

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

AYLO FREESITES LTD,
Petitioner,

v.

WELLCOMEMAT, LLC,
Patent Owner.

IPR2024-00710
Patent 8,307,286 B2¹

Before KARL D. EASTHOM, KARA L. SZPONDOWSKI, and
BRIAN P. MURPHY, *Administrative Patent Judges*.

MURPHY, *Administrative Patent Judge*.

DECISION
Determining All Challenged Claims Unpatentable
35 U.S.C. § 318(a)
Denying Petitioner's Motion to Exclude
37 C.F.R. § 42.64(c)

¹ Consolidated with now terminated IPR2024-01101 as discussed below.

I. INTRODUCTION

Aylo Freesites Ltd (“Petitioner”) filed a Petition pursuant to 35 U.S.C. § 311 requesting institution of *inter partes* review of claims 13–15 and 18–20 of U.S. Patent No. 8,307,286 B2 (Ex. 1001; “the ’286 patent”). Paper 2 (“Pet.”). WellcomeMat, LLC (“Patent Owner”) timely filed a Corrected Patent Owner Preliminary Response. Paper 7 (“Prelim. Resp.”). On September 5, 2024, we instituted *inter partes* review of claims 13–15 and 18–20 pursuant to 35 U.S.C. § 314 based on the challenges set forth in the Petition. Paper 13.

Petitioner later filed a second Petition challenging claim 17 of the ’286 patent. IPR2024-01101 Paper 3. Patent Owner filed a Preliminary Response, and we instituted review of claim 17. IPR2024-01101 Papers 7, 9. On December 6, 2024, we consolidated IPR2024-01101 with IPR2024-00710 and administratively terminated IPR2024-01101. IPR2024-01101, Paper 10; Paper 18.

Subsequent to institution, Patent Owner filed a Response. Paper 24, (“Resp.”). Petitioner filed a Reply and Patent Owner filed a Sur-Reply. Paper 28 (“Reply”); Paper 33 (“Sur-Reply”). Petitioner filed a Motion to Exclude Exhibits 2018–2022 and 2041. Paper 34 (“Motion” or “Mot.”). Patent Owner filed an Opposition to Petitioner’s Motion and Petitioner filed a Reply. Paper 35 (“Mot. Opp.”); Paper 36 (“Mot. Reply”).

We have jurisdiction under 35 U.S.C. § 6. This is a Final Written Decision under 35 U.S.C. § 318(a) as to the patentability of claims 13–15 and 17–20 of the ’286 patent. We conclude Petitioner has demonstrated by a preponderance of the evidence that claims 13–15 and 17–20 of the ’286 patent are unpatentable.

A. Real Parties in Interest and Related Matters

Petitioner identifies Aylo Freesites Ltd (f/k/a MG Freesites Ltd), Aylo Premium Ltd (f/k/a MG Premium Ltd), Aylo Holdings S.à r.l. (f/k/a MindGeek S.à r.l.), and 9219-1568 Québec, Inc. as real parties-in-interest. Pet. xii. Patent Owner, WellcomeMat, LLC, identifies itself as a real party in interest. Paper 5, 1.

Petitioner and Patent Owner identify the following related matters:

WellcomeMat, LLC v. Aylo Holdings S.à r.l., No. 2:23-cv-00483-JRG (E.D. Tex.);

Aylo Freesites Ltd v. WellcomeMat, LLC, IPR2024-01101 (U.S. Pat. No. 8,307,286);² and

Reexamination Control No. 90/019,758 (directed to claims 21–28 of the ’286 patent).

Paper 9, 1; Paper 10, 1; Paper 21, 1; Paper 22, 1.

B. The ’286 Patent

The ’286 patent, titled “Methods and Systems for Online Video-Based Property Commerce,” is directed to a method and system for processing cue point information associated with video content, such as online real estate marketing videos. Ex. 1001, 2:48–65. “[C]ue points may refer to indexed time positions or tags anywhere within a video file ... essentially providing chapter markers for the different sections of the video.” *Id.* at 7:50–60. Cue points are typically indexed to a time point or location in a video and may include the index information and metadata (e.g., title and author of the cue point). *Id.* at 2:48–65, 7:49–8:1, 8:14–

² The petition in IPR2024-01101 presents five unpatentability grounds challenging claim 17 of the ’286 patent. IPR2024-01101 Paper 3 (“1101 IPR Pet.”). We address the Grounds in IPR2024-01101 challenging the patentability of claim 17 as obvious over Fegan and Sull (“1101 IPR” Ground 2) and Vasilevsky and Logan (1101 IPR Ground 5).

24. Cue points may also include text comments describing or explaining the associated video, “or any other useful information.” *Id.* at 19:38–48, 26:12–14.

One embodiment of the cue point processing method utilizes a client-server architecture that includes application server 110 interfacing with video server 112 and cue point server 114, as depicted in Figure 1A reproduced below:

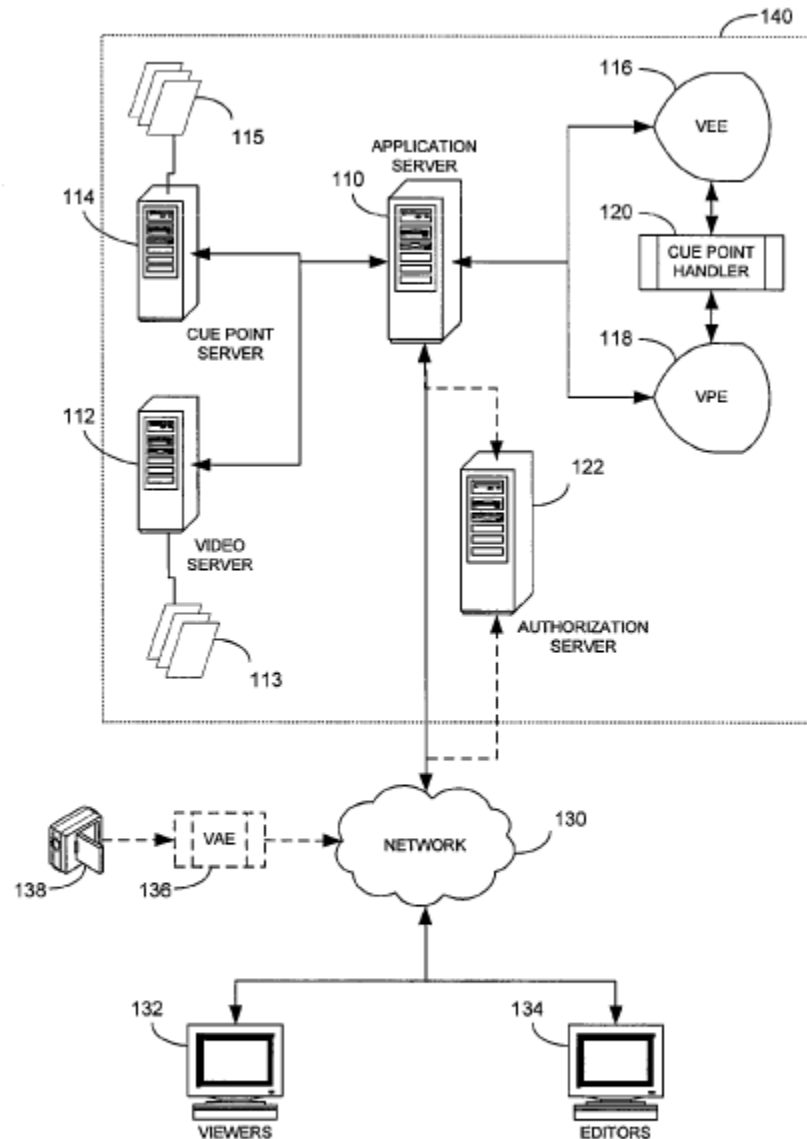


Fig. 1A

Id. at 6:61–7:14, 7:42–60, Fig. 1A. As shown in Figure 1A, the application server “may be configured to handle various applications, including a Video Editing Environment (VEE) 116 and/or a Video Playback Environment (VPE) 118.”³ *Id.* at 9:19–21, Fig. 1A; *see also id.* at 4:1–2 (“In other embodiments, the video editing environment comprises a server-level video editor.”). VEE “programs may be stored on the application server, runnable (able to be executed, performed, effectuated, etc.) by the application server, or handled by the application server in some other useful way.” *Id.* at 9:22–25; *see also id.* at 13:2–6 (“the VEE may be loaded in any useful way to provide the desired results[,] [f]or example, . . . as a server-level application”), 13:64–65 (“the VEE itself running [] at the . . . server level”). In Figure 1A, the application server runs the VEE and communicates with the video server and cue point server to handle video cue point generation and editing. *Id.* at 5:30–32, 7:5–14, 7:42–48. The Video Playback Environment is an environment to play videos and display cue points for selection by a user on the client side of network 130. *Id.* at 34:59–65, Fig. 11A.

