’s argument. We have rejected Patent Owner’s construction of “at least one portion” that is the basis for arguments (1) and (2). *See supra*, Section III.A. We therefore do not agree with Patent Owner’s argument that Eyal fails to disclose those limitations. Argument (3) presumes that the combination of Eyal and ASX Files does not teach or suggest the claimed “instructions.” This is addressed in the immediately following section.

Finally, we do not agree with Patent Owner’s mischaracterization of Dr. Houh’s testimony, here and throughout its submissions. During Dr. Houh’s deposition, Patent Owner’s counsel was cautioned by the Board to

avoid broad questions and to ask questions that are more specific to the facts of the case and Dr. Houh's declaration. Houh Dep. 208:12–16, 209:14–22.

For example, Patent Owner's counsel asked Dr. Houh if "a play script is different from a playlist." Houh Dep. 147:9–10. Dr. Houh testified, in response to this hypothetical: "I think the play script has a preliminary construction adopted by the PTAB, . . . under which adopted construction is definitely different than what I think a person of ordinary skill would think of as a playlist." *Id.* at 147:11–15. Similarly, Dr. Houh was asked another hypothetical, "Is an ASX file different than a playlist?" *Id.* at 155:7. He responded: "ASX has some advanced features which aren't commonly in a playlist, but can be used in a playlist." *Id.* at 155:10–11. Citing this testimony out of context, Patent Owner asserts: "[Petitioner's] own expert admitted that a play list is different than a play script." PO Resp. 40–41. As Petitioner points out (Reply 12), this argument is inconsistent with Patent Owner's argument in support of its priority claim. PO Resp. 34–35 (asserting that in the priority document, "play script is used interchangeabl[y] with play list").

In this same vein, Dr. Houh was asked about a statement in Dr. Houh's declaration about "[F]iles types that could act as playscripts." Houh Dep. 243:19–244:9. Patent Owner cites this testimony out of context as alleged proof that playlists and play scripts are "different." PO Resp. 40–41. The question, however, is not whether there are differences between play lists and play scripts, but whether an ASX file can be considered a play script, as claimed in the '635 patent. As to that question, Dr. Houh's

declaration states unequivocally, ASX files “could act as playscripts.” Houh Decl. ¶ 103. Patent Owner does not convincingly rebut this testimony with out-of-context excerpts from Dr. Houh’s deposition.

We find, for the reasons given, including those summarized above, that Petitioner demonstrates that Eyal and ASX Files disclose the claimed play script. Pet. 35–43; Reply Houh Decl. ¶¶ 151–169.

c. “instructions”

Claim 1 requires the playlist to have “instructions for use . . . together with the at least one URL to cause the at least one portion of the requested media to be streamed to the communication device.” Ex. 1001, 51:8–12. Petitioner demonstrates that Eyal’s disclosure of metadata meets this limitation. Pet. 42 (“Eyal teaches that a wide variety of metadata, which may instruct the communication device regarding how to obtain, present, and adjust the media, such as duration, media URL, source web site, media type, clip broadcast quality, and image size for videos, may be included in the play-list.”); *see also* description in Section V.C.1, *supra*. In addition, Petitioner relies on ASX Files to meet this limitation: “Similarly, All About ASX teaches 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.” Pet. 43 (quoting Ex. 1017, 1) (internal quotation marks omitted).

Patent Owner responds that “there is no disclosure, teaching or suggestion that any metadata from the database in Eyal’s system is sent to

the user in a play-list (the purported ‘play-script’) and used to *cause* media to be streamed.” PO Resp. 43. We do not agree with this argument. As Petitioner points out, correctly, “[t]he claims do not require the instructions to be separate from the URLs for obtaining media.” Reply 17.

Patent Owner further argues that the metadata in Eyal “relates to how media is displayed on the user device,” and not to how the media is obtained. PO Resp. 42. We do not agree with this argument. In discussing the construction of the term “instructions,” we rejected Patent Owner’s attempt to limit the term to exclude instructions (metadata) relating to how the media is displayed and the order in which the media is obtained and displayed. *See* Section III.B, *supra*; PO Resp. 42–43. We find that for the reasons given, Petitioner demonstrates that Eyal meets this limitation by disclosing instructions for obtaining media from URLs in a particular sequence and causing the requested media to be streamed to a user terminal. Pet. 41–43; Houh Decl. ¶¶ 166–167.