The '286 patent explains that running the VEE on the server side of the network addresses the problem of “video editing software and hardware [that] is cumbersome, expensive, and difficult to learn” by client-side users of the system. *Id.* at 2:16–25. Importantly, the method permits client-side users to interface with the server side and communicate video cue point and editing commands over the network to the server-side of the system on which the VEE resides. *Id.* at 10:4–11 (“editor terminals may communicate with the application server via a network”), 13:48–51 (“VEE graphical user interface (GUI) . . . may comprise any graphical, textual, audio, or other data which is desirable or necessary for providing interface

³ Quotations from patent documents may omit or de-emphasize bold numerals.

capabilities to a client”); 24:41–45 (“client terminal may interface at least through its network device to a network”). For example, client editor terminal 134 in Figure 1A may interface with the server to generate and edit cue points for selected video information via a graphical user interface (“GUI”) “generated as a webpage on a client’s web browser.” *Id.* at 13:59–67; *see also id.* at 9:30–38 (“editor terminals 134 . . . may comprise any device or application capable of accessing the system 100 in a useful way”), 24:56–62 (“[t]he client may enter the VEE by . . . accessing a webpage”).

The ’286 patent also describes the use of forms displayed on a client-side terminal where a user can provide new or updated cue point information on a form and transmit the form containing the cue point information to the server side of the network:

In other embodiments, the method may only generate and/or save the cue point after the client submits the information. For example, the cue point information form may be displayed on a client terminal while the cue point editor resides on a server terminal. In this example, the client may be required to submit the form over a network to the server computer before the cue point editor has the information it needs to generate the cue point.

Id. at 23:16-28. Thus, the ’286 patent describes an embodiment where a client-side user enters cue point information on a form via a browser-based GUI and submits the form over the network to the server computer to save the new or updated cue point, e.g., by updating the cue point database on the server side of the network in accordance with the client’s cue point information. *Id.*, *see also id.* at 15:52–57 (“if a client wishes to insert a new cue point, she may . . . assign the cue point a location, . . . a name, and submit or save the cue point data to a file”), 16:11–20 (“a client may choose to save new cue point information . . . to a relational database

stored on a cue point server”), 27:55–57 (“a ‘Save’ button for allowing a client to save the current cue point editing and possibly submit the cue point information”).

The ’286 patent provides an example of a client-side cue point editor screen (browser-based GUI) that displays three time-indexed cue points for a client user to view the Neighborhood, Foyer, and Living Room areas in a real estate marketing video. Ex. 1001, Fig. 6; *see also id.* at 13:48–51 (GUI “may comprise any graphical, textual, audio, or other data . . . for providing interface capabilities to a client”), 14:15–16 (“GUI may provide . . . controls, fields, etc. for editing a video file”). Figure 6 is reproduced below from the Petition in annotated form:

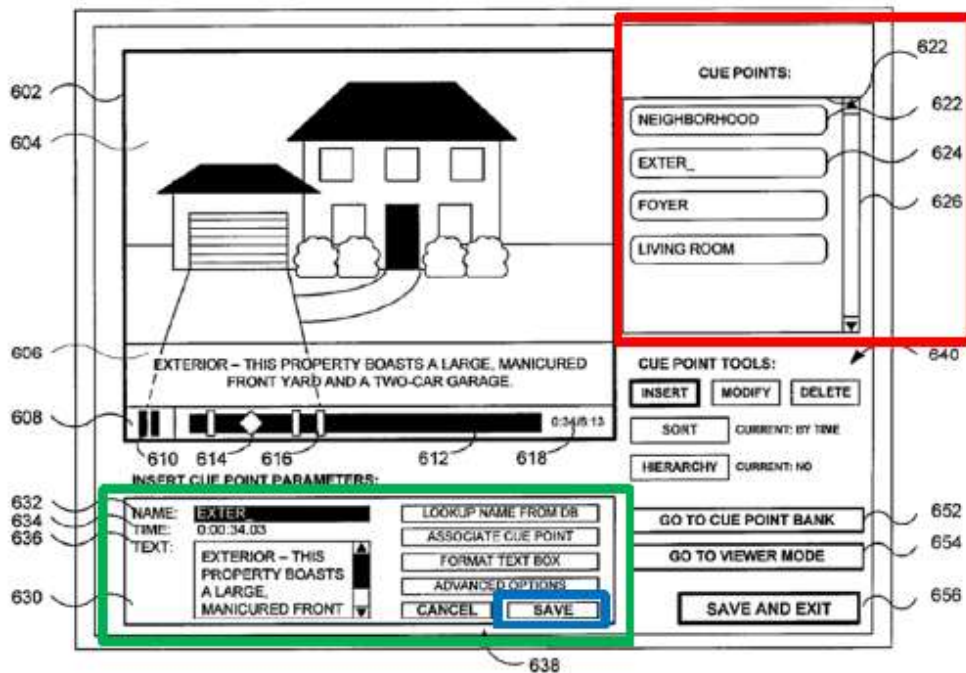


Fig. 6

Pet. 7; *see also* Ex. 1001, 25:64–26:11, 26:60–67, Fig. 6.

The browser-based, cue point editor screen in annotated Figure 6, above, includes a cue point listing area (outlined in red) that lists three existing cue points (time-indexed video clips) of the “NEIGHBORHOOD,” “FOYER,” and “LIVING

ROOM” in a six-minute, thirteen-second video of the property being marketed. Ex. 1001, 27:21–26, 28:24–30. A client-side editor is in the process of adding a new cue point for the home’s exterior—“EXTER_”—in the cue point listing area of the GUI “by pausing playback of the video file at 34.03 seconds.” *Id.* at 26:52–62, 27:21–26, 28:31–57. Cue point parameters area 630 (outlined in green) allows the client-side editor to input cue point information, such as cue point “name” (form field 632), “time position” (form field 634), and “comment text” (form field 636). *Id.* at 27:32–40. The “Save” button (outlined in blue) “allow[s] a client to save the current cue point editing and possibly submit the cue point information” over the network to the server side for updating and storage. *Id.* at 27:55–59.

C. Illustrative Claim

Independent claim 13 and dependent claims 14–15 and 17–20 are the challenged claims. Claim 13, reproduced below, illustrates the claimed subject matter:

[13.P]⁴ A method for handling video cue points, the method comprising:

[13.1] providing a computer system having at least one computer-readable medium comprising a video editing environment, and being disposed at a server side of a public network;

[13.2] receiving a set of video information at the video editing environment using the computer system;

[13.3] receiving a set of cue point information at the video editing environment using the computer system;

[13.4] receiving a cue point editing command over the network from a remote client terminal disposed at a client side of the public network using the computer system;

⁴ We adopt Petitioner’s claim limitation numbering system for convenience.

[13.5] modifying a portion of the cue point information at the server side of the public network according to the cue point editing command received over the public network from the client terminal;

[13.6] receiving a cue point selection over the network from the remote client terminal identifying one of the cue points corresponding to a portion of the video information of one of the video files; and

[13.7] streaming the portion of the video information to the client terminal over the public network in response to receiving the cue point selection.

Ex. 1001, 54:66–55:22.

D. Prior Art and Asserted Grounds of Unpatentability

Petitioner asserts that claims 13–15 and 17–20 are unpatentable on the following Grounds:

Claim(s) Challenged	35 U.S.C. §	Reference(s)/ Basis
13-15 and 18-20 (Ground 1)	102 ⁵	Gupta ⁶
13-15 and 18-20 (Ground 2)	102	Fegan ⁷
13-15 and 18-20 (Ground 3)	103	Kim ⁸
13-15 and 18-20 (Ground 4)	103	Kim, Gupta
13-15 and 18-20 (Ground 5)	103	Vasilevsky, ⁹ Logan ¹⁰
17 (1101 IPR Ground 1) ¹¹	102	Gupta

⁵ The Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (“AIA”) includes revisions to 35 U.S.C. §§ 102, 103 that became effective after the filing date of the application that led to issuance of the challenged patent. Hence, this *inter partes* review is governed by the pre-AIA provisions of 35 U.S.C. §§ 102, 103.

⁶ US 2005/0081159 A1, Pub. Apr. 14, 2005 (Ex. 1004, “Gupta”).

⁷ US 2005/0144305 A1, Pub. June 30, 2005 (Ex. 1005, “Fegan”).

⁸ US 2005/0210145 A1, Pub. Sep. 22, 2005 (Ex. 1006, “Kim”).

⁹ WO 03/067594 A1, Pub. Aug. 14, 2003 (Ex. 1008, “Vasilevsky”).

¹⁰ US 2003/0093790 A1, Pub. May 15, 2003 (Ex. 1009, “Logan”).

¹¹ The Grounds asserted in IPR2024-01101 are numbered as “1101 IPR Ground” 1–5 following consolidation with IPR2024-00710.

Claim(s) Challenged	35 U.S.C. §	Reference(s)/ Basis
17 (1101 IPR Ground 2)	103	Fegan, Sull ¹²
17 (1101 IPR Ground 3)	103	Kim
17 (1101 IPR Ground 4)	103	Kim, Gupta
17 (1101 IPR Ground 5)	103	Vasilevsky, Logan

Pet. 1; 1101 IPR Pet. 1. Petitioner relies on the Declaration of Henry Houh, Ph.D. in support of the Petition and the Reply Declaration of Dr. Houh in support of the Reply. Ex. 1002¹³; Ex. 1023. Patent Owner relies on the Declaration of Mark P. Mahon, Ph.D. in support of the Response and Sur-Reply. Ex. 2015.

II. CLAIM CONSTRUCTION

A. Level of Ordinary Skill in the Art

The Petition states that a person of ordinary skill in the art (“POSITA”) “would have had a Bachelor’s degree in Electrical Engineering, Computer Engineering, or Computer Science (or equivalent) plus approximately two years of work experience with technologies relating to video annotation/bookmarking and/or video navigation.” Pet. 10 (citing Houh Declaration Ex. 1002 ¶¶ 59–60). The Petition further states that “more education can supplement work experience and vice versa.” *Id.* Patent Owner “accepts the Petitioner’s definition of the POSITA as having experience with technologies relating to video annotation/bookmarking and/or video navigation. Patent Owner finds it reasonable, subject to the understanding that a lack of work experience can be mitigated by additional education.” Resp. 4 (citing Pet. 15; Mahon Declaration Ex.

¹² US 2002/0069218 A1, Pub. June 6, 2002 (Ex. 1007, “Sull”).

¹³ Unless otherwise noted, we cite to Ex. 1002 in IPR2024-00710. When addressing claim 17 we will cite to “Ex. 1002 (1101 IPR)” when necessary.

2015 ¶¶ 43–47).

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) (citing *Custom Accessories, Inc. v. Jeffrey-Allan Indus., Inc.*, 807 F.2d 955, 962 (Fed. Cir. 1986)). “These factors are not exhaustive but are merely a guide to determining the level of ordinary skill in the art.” *Daiichi Sankyo Co. v. Apotex, Inc.*, 501 F.3d 1254, 1256 (Fed. Cir. 2007). There is uncontested evidence in the record before us that reflects the knowledge and experience of a POSITA, as agreed by Petitioner and Patent Owner, and we apply the skill level of a POSITA agreed by the parties.

B. Claim Construction

The Petition advocates for the “plain and ordinary meaning” of the claim terms without further analysis. Pet. 9–10 (citing Ex. 1002 ¶¶ 61–62).

The Response addresses the plain and ordinary meaning of a “*video editing environment . . . disposed at a server side of a public network*” recited in limitation 13.1. Resp. 9–12. Patent Owner contends:

This limitation provides for server-side *video editing environment* (“VEE”) software (e.g., an application) for performing editing of cue point information that enables the client to perform remote cue point editing as further recited in the claim. Notably, the claims, the specification, and the prosecution history demonstrate that the VEE is located on the server-side of the recited public network—and interacts with a client terminal located on the client-side of such public network—which is a foundational element of all the challenged claims.

Id. at 9 (citing Ex. 2015 ¶¶ 80–85). Patent Owner argues that a POSITA would understand the limitations in claim 13 “to require a server-side video

editing environment for editing cue points that enables remote cue point editing by a client over a public network.” *Id.* at 10–11 (citing Ex. 2015 ¶ 87).

Petitioner replies that Patent Owner’s construction of the VEE is overly limiting because the VEE recited in claim 13 “is not claimed to receive a cue point editing command or modify cue point information.” Reply 1 (citing Ex. 1024, 110:17–111:17). Petitioner’s essential point is that claim 13 recites “only a server-side VEE [13.1] receiving a ‘set of video information’ [13.2] and a ‘set of cue point information’ [13.3].” *Id.* Petitioner also takes issue with Patent Owner’s reliance on prosecution history arguments in what Petitioner perceives as an argument of “prosecution history disclaimer that requires the VEE modify cue point information” as recited in limitation 13.5. *Id.* at 2–3.¹⁴ We need not resolve these disputes to resolve this *inter partes* review.

The parties are arguing at cross-purposes, but the plain and ordinary meaning of limitation 13.1—“*providing a computer system having at least one computer-readable medium comprising a video editing environment, and being disposed at a server side of a public network*”—is clear. Claim 13 recites a “*method for handling video cue points*” that relies on client-server architecture. Limitation 13.1 recites providing a computer system that includes a computer readable medium comprising a “*video editing environment*” (VEE), i.e., an environment for editing video with cue points, implemented by software, hardware and software, a web page, or “in any other useful way” on the server side of a public network. Ex. 1001, 24:56–62 (“The client may enter the VEE by executing an application invoking various software and/or hardware commands, accessing a

¹⁴ Petitioner, however, does not offer an explicit construction of limitation 13.1 beyond its plain and ordinary meaning. Pet. 9–10; Reply 1–3.

webpage, or in any other useful way.”); *see also* Resp. 9 (“*video editing environment* (‘VEE’) software (e.g., an application) for performing editing of cue point information . . . located on the server-side of the recited public network”). Nothing more is required.

To further clarify, the claimed VEE is not limited to any particular type of software, hardware, application program, cue point server, application server, or configuration. The ’286 patent describes the functional implementation of the VEE on the server side of a public network in broad terms—“in any other useful way”—as long as there is a client-side interface with the server side via the network. Ex. 1001, 24:56–62. Dr. Houh agrees. Ex. 1023 ¶¶ 11 (citing Ex. 1001, 24:56–62), 26. Dr. Mahon similarly testifies that the VEE is “not restricted to” a software application, and “[i]f it included hardware components, then it would also include software. So it would have an application running on that hardware.” Ex. 1024, 79:3–14.

Figure 6 in the ’286 patent “provides an exemplary screen shot of an embodiment of a video editing environment as viewed by a client terminal according to the invention.” Ex. 1001, 25:64–66. Beyond Figure 6, discussed in detail above, the ’286 patent provides high-level descriptions of the VEE. *See, e.g., id.* at 9:22–25 (“[VEE] programs may be stored on the application server, runnable (able to be executed, performed, effectuated, etc.) by the application server, or handled by the application server in some other useful way.”); 12:65–13:6 (“Loading the VEE may involve executing an application invoking various software and/or hardware commands . . . [and] may load as a script in the background of a webpage, as a server-level application.”); 13:64–65 (“the VEE itself running . . . at the . . . server-level”). Thus, the claimed method permits client-side users to interface with the server side over a public network to edit

video with cue points on the server-side of the system where the VEE resides. Ex. 1001, 13:48–51, 13:59–67, 24:56–62.

For the reasons give above, we determine the plain and ordinary meaning of limitation 13.1 governs, and no further construction of limitation 13.1 is necessary to decide whether Petitioner has satisfied its burden to establish by a preponderance of the evidence that claims 13–15 and 17–20 are unpatentable. *See, e.g., Wellman, Inc. v. Eastman Chem. Co.*, 642 F.3d 1355, 1361 (Fed. Cir. 2011) (“[C]laim terms need only be construed ‘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)).

III. FEGAN AND SULL – GROUND 2

Petitioner contends that Fegan (Ex. 1005) anticipates claims 13–15 and 18–20 under 35 U.S.C. § 102. Pet. 33–52. The Petition argues, in particular, that independent claim 13 can be mapped to Fegan’s disclosure of a server-side VEE that allows a client-side user to generate and edit multimedia (video) files with annotations (cue points), via a web browser user interface, and send the annotation and edit information over the network to modify annotations (cue points) at a server running PHP scripts software. Pet. 33–49 (citing, *inter alia*, Ex. 1002 ¶¶ 143–187; Ex. 1005 Abstract (code 57), ¶¶ 7–10, 12, 81, 83, 85); Reply 19–29 (citing Ex. 1005 ¶¶ 3, 5–10, 12, 15, 20, 42, 69–71, 73, 75, 80–81, Figs. 4–7; Ex. 1023 ¶¶ 67–104; Ex. 2025, 496–498, 500 Fig. 7-37). The Petition argues that Fegan expressly discloses limitations 13.1–13.7 as understood by a POSITA. *Id.*

Patent Owner argues that Fegan does not disclose limitations 13.1–13.5 because Fegan discloses client-side editing of video annotations and that “the tools for creating segments and annotations run on the client-side, not the server side.”

Resp. 36 (citing Ex. 1005 ¶¶ 74, 76, 78, 80; Ex. 2015 ¶ 197). Patent Owner further contends, in particular, that Fegan discloses database software that performs server-side storage and retrieval, but not server-side software for editing video annotations. *Id.* at 36–43 (citing, *inter alia*, Ex. 1005 ¶¶ 74, 76, 78, 80, 81, 83, 85; Ex. 2015 ¶¶ 184–193, 197–214, 216–223); Sur-Reply 11–17 (citing Ex. 1005 ¶¶ 74–81, Figs. 5, 7). The Response and Sur-Reply argue that Fegan does not expressly disclose limitations 13.1–13.5.