For ASX Files, Patent Owner makes a similar argument, that with ASX playlists, “[s]cheduling, where/when to insert advertising/other clips and instructions for playing pertains to how media is presented to the viewer pertains to how media is presented to the viewer.” Pet. 44. For the reasons given, we have rejected Patent Owner’s proposed construction of “instructions” as excluding such a disclosure. We find Petitioner demonstrates that ASX Files discloses this limitation. Pet. 43; Houh Decl. ¶¶ 168–169.

6. Summary—Claim 1

Considering the foregoing, we find that Petitioner has shown by a preponderance of the evidence that the combination of Eyal and ASX Files teaches or suggests the limitations recited in claim 1, and that Petitioner has presented a persuasive reason to combine the prior art teachings of those references with a reasonable expectation of success. Therefore, we find that Petitioner has established by a preponderance of the evidence claim 1 would have been obvious over Eyal and ASX Files.

7. Dependent claims 2–5, 7, 11–13, 17, 18, 20, and 22

Petitioner provides a claim-by-claim analysis of these dependent claims in view of Eyal and ASX Files. *See* Pet. 43–54; Houh Decl. ¶¶ 171–202. We find that Petitioner’s analysis demonstrates that each limitation of these claims is met by Eyal and ASX Files.

In response, Patent Owner, for the most part, relies on its response to claim 1. PO Resp. 44–48. For claim 3, Patent Owner contends that Eyal does not disclose “selecting different media based on the characteristics . . . of [an] audience.” PO Resp. 45. Petitioner responds that Patent Owner “seeks to limit Claim 3 to a single embodiment from the specification.” Reply 18. The claim recites “at least one audience characteristic.” Ex. 1001, 51:16–17. Petitioner demonstrates that both Eyal and ASX Files meet this limitation. Pet. 45–46; Reply 17–18. Eyal discloses inserting commercials into the play-list that are “targeted to the audience likely to listen to the media available on the play-list.” Ex. 1005, 13:3–5. Likewise,

ASX Files teaches inserting advertising based on the user's profile. Ex. 1017, 4.

For claim 7, Patent Owner contends "Eyal and All About ASX Files do not disclose portions of requested media and thus cannot render claim 7 obvious." PO Resp. 46. Patent Owner makes a similar argument for claim 18. *Id.* at 47–48. This argument fails because it is based on a proposed construction of "portion" that has been rejected. *See supra*, Section III.A.

For claim 11, Patent Owner contends that Petitioner "fails to identify any rule used by Eyal's play-list generator to select advertising media clips." PO Resp 47. This argument is unavailing. We agree with Petitioner and find that a person of ordinary skill would have recognized that rules would be required in Eyal and ASX Files to select and place the advertising. Reply 19–20; Houh Decl. ¶¶ 186–188. Dr. Houh testifies that "these commercials [in Eyal] are selected based on the rule based on some audience characteristic(s)." Houh Decl. ¶ 186. He explains further that ASX Files "teaches that advertisements can be selected . . . based on a rule relating to region or other user characteristics." *Id.* ¶ 187 (citing Ex. 1017, 4). We, therefore, do not agree with Patent Owner that this explanation is not adequate. "[I]t is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom." *In re Preda*, 401 F.2d 825, 826 (CCPA 1968).

Having reviewed Petitioner's arguments and supporting evidence in this record, including the arguments summarized above for claim 1, from

which these claims depend, and Patent Owner's arguments and evidence in response, we determine that Petitioner has established by a preponderance of the evidence that the combination of Eyal and ASX Files teaches or suggests the limitations of claims 2–5, 7, 11–13, 17, 18, 20, and 22. *See* Pet. 43–54; Reply 1–20; Houh Decl. ¶¶ 171–202. In addition, we find that Petitioner has demonstrated a motivation to combine the references in the manner proposed by Petitioner with a reasonable expectation of success. Accordingly, we determine that Petitioner has demonstrated that these dependent claims also would have been obvious over the combination of Eyal and ASX Files.