Anticipation under 35 U.S.C. § 102 requires “the presence in a single prior art disclosure of all elements of a claimed invention arranged as in the claim.” *Therasense, Inc. v. Becton, Dickinson & Co.*, 593 F.3d 1325, 1332 (Fed. Cir. 2010); *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1369 (Fed. Cir. 2008). To anticipate a patent claim under 35 U.S.C. § 102, “a reference must describe, either expressly or inherently, each and every claim limitation and enable one of skill in the art to practice an embodiment of the claimed invention without undue experimentation.” *American Calcar, Inc. v. Am. Honda Motor Co.*, 651 F.3d 1318, 1341 (Fed. Cir. 2011) (citing *In re Gleave*, 560 F.3d 1331, 1334 (Fed. Cir. 2009)). “[E]xtrinsic evidence may be considered when it is used to explain, but not expand, the meaning of a reference.” *In re Baxter Travenol Labs.*, 952 F.2d 388, 390 (Fed. Cir. 1991) (citing *Scripps Clinic & Research Foundation v. Genentech, Inc.*, 927 F.2d 1565, 1576–77 (Fed. Cir. 1991)).

Petitioner further contends that Fegan and Sull render claim 17 obvious under 35 U.S.C. § 103. 1101 IPR Pet. 53–55 (citing Ex. 1002 (1101 IPR) ¶¶ 185–91; Ex. 1005 Abstract (code 57), ¶¶ 3, 7–10, 12, Fig. 4; Ex. 1007 Abstract (code 57), ¶¶ 52–55, 61, 167, 205, 209, Fig. 3. Patent Owner responds that claim 17 “is patentable over Fegan and Sull for at least the reasons set forth above for Claim 13.” Resp. 45 (citing Ex. 2015 ¶ 238). Patent Owner does not further address

claim 17.

A patent claim is unpatentable under 35 U.S.C. § 103 if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person of ordinary skill in the art. *See KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007) (quoting pre-AIA 35 U.S.C. § 103(a) (“KSR”)).

We assess Petitioner’s evidence and arguments according to the above-referenced anticipation and obviousness standards. For the reasons given below, we determine the Petition has established that claims 13–15 and 20 are unpatentable as anticipated by Fegan (Ground 2), and claim 17 is unpatentable as obvious over Fegan and Sull (1101 IPR Petition Ground 2) by a preponderance of the evidence. We further determine the Petition has not established that claims 18–19 are unpatentable as anticipated by Fegan (Ground 2). We begin with a discussion of the Fegan reference.

A. Fegan (Ex. 1005)

Fegan discloses a “comprehensive server-side system for editing, annotating, managing and presenting multimedia events.” Ex. 1005, Abstract (code 57). Clients access Fegan’s system over the Internet to “generat[e] time-based index points for virtual segmentation of a multimedia file,” e.g., streaming video, which allows a user to “create ‘clips’ of specified portions” of the video. *Id.* ¶¶ 78, 80; *see also id.* at ¶ 13 (“multimedia files include . . . streaming media . . . video information”). The client user then streams a presentation of the selected video segments. *Id.* ¶ 7 (“The application then uses the url/uri and time offsets to play the portion of the digital object that the user has selected . . .”).

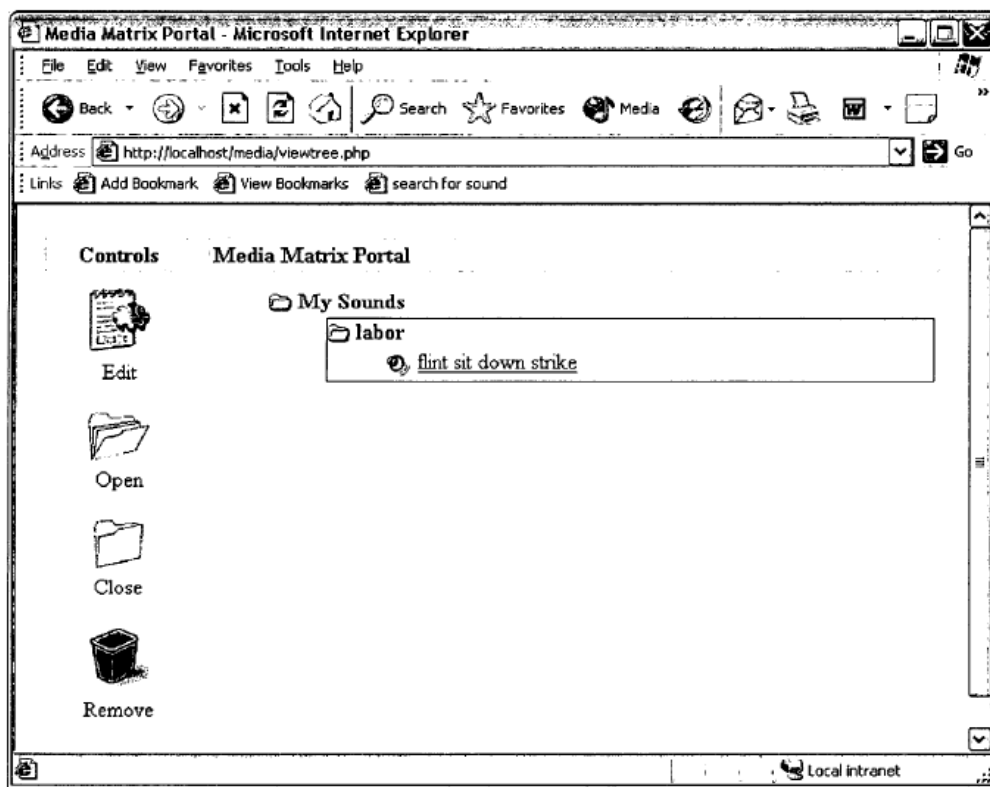
Fegan’s system also provides “a means for a user to add annotative information to a multimedia file,” such as “a title, annotative notes, and a

designated location for storage and retrieval of the annotative information.” *Id.*

¶ 80. “In preferred embodiments, such annotative information is entered via one or more text fields in a browser window.” *Id.* Figure 5 in Fegan depicts a “browser window displaying a user-created directory of annotative information associated with multimedia files.” *Id.* ¶ 81, Fig. 5. Figure 5 is reproduced below:

FIGURE 5

The folder created that appears on the user's portal page along with the annotation. Clicking on the folder shows the annotations in the folder as well as bringing up the controls to edit the settings of the folder (rename it, move it to another folder, delete it, etc...)



Id. Figure 5 depicts the annotation “flint sit down strike” and displays a directory of control icons that “allows a user to select, open, edit, close, or delete the annotative information associated with a multimedia file.” *Id.* ¶ 81. Fegan discloses that such “systems and methods are hosted in an entirely server-side environment, such that client computers can identify, segment, collect, annotate, organize, and publish complex multimedia presentations containing multimedia

files.” *Id.* ¶ 8.

Fegan’s system, moreover, uses Internet-based website technology that “serves information content over a network using the standard protocols of the World Wide Web.” *Id.* ¶ 42. Fegan’s system includes “hardware/software server components that serve the informational content over the network [*i.e.*, a website]” and “‘back end’ hardware/software components, including any non-standard or specialized components ... to perform services for Web site users.” *Id.* Fegan expressly discloses the use of PHP scripts—server-side software program functionality—to process annotation information received from a client: “The present invention is not limited to particular types or kinds of server-side software In some preferred embodiments, the features of the present invention are encoded in PHP.” *Id.* ¶ 10.

B. Fegan Anticipates Claim 13 (Ground 2)

The parties’ primary dispute in Ground 2 centers on whether Fegan discloses limitations 13.1, 13.4, and 13.5.¹⁵ For the reasons given below, we determine that Fegan discloses all three contested limitations.

1. Fegan discloses “a video editing environment . . . disposed at a server side of a public network” (13.1)

We begin with two fundamental points not in dispute. The parties do not dispute that Fegan discloses a method for annotating video files with “*cue points*,” e.g. bookmarks such as “multimedia file start and stop points (*i.e.*, designations of the starting and ending points of the multimedia file to be played in a presentation).” Ex. 1005 ¶ 12; *see* Pet. 33 (citing Houh Declaration Ex. 1002 ¶ 146; Ex. 1005, Abstract, ¶¶ 12, 13 (multimedia encompasses “streaming

¹⁵ We separately address the parties’ disputes regarding claims 15 and 18 in Section C. below.

video”)), 77–81; *cf.* Ex. 1001, 7:50-52 (“cue points may refer to indexed time positions or tags anywhere within a video file”), 8:15-20 (“cue points may be video meta-tags . . . [that] describe the information in the video file”)); Ex. 2015 ¶ 182; Resp. 36–43. There also is no dispute that Fegan discloses a method for editing the video cue points, although how the method is accomplished and whether Fegan’s annotation editing function is a disclosure of limitations 13.1, 13.4, or 13.5 is in dispute. For example, in Fegan’s system “[t]he directory allows a user to select, open, edit, close, or delete the annotative information associated with a multimedia file.” Ex. 1005 ¶ 81 (emphasis added); *see also* Pet. 44–46 (citing Ex. 1002 ¶¶ 170–172; Ex. 1005 ¶¶ 9 (“each user has a personal ‘portal’ hosted on the system of the present invention that allows the user to edit and organize collected materials and to create complex publications and presentations that include multimedia clips and annotations”), 81; Resp. 36 (“each of Fegan’s disclosed embodiments performs editing”).

In short, Fegan’s video annotations are “*cue points*” that may be edited by a client user.

a. Fegan discloses server-side software for editing video annotations

The Petition reads limitation 13.1 onto Fegan as follows:

The at least one computer-readable medium *comprising a video editing environment* (e.g., software for both editing annotations and streaming video, executed by the remote server and databases). The remote server executes software for editing annotations and streaming media.

The computer system *being disposed at a server side of a public network* (e.g., Internet), in contrast to a client side of the network where client computers are located.

Pet. 34–35. We are persuaded by Dr. Houh’s testimony that Fegan consistently references server-side software “programs”—“application” software stored on a

server—and a client-side browser interface for accessing those server-side programs to execute video annotations and edits. Ex. 1002 ¶¶ 152, 154–156. The Petition cites the following disclosures in Fegan to establish that Fegan’s system relies on server-side software for annotating video files (“*cue points*”) and editing those annotations:

[A] *comprehensive server-side system for editing, annotating, managing and presenting multimedia events from a plurality of multimedia sources.* (Ex. 1005, Abstract (code 57));

The *technical tools* for carrying out the multimedia presentation are *maintained on the server-side*, rather than forcing the user on the client-side to navigate the difficulties of the management of the multimedia files. (*Id.* ¶ 7);

[T]he systems and methods are *hosted in an entirely server-side environment*, such that *client computers can* identify, segment, collect, annotate, organize, and publish complex multimedia presentations (*Id.* ¶ 8);

[E]ach user has a personal ‘portal’ *hosted on the system* of the present invention that *allows the user to edit* and organize collected materials and to create complex publications and presentations that include *multimedia clips and annotations.* (*Id.* ¶ 9);

In preferred embodiments, the system is maintained *entirely on the server-side*. The *server (host) system manages* the appropriate databases (e.g., user information, multimedia file location information, *annotations, start and stop points*, etc.). . . . In some preferred embodiments, the features of the present invention are *encoded in PHP* and JavaScript, with an XML-based delivery and display. (*Id.* ¶ 10);

[T]he present invention provides a system for manipulating, *annotating*, and managing a plurality of remote, multimedia files in a *server-side environment . . . comprising* multimedia file identity and *multimedia file start and stop points* (i.e., designations of the starting and ending points of the multimedia file to be played in a presentation).” *Id.*, ¶[0012];

[M]ultimedia files include . . . streaming media, audio information,

video information. (*Id.* ¶ 13);

[T]he term “client-server” refers to a model of interaction . . . in which a program at one site sends a request to a program at another site and waits for a response. . . . In the context of the World Wide Web . . . the client is a “Web browser” (or simply “browser”) that runs on a computer . . . of a user; the program which responds to browser requests by serving Web pages is commonly referred to as a ‘Web server.’ (*Id.* ¶ 37);

[T]he functionality of the browser is extended by means of one or more separate computer programs (*hereinafter referred to as “applications”*) that are stored in one or more remote locations (e.g., *locations other than locally on the user’s computer*). . . . The hyperlink connects the user to *a remote server* via a computer network (e.g., the Internet). (*Id.* ¶ 71);

[T]he data comprising the search results [multimedia content] may be stored by *software on a remote server*. (*Id.* ¶ 73);

The [browser] window is configured to provide user access to the playback controls of the multimedia player . . . including . . . the ability to *start, stop, and pause playback* in real time In some embodiments, *software that is stored on a remote server* allows a user to save and store the desired playback parameters (e.g., audio volume) associated with a selected multimedia file. (*Id.* ¶ 76);

Fig. 5 shows a browser window displaying a user-created directory of annotative information associated with multimedia files. In preferred embodiments . . . the directory *allows a user to select, open, edit, close, or delete the annotative information* associated with a multimedia file. . . . Fig. 7 shows a saved annotation that has been opened via the directory for *further editing*. (*Id.* ¶ 81);

[S]*oftware that is stored on a remote server* allows a user to save and store segment and *annotative information* associated with one or more multimedia files. (*Id.* ¶ 83); and

[A] first user in a first location may create a multimedia presentation that is *stored entirely on a remote server*. (*Id.* ¶ 85).

Pet. 33–35, 44–46 (emphases added) (also citing Ex. 1002 ¶¶ 151–157).

The Abstract and paragraphs 7–10, 12, and 37 in Fegan disclose that the software programs (“applications”) for executing video file annotations are hosted entirely on the server-side of a client-server system architecture. Paragraphs 9, 76, and 81 disclose that a client interfaces with the server-side of the system via a web browser to annotate multimedia (video) files, e.g. by annotating specific start and stop points (“*cue points*”), and to edit those annotations. Paragraphs 10, 71, and 76 disclose that server-side PHP script programs can be used to execute the video annotations and edits (“*video editing environment*”). Paragraphs 9, 81, 83, and 85 disclose that a client uses a directory presented on a web browser to interface with the server-side of the system “to select, open, edit, close or delete the annotative information associated with multimedia [video] files,” as shown in Figures 5–7.

For example, the ’286 patent describes the claimed “*video editing environment*” as follows: “Loading the VEE may involve executing an application invoking various software and/or hardware commands . . . [and] *may load as a script* in the background of a webpage, as a server-level application.” Ex. 1001, 12:65–13:6 (emphasis added). That is precisely what Fegan discloses. Fegan’s server side software programs may load as PHP script. Ex. 1005 ¶ 10 (“In some preferred embodiments, the features of the present invention are encoded in PHP”). Like the ’286 patent, in Fegan’s system a client-side web browser interfaces with server-side software programs to annotate video files and edit those annotations—“*at least one computer-readable medium comprising a video editing environment . . . disposed at a server side of a public network*” (limitation 13.1).

The Petition further demonstrates that Fegan’s system runs server-side PHP script applications using the remote server’s memory (storage). Pet. 34–35 (citing Ex. 1002 ¶¶ 151–157; Ex. 1005 ¶¶ 10 (“server-side software; . . . encoded in PHP”), 24–26 (describing computer readable media), 37 (describing a program run

by a server in response to client requests) 76 (describing “software that is stored on a remote server”), 83 (same). As Dr. Houh explains:

Fegan’s system runs on “‘server-side software’ such as MYSQL and PHP, which uses the remote server’s memory/storage.

Ex. 1002 ¶ 154 (citing Ex. 1005 ¶ 10, 24–26, 37, 76, 83). Fegan expressly discloses a client-server architecture where the client is a “‘Web browser’ (or simply ‘browser’) that runs on a computer (e.g., desktop, cell phone, hand-held, etc.) of a user; the program which responds to browser requests by serving Web pages is commonly referred to as a ‘Web server’” that can run PHP script applications. Ex. 1005 ¶¶ 10, 37. Fegan further discloses that the application software for a client-side user to edit video annotations via the web browser is stored in one or more “remote locations (e.g. locations other than locally on the user’s computer),” specifically in a server located on the server-side of the network. Ex. 1005 ¶ 71; *see also* Ex. 1002 ¶ 155 (citing Ex. 1005 ¶¶ 7, 9, 71, 73–74, 83, Figs. 1–7).

In sum, Fegan discloses server-side software comprising “*at least one computer readable medium comprising a video editing environment . . . disposed at a server side of a public network*” because Fegan’s “comprehensive” “server (host) system” is “hosted in an entirely server-side environment” comprising: a server that stores software “programs” (“applications”) that can load as PHP scripts for annotating streaming video and editing those annotations in response to a client interfacing via web browser over a network with the server. *See, e.g.*, Pet. 34–35 (citing Ex. Ex. 1002 ¶¶ 155–157; 1005 ¶¶ 7, 9, 71, 73–74, Figs. 1–7), 43–47 (citing Ex. 1002 ¶¶ 169–179; Ex. 1005 ¶¶ 3, 9, 37, 80–83, 85).

b. Addressing Patent Owner’s Arguments

Patent Owner argues that “each of Fegan’s disclosed embodiments performs

editing locally through **client-side software**.” Resp. 36 (citing Ex. 1005 ¶¶ 74, 76, 80; Mahon Declaration Ex. 2015 ¶ 183); Sur-Reply 11–13 (citing Ex. 1005, Fig. 7; Ex. 2015 ¶¶ 213–214, 218–222). Patent Owner also argues that the web browser windows depicted in Fegan Figures 5–7 “are implemented entirely through client-side software” (e.g., a client browser and a browser-based media player). Resp. 36 (citing Ex. 2015 ¶ 183). We disagree.

Patent Owner and its expert, Dr. Mahon, attempt to minimize Fegan’s disclosure of a system hosted entirely on the server-side of the network (“a server-side environment”) as “vague high-level introductory statements.” Ex. 2015 ¶ 183 (cited in Resp. 36). But Patent Owner cannot disregard the distinction between client-side application software and a client-side browser interface that allows a client to access server-side software programs over a public network to annotate video and edit those video annotations, as disclosed in Fegan. Fegan’s specific and repeated disclosures of a client-server architecture that relies on a “comprehensive” and “entirely server-side environment” to execute software “programs” and “applications” for annotating and editing streaming video in response to a client interfacing with the server(s) over a network via web browser are not so easily dismissed.