8. Conclusion on Obviousness over Eyal and ASX Files

Based on the evidence in the record, we find that Petitioner has demonstrated that claims 1–5, 7, 11–13, 17, 18, 20, and 22 would have been obvious over Eyal and ASX Files.

D. Obviousness over Madison and Holtz

Petitioner asserts that claims 1–3, 7, 11, 13, and 18 are unpatentable under § 103(a) as obvious over Madison and Holtz. Pet. 55–78; Houh Decl. ¶¶ 203–244. Upon consideration of Petitioner's explanations and supporting evidence in this current record, we find that for the reasons given, Petitioner has demonstrated by a preponderance of the evidence that these claims are unpatentable under § 103(a) as obvious over Madison and Holtz.

1. Madison (Ex. 1007)

Madison discloses a system and method for controlling access to streaming media. Ex. 1007, (57).

Figure 8 of Madison is reproduced below.

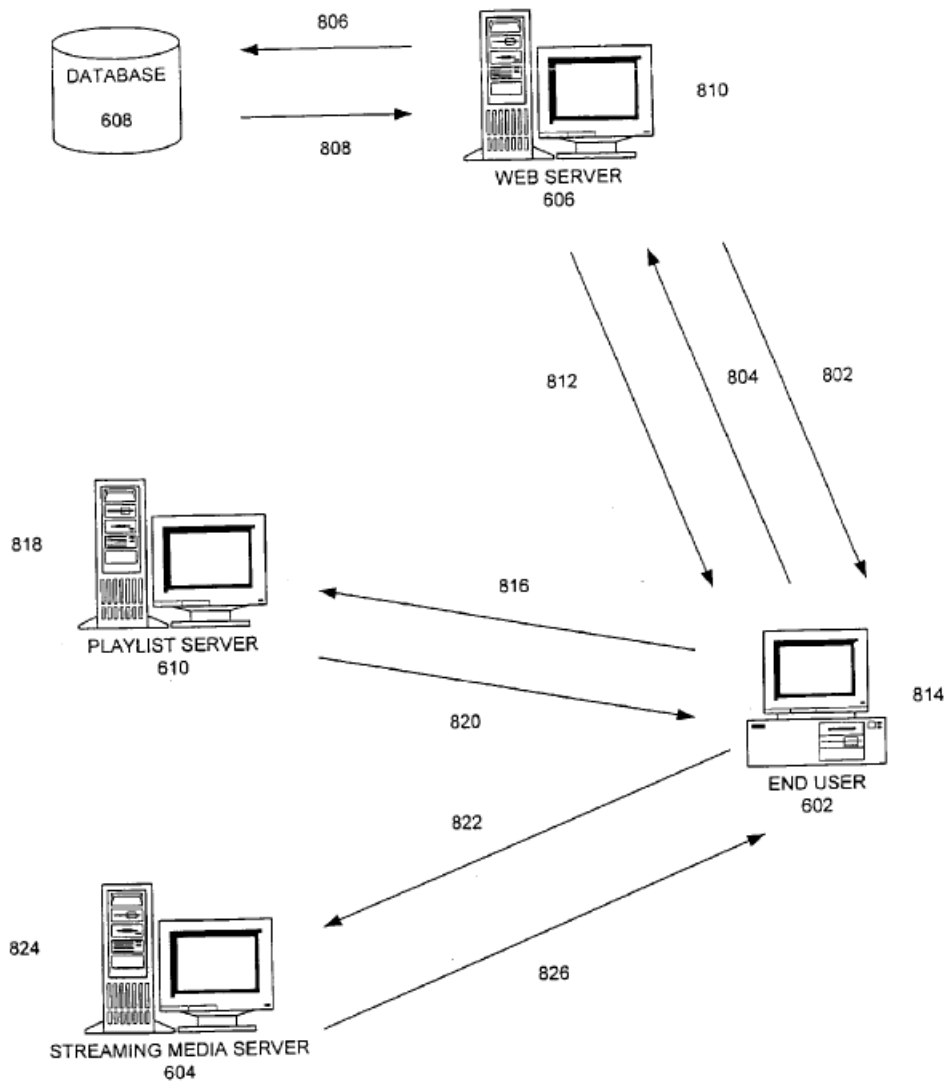


Figure 8 of Madison above illustrates a system comprising web server 606, database 608, playlist server 610, streaming media server 604, and end user device 602. Ex. 1007 ¶¶ 72–80. Web server 606 provides a web page