We agree with Petitioner that Fegan’s system uses Internet-based website technology, including “hardware/software server components that serve the informational content [*i.e.*, website]” and “‘back end’ hardware/software components, including any non-standard or specialized components ... to perform services for Web site users.” Reply 20 (quoting Ex. 1005 ¶ 42). To provide such services, Fegan expressly discloses the use of PHP script—server-side software—to process annotation information received from a client. *Id.* (citing Ex. 1005 ¶ 10 (“The present invention is not limited to particular types or kinds of server-side

software ... In some preferred embodiments, the features of the present invention are *encoded in PHP*)” (emphasis added); *see also* Pet. 34 (citing Ex. 1005 ¶¶ 10, 37). We credit Dr. Houh’s testimony that server-side scripts such as CGI or PHP were conventional and well-known in the art:

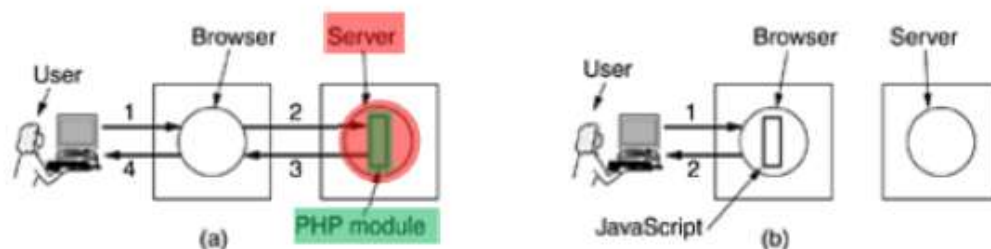
According to the ’286 Patent, the VEE may employ known, conventional server-side technologies such as “CGI [Common Gateway Interface] scripts.” ’286 Patent, 18:15-17. As I explained above in Section II.A, conventional server-side CGI, or some similar server-side script, must be present on the server in order to receive, process, and store information submitted by a client using a form on a webpage. This would have been very well-known and understood by any POSITA before the earliest priority date of the ’286 Patent. . . .

Tanenbaum also explains that there exist other conventional server-side dynamic web page generation techniques comparable to CGI, including PHP (*i.e.*, “PHP: Hypertext Preprocessor”). Tanenbaum explains that PHP scripts are executed by the server to generate dynamic HTML pages to serve to the client.

Ex. 1023 ¶¶ 27, 30 (citing Ex. 2025, 496); *see also* Ex. 1002 ¶ 154). We rely on Dr. Houh’s testimony “to explain, but not expand, the meaning of a reference,” *i.e.*, the meaning of “encoded in PHP” in Fegan paragraph 10 to a POSITA. *In re Baxter Travenol*, 952 F.2d at 390.

We also rely on Tanenbaum as objective corroborating evidence that PHP scripts are executed server-side in Fegan’s system, not client-side:

Figure 7-37. (a) Server-side scripting with PHP. (b) Client-side scripting with JavaScript.



EX2025, 500 (FIG. 7-37) (annotated).

Reply 20–21 (citing Ex. 2025, 496–498, 500, Fig. 7-37 (annotated)). As depicted in Tannenbaum Figure 7-37 (annotated), the PHP script module resides in the server. Dr. Houh testifies that “Tanenbaum confirms that PHP is executed server-side,” and we credit his testimony because it is consistent with the teachings of Tanenbaum and Fegan. Ex. 1023 ¶ 81; *see also* Reply 8–9 (citing Ex. 2025, 496); Ex. 1023 ¶¶ 28–29. Tanenbaum further states that “[u]sually, servers expect Web pages containing PHP to have file extension php rather than html or htm.” *Id.* at 496. Fegan Figures 4–7, on which Patent Owner relies in support of its argument attempting to distinguish Fegan from claim 13 (Resp. 36–43; Sur-Reply 12–16), depict web browser windows containing “php” file extensions that indicate server-side php scripting, not client-side scripting. Ex. 1005, Figs. 5–6 (“viewtree.php”), 4 and 7 (“sound_editor.php”). Petitioner’s position is further supported by Fegan’s disclosure that “technical tools . . . are maintained on the server-side, rather than forcing the user on the client-side to navigate the difficulties of the management of the multimedia files.”¹⁶ Reply 21 (quoting Ex. 1005 ¶ 7).

¹⁶ The ’286 patent similarly describes the use of server-side software tools to relieve client users of the need to run client-side multimedia applications, as noted

Notably, although Patent Owner bears no evidentiary burden, Patent Owner does not address Tanenbaum, much less undermine Petitioner’s persuasive argument and evidence that Fegan discloses server-side PHP software scripts for processing video annotations and edits. *See* Sur-Reply 11–19.¹⁷ Patent Owner makes conclusory arguments that “PHP does not disclose limitations 13.1-13.5” and “the Petition mentions PHP **only once** (Pet., 34) and does not argue PHP in relation to limitation 13.4.” *Id.* at 17. Such conclusory arguments, without further explanation or evidentiary support, are entitled to little or no weight. *See Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624, Paper 9 (PTAB Aug. 24, 2022) (precedential) (*verbatim* conclusory assertion of expert, without evidentiary support, entitled to little weight). In sum, we credit Dr. Houh’s testimony that Tanenbaum confirms PHP scripts are run on the server side in Fegan’s system as depicted in Figures 5–7.

c. Fegan discloses a user interface for editing video annotations on the server-side of a public network

Patent Owner argues that Fegan “performs editing locally through client-side software” where “segments and associated annotations are created using client-side applications” run on a multimedia player. Resp. 36, 38–39 (citing Ex. 2015 ¶¶ 183, 197–206, 213–214). We agree with Petitioner’s reply argument that Fegan’s browser-based user interface provides updated segment/annotation information over the network to the server in order to modify that information in server-side databases. Reply 21–23 (citing Ex. 1023 ¶¶ 73–97). As Dr. Houh explains:

by Patent Owner. Resp. 2 (citing Ex. 1001, 2:16–25 (“much of the video editing software and hardware is cumbersome, expensive, and difficult to learn”)).

¹⁷ We address Patent Owner’s “localhost url” argument in the next section addressing limitations 13.4 and 13.5. Sur-Reply 12–15.

Fegan discloses that the segmentation/annotation tools are not part of the media player, though both are displayed in a browser window. This arrangement is confirmed, for example, by Fegan’s description of the browser window including three **different** components: the media player, the segmentation controls, and the annotation controls (*e.g.*, text fields).;

Fegan clearly discloses that the “browser window for editing of multimedia content” includes three distinct components— “[i] a compatible **multimedia player**, [ii] controls for generating time-based index points for virtual **segmentation** of the multimedia file, **and** [iii] “a means of **entering annotative information**,” *e.g.*, “text fields.” (citing Ex. 1005 ¶ 80);

The segmenting/annotation tools are part of user interfaces that are loaded via web page (*e.g.*, Figs. 4 and 7). Fegan is clear that these segmenting/annotation tools are server-side, as Fegan explicitly describes using a server-side web server which “responds to [client] request[s]” “by serving Web pages” to client browsers. If Fegan’s segmenting/annotation tools were client-side, they could be loaded exclusively by the client, and such web server access would not be needed to load the web page interfaces (*e.g.*, Figs. 4 and 7) in the client browser. (citing Ex. 1005 ¶¶ 37, 43–44);

Moreover, Fegan does not disclose the client running editing software for segmenting/annotating video—quite the opposite. And as I discussed above, Fegan distinguishes itself from such a client-centric approach. Instead, Fegan discloses that the client accesses the user’s “personal ‘portal’ **hosted on the system**” to view and edit segments and annotations. (Figs. 5-7 depicting such portal access). Therefore, as I discussed above and as Fegan notes, such access to Fegan’s personal portal web page “hosted on the system” is made via the client browser making requests to the web server for the personal portal webpage. The data entry forms for entering or modifying the segment/annotation information on the personal portal are likewise requested by the client browser from the web server. (citing Ex. 1005 ¶¶ 6–7, 9, 37, 81, Figs. 5–7).

Ex. 1023 ¶¶ 75, 76, 78–79.

We are particularly persuaded by Dr. Houh’s explanation that web server

access, as depicted in Fegan Figures 4–7, would not be needed to load web page interfaces if Fegan’s segmenting/annotation tools were client-side applications as asserted by Patent Owner. We also are persuaded that a client user’s “personal ‘portal’” to view and edit video segments and annotations, as depicted in Figures 4–7, “is hosted on the system,” i.e., “hosted in an entirely server-side environment” where “[t]he server (host) system manages the appropriate databases (e.g., . . . multimedia file location information, annotations, start and stop points, etc.).” Ex. 1005 ¶¶ 8–10. Patent Owner’s assertion, that Fegan uses client-side software to execute video segmentation and annotation functions, is not consistent with Fegan’s (i) operational disclosures regarding the browser windows depicted in Figures 4–7 and (ii) express disclosure of a web server that “responds to [client] request[s]” “by serving Web pages” to client browsers, as explained by Dr. Houh. Ex. 1005 ¶ 37; *see also id.* ¶¶ 43–44 (describing conventional Hyper-Text Markup Language (“HTML”) and Hyper-Text Transport Protocol (“HTTP”) coding to exchange information, such as the transfer of web documents “from a Web server to a browser”). Dr. Houh’s testimony is consistent with Fegan’s disclosures and persuasive on the contested point.