requesting the end user to log in to an authorization application and presenting the user with the option of viewing certain streaming media (step 802). *Id.* ¶ 72. In response, the user provides the user ID and activates the stream request link, thereby requesting access to a streaming media content file and sending the stream request link and the user ID to web server 606 (step 804). *Id.* ¶¶ 72–74.

Once web server 606 receives the stream request, it requests and obtains the private key from database 608 (steps 806, 808), and uses the private key to generate the authorization ticket. *Id.* ¶¶ 75–76. In step 812, web server 606 sends the ticket and the user ID to end user processor 602. *Id.* ¶ 76. In step 816, end user processor 602 makes a call to playlist server 810 and, in step 818, playlist server 810 is provided with the link, playlist ID, ticket, and user ID, and then generates a redirector file—namely, an Advanced Stream Redirector (“ASX”) file. *Id.* ¶ 79.

To generate the redirector file, the playlist server accesses a database to retrieve the stream ID of a content file comprising the playlist and the information necessary to link the content file, including the Hostname, URL Prefix and Filename, associated with the stream ID. *Id.* The redirector file contains a link to the requested content, along with the ticket and public key (i.e., stream ID of content file and user ID), as well as “other information, such as metadata for the content file, or other, non-secure files, such as advertisements.” *Id.* ¶¶ 79, 82.

In an alternate embodiment, when the user provides its user ID and activates the stream request link (in step 84), the authentication application

running on web server 606 generates the ticket, appends the ticket and end user ID to the stream request link, and directly makes the call to playlist server 610 to create the redirector file. *Id.* ¶ 80. Because web server 606 also passes to playlist server 610 information identifying the media player on end user processor 62, playlist server 610 forwards the redirector file to media player (in step 820, thereby obviating steps 812, 814, and 816). *Id.* In step 822, the media player makes a call to streaming media server 604, as identified in the ASX file, and provides media server 604 with the copy of the requested content's stream ID, the ticket generated by web server 606 and the user ID. *Id.* ¶ 83. In response, streaming media server 604 determines whether to grant the user access to the requested content (step 824). *Id.* ¶ 84.

2. Holtz (Ex. 1008)

Holtz discloses how a “multimedia production and distribution system collects or assembles a media production (such as a news program, television programming, or radio broadcast) from a variety of sources, including television stations and other media hosting facilities.” Ex. 1008, (57).

Figure 1 of Holtz is reproduced below.

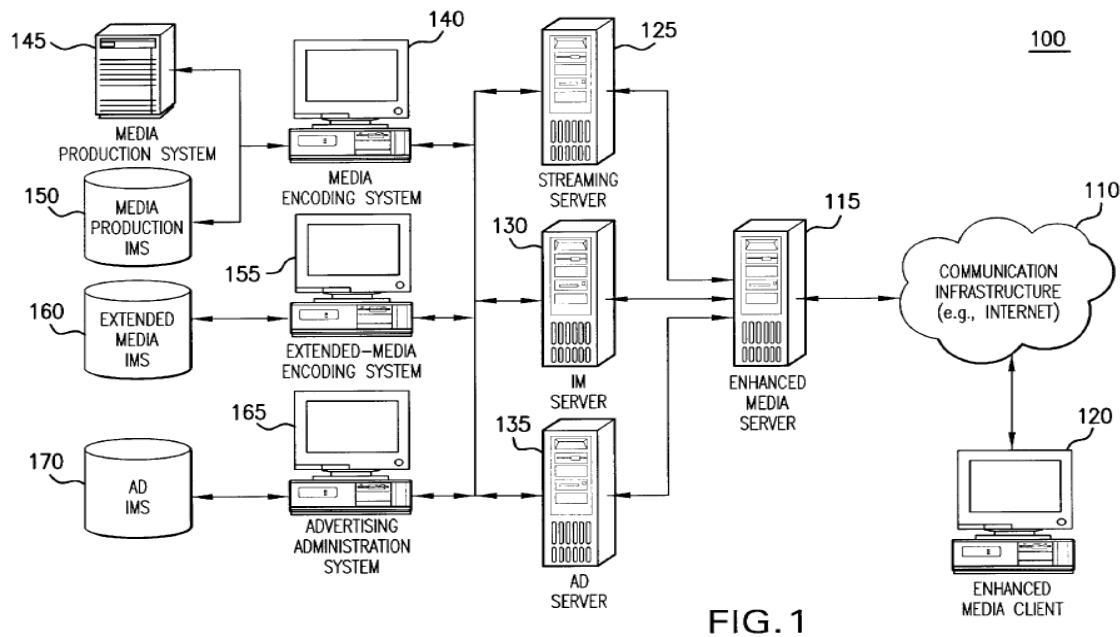


Figure 1 of Holtz illustrates enhanced media production and distribution system 100, which includes enhanced media server 115 and one or more enhanced media clients 120. *Id.* at 7:36–56. Media server 115 is connected to streaming server 125, information management (IM) server 130, and advertisement server 135. *Id.* at 8:23–25.

Holtz discloses that “[a]dvertising is linked to each segment of each customized program so that the user when viewing the customized programming also views the associated advertising.” *Id.* at 11:63–66. “The segments, which make up the customized program, are automatically sequenced together with the linked advertisements in such a fashion that the program appears to have been created for the user according to a subject matter specification indicated by the user.” *Id.* at 12:65–13:2.

3. *Claim 1*

Petitioner asserts that the combination of Madison and Holtz teaches or suggests the limitations recited in claim 1. Pet. 62–72; Houh Decl. ¶¶ 205–228. Upon review of Petitioner’s argument and supporting evidence, as well as Patent Owner’s responsive arguments and evidence, we agree with Petitioner’s analysis and find that for the reasons given the limitations of claim 1 are met by Madison and Holtz.

For example, with respect to element 1.a, Petitioner explains that in Madison, the user requests access to a playlist by activating “the stream request link, thereby requesting access to a particular streaming media content file.” *Id.* at 62 (citing Ex. 1007 ¶ 72, Fig. 8). Petitioner further explains that in a variation, the web server and the playlist server work together to receive and respond to the end user’s request. *Id.* at 63 (citing Ex. 1007 ¶ 80). Petitioner asserts: “Accordingly, these components together constitute the ‘computing device.’” *Id.* Petitioner asserts, “[a person of ordinary skill] would have understood that they are a combination of hardware and software.” *Id.* at 64 (citing Ex. 1007 ¶ 21; Houh Decl. ¶ 207).

As to element 1.b, Petitioner asserts, “Madison provides an example of an ASX redirector file with three files in the requested playlist.” Pet. 65 (citing Ex. 1007 ¶ 95). Further, Petitioner asserts: “Listing these files in the ASX playlist is a determination to stream them to the user.” *Id.* (citing Ex. 1007 ¶ 91; Houh Decl. ¶¶ 211–212).

Petitioner asserts that the combination of Madison and Holtz suggests “transmitting . . . at least one play script” meeting limitation 1.c. Pet. 65–67;

Houh Decl. ¶¶ 213–214. Petitioner identifies Madison’s ASX redirector file as the claimed “play script.” *Id.* at 66 (“The redirector file is the claimed ‘play script.’”). Petitioner continues: “Madison also explains that the ASX file may ‘include other information such as metadata for the content file, or other, non-secure files, such as advertisements.’” *Id.* (quoting Ex. 1007 ¶ 82). “Accordingly, the ASX file is customized for the communication device.” *Id.* (citing Houh Decl. ¶ 213).

Petitioner explains that elements 1.c.1-1.c.4 are met by Madison and Holtz. Pet. 67–72; Houh Decl. ¶¶ 217–227. For example, as to element 1.c.3, Petitioner asserts that Madison’s ASX file includes a URL representing the hostname of the media server, which is separate from the computing device. Pet. 69. For element 1.c.4, Petitioner further asserts that ASX files such as those taught by Madison include instructions to cause the portion of requested media to be streamed to the user device, and that inclusion of such instructions for playing files or streams is confirmed by Holtz. *Id.* at 71–72 (citing Ex. 1007 ¶¶ 79, 82, 95; Ex. 1017, 1, 4; Ex. 1008, 9:11–14, 8:65–9:3).