Moreover, we agree with Petitioner that Fegan’s provision of a web page user interface is indistinguishable from the ’286 patent’s description of a VEE providing a web page interface to a client’s web browser to permit client interaction with the server-side VEE (a VEE GUI). Reply 4 (citing Ex. 1001, 24:56–62 (“client may enter the VEE 510 by . . . accessing a webpage”), 13:48–49 (“VEE graphical user interface (GUI)”), 13:59–67 (VEE “GUI may be generated . . . as a webpage on a client’s web browser”), 13:3–6, 14:8–13, claim 26 (“provide the edit interactivity . . . via a standard Internet browser running on the remote client terminal”)). Patent Owner, Dr. Mahon, and Dr. Houh all confirm

that the '286 patent describes a VEE GUI provided as a web page on a remote client's web browser to permit client interaction over the network with the server-side VEE.

Patent Owner states:

The claim encompasses the use of a browser to access a server-side VEE that performs editing of cue points per limitation 13.1. For example, the '286 Patent discloses that the server-side *VEE* cue point editing can be controlled by a client device using a browser. See '286 Patent, 13:58-67.

Resp. 38 n.1. At his deposition, Dr. Mahon testified to the same understanding:

Q If I understand you correctly, that one -- one way is to use a browser to access the VEE?

A What I said was, you can use a browser to access the client server architecture. That is, in this case, the server capabilities. And then the underlying capabilities of that server, whatever service they're providing you, the user would utilize those services to request access to the VEE. . . .;

Q So that's a "yes," that a web server responding to HTTP request is encompassed by the '286 patent?

A The '286 is disclosing a client server architecture, and in the client server architecture, certainly, you could request access to the server's capabilities and which services they're providing via initial HTTP request or connection. But after that, obviously, you can implement it in various ways following.

Ex. 1024, 81:7–15, 87:12-22 (objection omitted). Dr. Houh concurs, and highlights the inconsistency in Patent Owner's position:

[T]he '286 Patent describes an example of a VEE receiving cue point information via a client web browser form, and specifically refers to such instance of a VEE as *server-side*.

To start, the '286 Patent repeatedly describes the use of a client web browser, including such use in the particular context of presenting the VEE user interface to a client user.

FIG. 5 provides an exemplary flow diagram summarizing methods relating to client terminal interactions with video editor environments in various embodiments of the invention. The method 500 may begin when a client enters a VEE 510. **The client may enter the VEE 510 by** executing an application invoking various software and/or hardware commands, **accessing a webpage**, or in any other useful way. '286 Patent, 24:56-62 (emphasis added).

The method 300 may then generate a VEE graphical user interface (GUI) 316. '286 Patent, 13:48-49 (emphasis added).

It will be appreciated that the GUI may be generated 316 in any useful way for providing a useful interface to the VEE. For example, **the GUI may be generated 316 as a webpage on a client's web browser, as a frame within a webpage**, as a dedicated client-level application on the client's terminal (with the VEE itself running either at the client- or server-level), or as a background script to be executed by another application (e.g. as Visual Basic commands for an interpreter which may use those commands to generate the GUI). '286 Patent, 13:59-67 (emphasis added).

For example, **the VEE may load as** a script in the background of a **webpage**, as a server-level application, as a client-level application, or with various components of the application loading in different ways. '286 Patent, 13:3-6 (emphasis added).

Ex. 1023 ¶¶ 10–11 (quoting Ex. 1001). Thus, the '286 patent describes a client-server architecture that encompasses a web page interface served by the VEE to a client-side web browser that allows the client-side web browser to interface with VEE software to edit cue points. Fegan discloses the same architecture that allows a client-side web browser to interface with server-side VEE software, e.g., a software program encoded in PHP script, to edit cue points.

Patent Owner does not persuasively address the inconsistencies identified by Dr. Houh with specific support cited in Fegan, including the “php” url depicted in Fegan Figures 5–7. See Resp. 34–43. For example, Dr. Mahon posits that Fegan

does not disclose that “PHP programming is executed server-side to perform annotation editing.” Ex. 2015 ¶ 184. But Dr. Mahon does not contradict or undermine Fegan’s disclosures:

[T]he systems and methods are hosted in an entirely server-side environment, such that client computers can ... annotate ... multimedia presentations (Ex. 1105 ¶ 8);

The server (host) system manages the appropriate databases (e.g., ... *annotations*; ... *the features of the present invention are encoded in PHP*) (*Id.* ¶ 10) (emphasis added);

[A] personal ‘portal’ hosted on the system (*Id.* ¶ 9) ... allows a user to ... edit ... the annotative information associated with a multimedia file ... [shown in] Fig. 7 (*Id.* ¶ 81);

[T]he *functionality of the browser is extended by means of one or more separate computer programs (hereinafter referred to as “applications”)* that are stored in one or more remote locations (e.g., *locations other than locally on the user’s computer*) (*Id.* ¶ 71) (emphasis added); and

Fig. 5 shows a browser window displaying a user-created directory of annotative information [and] the directory allows a user to select, open, *edit*, close, or delete *the annotative information* associated with a multimedia file. . . . Fig. 7 shows a *saved annotation* . . . opened via the directory for *further editing*. (*Id.* ¶ 81) (emphasis added).

See *Id.* ¶¶ 182–184. Dr. Mahon also does not address the “php” file extensions depicted in Fegan Figures 5–6 (“viewtree.php”) and 7 (“sound_editor.php”). His testimony that there “is no disclosure by Fegan that such database software performs any server-side editing of annotations based on commands sent from a client terminal” is conclusory, not consistent with Fegan (as explained by Dr. Houh), and improperly invokes the “*cue point editing command*” language from

limitation 13.4 when discussing the VEE recited in limitation 13.1.¹⁸ *Id.* ¶¶ 184–185; *see also id.* ¶¶ 198–215 (addressing limitation 13.1). Dr. Mahon does address the Tanenbaum reference, but not Tanenbaum’s reference to PHP scripts as well-known server-side programs. *See Id.* ¶¶ 132–137 (explaining that HTTP requests may be used by a client to request content from a server, in order to distinguish the Gupta reference from the challenged patent claims).

Petitioner and Dr. Houh persuasively explain that Fegan discloses encoding PHP script programming for its “server-side software,” which a POSITA would have known is executed on the server-side, as discussed above. In paragraphs 203–206 of his declaration, Dr. Mahon does not persuasively reconcile his assertion that the annotation software applications are client-side media player applications, with Fegan’s express disclosure of a system that serves a web page interface to a client browser and runs server-side PHP script programs to edit video annotations, as explained above. *Compare* Ex. 2015 ¶¶ 203–206 *with* Ex. 1005 ¶¶ 8, 10, 71, 81, Figs. 5, 7. For example, Dr. Mahon’s testimony that “segments and associated annotations can be created using the client-side browser and media player applications generating the window of Figure 4,” fails to address or recognize the PHP file extension—“sound_editor.php”—depicted in the Figure 4 url as server-side PHP script programming. Ex. 2015 ¶¶ 203–204. We further credit Dr. Houh’s testimony that the three distinct components in Fegan’s browser window, the media player, the segmentation controls, and the annotation controls (*e.g.*, text fields), are distinct control functions and do not indicate that video annotations are edited in client-side software. Ex. 1023 ¶¶ 75–76.

¹⁸ We further address the argument in limitation 13.4, which recites “*receiving a cue point editing command over the network from a remote client terminal . . . using the computer system.*”

d. Conclusion

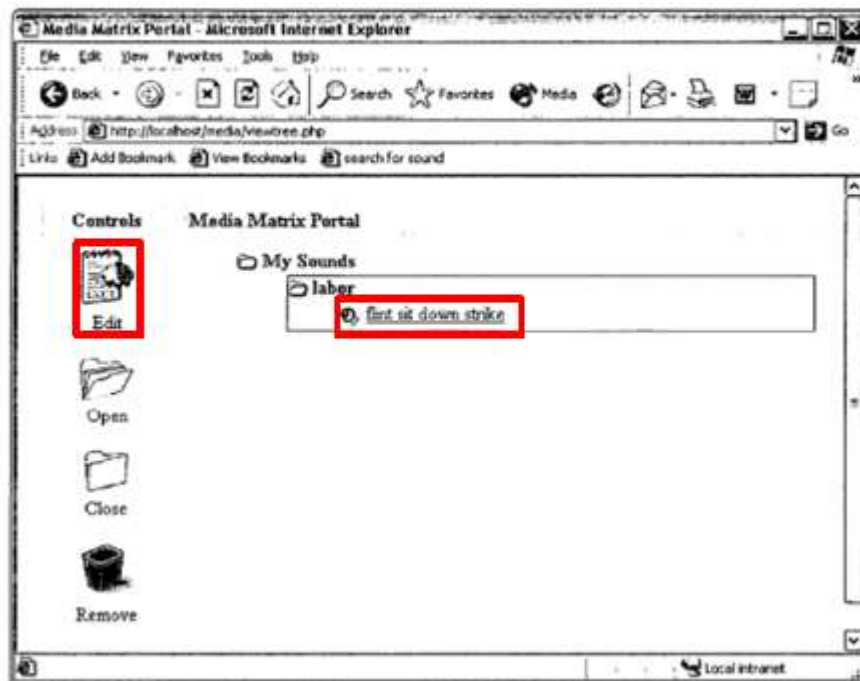
For the reasons given above, we determine the Petition has established by a preponderance of the evidence that Fegan discloses “*at least one computer-readable medium comprising a video editing environment . . . disposed at a server side of a public network*” as recited in limitation 13.1.