As to the reason to combine the prior art teachings of Holtz and Madison, Dr. Houh testifies that “[a person of ordinary skill] would have found it obvious to apply Holtz’s teachings of including and selecting advertisements to Madison.” Houh Decl. ¶ 203. He testifies that “[b]oth references relate to distribution of media over a network, such as the Internet.” *Id.* Further, he testifies “[b]oth Madison and Holtz also disclose the intermediary server providing a response to a request that identifies the

requested media, the delivery server address, and other information for obtaining the requested media.” *Id.* ¶ 204. Also, “both references disclose using ASX files to identify the names, locations, and instructions for obtaining the identified media.” *Id.* He concludes, “the resulting combination would use only known techniques to improve a similar system with no unexpected results and a [person of ordinary skill] would have been motivated to combine the teachings of Madison and Holtz to make an improved system.” *Id.*

Patent Owner begins by asserting that Madison and Holtz do not qualify as prior art. PO Resp. 33–37. Patent Owner contends the ’635 patent is entitled to the benefit of the filing date of the ’519 application that predates Madison and Holtz. *Id.* at 33. For the reasons given in Section IV, *supra*, we do not agree with this argument, and we find that the challenged claims of the ’635 patent are not entitled to the benefit of that earlier filing date. Consequently, we find that Madison and Holtz are qualified as prior art.

In light of Petitioner’s analysis, summarized *supra*, we determine that Petitioner has shown by a preponderance of the evidence that the combination of Madison and Holtz teaches or suggests all of the limitations recited in claim 1, and Petitioner has presented a persuasive reason to combine successfully the prior art teachings. Thus, we find that Petitioner has established that claim 1 would have been obvious over Madison and Holtz. In reaching this conclusion we have considered Patent Owner’s arguments as discussed below.

On the merits of the references, Patent Owner's contentions are similar to those presented in its opposition to the Eyal-ASX Files challenge. *See* PO Resp. 47–53. For example, Patent Owner challenges the motivation to combine Madison and Holtz. *Id.* at 56–64. Patent Owner's principal argument is that Madison and Holtz are “fundamentally different systems.” *Id.* at 56 (emphasis omitted). For the reasons given by Petitioner, including those summarized *supra*, we disagree. *See* Dr. Houh's testimony regarding the similarities of Madison and Holtz, at Houh Decl. ¶¶ 203–204, and the discussion of those references in Sections V.D.1 and V.D.2, *supra*. For the reasons given by Petitioner and summarized *supra*, we find that Petitioner has demonstrated a motivation to combine the references.

Moreover, Patent Owner's arguments that Madison and Holtz do not disclose all limitations of claim 1 are unavailing. *See* PO Resp. 48–50. For example, Patent Owner's contention that Madison and Holtz fail to meet the “at least one portion” limitation of claim 1 (PO Resp. 48) is a repeat of its argument directed to Eyal and ASX Files, discussed *supra*. This argument is unavailing because it is based on a rejected claim construction. *See supra*, Section III.A.

Petitioner demonstrates that Madison would meet this limitation even under Patent Owner's construction. Reply 22. Petitioner explains that in response to a user request, Madison returns an ASX redirector file containing references to multiple files that are “portions” of the requested playlist. *Id.* (citing Ex. 1007, ¶¶ 93, 95). We find that for the reasons given Madison meets this limitation.

Similarly, we do not agree with Patent Owner's argument based on the alleged failure of Madison and Holtz to disclose "instructions" (PO Resp. 49–50). Petitioner demonstrates that the ASX files used in Madison contain instructions imbedded in URLs for obtaining media. Reply 22 (citing Adams Dep. 107:20–22). For example, sequencing instructions in the metafile relate to how the media are obtained. *Id.* at 22–23; Houh Decl. ¶¶ 224–226. Patent Owner's argument that the instructions cannot be part of a URL is not supported by the claim language or the specification, nor is Patent Owner's argument that sequencing information is excluded. *See supra*, Section III.B.

Accordingly, we find that, for the reasons given, Petitioner has shown by a preponderance of the evidence that the combination of Madison and Holtz teaches or suggests the limitations recited in claim 1, and that Petitioner has presented a persuasive reason to combine the prior art teachings of those references with a reasonable expectation of success. Therefore, we find that Petitioner has established by a preponderance of the evidence claim 1 would have been obvious over Madison and Holtz.

2. Dependent Claims 2, 3, 7, 11, 13, 18

Likewise, we are persuaded by Petitioner's element-by-element analysis of these challenged dependent claims and therefore find for the reasons given that each element is taught by Madison and Holtz. Pet. 72–78; Houh Decl. ¶¶ 229–244.

Patent Owner's responsive arguments are similar to its response to the challenge based on Eyal and ASX Files. PO Resp. 50–54. Patent Owner principally relies on its arguments for claim 1. *Id.* at 50. Patent Owner bases additional arguments for claims 7 and 18 on its rejected construction for “at least one portion.” *Id.* at 51–52, 53–54.

Patent Owner's argument directed to claim 3, that “[t]argeting a particular audience . . . is insufficient to render claim 3 obvious” (PO Resp. 51), is unavailing. As Petitioner demonstrates, Madison teaches including from Holtz advertisements and criteria such as “target audience” that include characteristics of the audience. Reply 23 (citing Houh Decl. ¶ 231); Ex. 1008, 4:19–34, 12:14–35.

Claim 11 requires selecting advertising based on “at least one rule.” PO Resp. 52. Patent Owner contends that Petitioner “fails to identify any rule used by the play-list generator to select advertising media clips.” *Id.* Patent Owner made a similar argument in connection with Eyal and ASX Files. *See* Section V.C.7, *supra*. We agree with Petitioner that, as stated previously with respect to Eyal and ASX Files, “without rules for selecting the advertisement, that advertisement could not be targeted.” Reply 24. Also, the description of customizing ASX Files in Microsoft's documentation is further proof of rules for targeting advertising. *Id.* (citing Ex. 1008, 9:4–20; Ex. 1017, 1–4; Ex. 1018, 1).

3. Conclusion on Obviousness over Madison and Holtz

For the foregoing reasons, we determine that Petitioner has established by a preponderance of the evidence that claims 1, 2, 3, 7, 11, 13, and 18 of the '635 patent are unpatentable under § 103(a) as obvious over Madison and Holtz.

VI. CONCLUSION

For the foregoing reasons, we determine Petitioner has demonstrated by a preponderance of the evidence that all challenged claims of the '635 patent would have been obvious and therefore are unpatentable. Our conclusions are summarized in the following table.

Claim(s)	35 U.S.C. §	Reference(s)	Claim(s) Shown Unpatentable	Claim(s) Not Shown Unpatentable
1–5, 7, 11–13, 17, 18, 20, 22	103(a)	Eyal, ASX Files	1–5, 7, 11–13, 17, 18, 20, 22	
1–3, 7, 11, 13, 18	103(a)	Madison, Holtz	1–3, 7, 11, 13, 18	
Overall Outcome			1–5, 7, 11–13, 17, 18, 20, 22	

VII. ORDER

For the foregoing reasons, it is

ORDERED that claims 1–5, 7, 11–13, 17, 18, 20, and 22 of the '635 patent are unpatentable; and

FURTHER ORDERED that, because this is a Final Written Decision, parties to the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.⁸

⁸ Should Patent Owner wish to pursue amendment of the challenged claims in a reissue or reexamination proceeding subsequent to the issuance of this decision, we draw Patent Owner's attention to the April 2019 *Notice Regarding Options for Amendments by Patent Owner Through Reissue or Reexamination During a Pending AIA Trial Proceeding*. See 84 Fed. Reg. 16,654 (Apr. 22, 2019). If Patent Owner chooses to file a reissue application or a request for reexamination of the challenged patent, we remind Patent Owner of its continuing obligation to notify the Board of any such related matters in updated mandatory notices. See 37 C.F.R. § 42.8(a)(3), (b)(2).

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