2. *Fegan discloses “receiving a cue point editing command over the network from a remote client terminal . . . using the computer system” (13.4)*

The Petition maps limitation 13.4 to Fegan as follows: “*receiving a cue point editing command*” (e.g., a command to edit an annotation after selecting “update” in the interface of Fig. 7) “*over the network*” (e.g., the Internet) “*from a remote client terminal disposed at the client side of the public network*” (e.g., client computer) “*using the computer system*” (e.g., remote server and databases). Pet. 43. The Petition annotates Fegan Figure 5, depicting a browser window on a client terminal, to explain Fegan’s editing process. *Id.* at 44. Figure 5 (annotated) is reproduced below:

FIGURE 5

The folder created that appears on the user's portal page along with the annotation. Clicking on the folder shows the annotations in the folder as well as bringing up the controls to edit the settings of the folder (rename it, move it to another folder, delete it, etc....)



Id.; Ex. 1005, Fig. 5 (annotated). As stated at the top of Figure 5, a folder appears on a client user's personal portal page displayed in the browser window, and "[c]licking on the folder shows the annotations in the folder." Ex. 1005, Fig. 5. In Figure 5, a client user has clicked on the "labor" folder and selected an existing annotation labeled "flint sit down strike" that appears in the center of the window. *Id.*

Clicking the "Edit" control icon on the left-side of Fig. 5 results in the interface window of Fig. 7 "show[ing] a saved annotation that has been opened via the directory for further editing." *Id.* ¶ 81. Annotated Figure 7 is reproduced below from the Petition:

FIGURE 7

by clicking the edit button, a user can edit any of the information for that annotation including re-editing the time-offsets from the source.

Press play to start recording.

Press start to start recording and end to stop recording.

Start Position: 3791 Start Recording

End Position: 7474 End Recording

Full Sound Review Clip

Title: flint sit down strike

Annotation: my annotation/thoughts on this sound

Folder: labor Or New: Update

Pet. 45; Ex. 1005, Fig. 7 (annotated). As stated at the top of Figure 7, “a user can edit any of the information for that annotation including re-editing the time-offsets from the source.” Ex. 1005, Fig. 7 (annotated). Annotated Figure 7 highlights the editable fields, including start and stop positions of the sound segment, the title, and the user’s text annotation: “my annotation/thoughts on this sound.” *Id.*

To recap, Fegan’s system stores video file annotations in server-side databases that are accessed by a client via web browser, as depicted in Figure 5. When a client user wants to edit (update) a video file annotation, the client uses the directory on its personal portal browser to open the annotation that has been saved on the server “for further editing,” as depicted in Figure 7. The Petition highlights the “Update” button in Figure 7 as a disclosure of a “a command to edit the annotation being sent from the client computer and received using the computer

system's remote server," i.e. a disclosure of *"receiving a cue point editing command over the network from a remote client terminal . . . using the computer system."* Pet. 45–46 (citing Ex. 1002 ¶¶ 169–177; Ex. 1005 ¶¶ 3, 9, 81, 83, 85).

Patent Owner argues that "Fegan does not provide **any disclosure** about what operations might be triggered by the user selecting 'Update,'" or that "selecting 'Update' in Figure 7 causes a command signal to be sent **"over the network"** to effectuate server side editing, as asserted." Resp. 42–43 (citing Ex. 2015 ¶¶ 219–222). Patent Owner challenges the credibility of Dr. Houh's testimony and cites to Dr. Mahon. Dr. Mahon testifies that "[a]t most, a POSITA would understand that selecting the "Update" button on Figure 7 could cause the edited segment/annotation information to be locally updated on the client device executing the client-side software as I have previously discussed." Ex. 2015 ¶ 221.

We agree with Petitioner that selecting the "Update" button shown in Fig. 7 results in a command to edit the annotation being sent over the network from the client-side to the server-side of Fegan's computer system. Pet. 45–46 (citing Ex. 1005 ¶¶ 81 ("the directory allows a user to select, open, edit, close, or delete the annotative information"), 83 ("software [] stored on a remote server allows a user to **save and store segment and annotative information** associated with one or more multimedia files"), 85 (describing users "creat[ing] a multimedia presentation that is stored entirely on a **remote server**"), 3 ("a comprehensive server-side system for editing, annotating, managing and presenting multimedia events from a plurality of multimedia sources"), 9 ("each user has a personal 'portal' hosted on the system" "that allows the user to edit . . . presentations that include multimedia clips and annotations."); Ex. 1002 ¶¶ 169–177).

We again credit the testimony of Dr. Houh, who testifies as follows:

[A] POSITA would have understood that the user's selection of

“update” after changing annotation information in the FIG. 7 interface results in sending a cue point editing command—an instruction to the computer system to edit a portion of the annotation—because the computer system responds by carrying out the requested action (see limitation [13.5] below). . . .

In Fegan, when a user at the client makes changes in “Edit” mode and selects “Update,” the edited annotation information is sent over the network (e.g., Internet) to modify the annotation at the server.

Ex. 1002 ¶¶ 176, 179 (citing Ex. 1005 ¶¶ 80–85, Fig. 7). We find particularly persuasive Dr. Houh’s emphasis on Fegan’s server-side approach that “eliminates the necessity of storing any of the data associated with the multimedia presentation on a user’s local computer,” because the software is hosted entirely in a server-side environment, including software programs “encoded in PHP” for generating and editing multimedia (video) annotations. *Id.* ¶ 177 (quoting Fegan ¶ 85); Ex. 1005 ¶ 10.

As Petitioner explains, Patent Owner and Dr. Mahon overlook “that Fegan’s browser-based user interfaces provide updated segment/annotation information to the server in order to modify this information in server databases.” Reply 21. Dr. Mahon’s testimony, that selecting the “Update” button in Fegan Figure 7 “could cause” the edited annotation information to be “locally updated on the client device executing client-side software,” is insufficient to rebut Dr. Houh’s testimony and does not find support in Fegan, as explained above. *See also* Ex. 1023 ¶¶ 98–104 (rebutting Dr. Mahon’s testimony). We further credit Dr. Houh’s testimony that a POSITA—someone with a Bachelor’s degree in Electrical Engineering, Computer Engineering, or Computer Science (or equivalent) plus two years of work experience with technologies relating to video annotation/bookmarking and/or video navigation—would have understood that selecting the “Update” button depicted in Fegan Figure 7 “causes the client to transmit a cue point editing

command to the server with segment/annotation information for storage, thereby creating/modifying a cue point on the server.” Ex. 1023 ¶ 94; *see also id.* ¶ 103 (“a POSITA would have understood that a user selecting the ‘Update’ button in Figure 7 is an example of causing an ‘Update’ command (a cue point editing command) being sent from the client to the server over the network for updating an annotation stored server-side”); Reply 23 (citing Ex. 1023 ¶ 94), 28 (citing Ex. 1023 ¶ 103); *In re Baxter Travenol*, 952 F.2d at 390 (holding that “the dispositive question regarding anticipation [is] whether one skilled in the art would reasonably understand or infer from the [reference’s] teaching” that the reference discloses the limitations recited in the claim).

We further agree with Petitioner that “this arrangement mirrors the ’286 disclosure of modifying cue point information via a web form to send updated cue point information to the server for storage.” Reply 24. As Dr. Houh explains:

First, both Fegan and the ’286 Patent describe web browser-based user interfaces displayed on a client device for user input of cue point parameters, and both user interfaces are similar to each other. . . .

Second, Fegan and the ’286 Patent both describe the same action being performed in connection with selection of their respective update/OK buttons. In particular, both Fegan and the ’286 Patent describe the resulting action being *submitting the entered cue point parameters to the server side for storage*. For example, Fegan discloses the use of PHP, while the ’286 Patent describes the use of CGI. . . .

Dr. Mahon opines that “[n]owhere does Fegan disclose that selecting the ‘Update’ button in Figure 7 causes the client to transmit a command to the server-side.” Mahon Decl., ¶221; *see also* ¶¶218-22. Dr. Mahon opines that “a POSITA would understand that selecting the ‘Update’ button on Figure 7 could cause the edited segment/annotation information to be locally updated on the client device executing the client-side software.” Mahon Decl., ¶221. I disagree.

A POSITA would have understood that Fegan’s . . . “Update” button[] must send segments/annotation information to the server side

for storage. Otherwise, Fegan's system would have no way for the web server to present the current segments/annotations to the user via the user's portal page (e.g., Figs. 5-7). The use of *different PHP scripts further confirms that the server is dynamically generating webpages in response to client requests*. Since the user's portal page (accessed by the "viewtree.php" PHP script) presents "current" annotations in the Fig. 5 interface, *any updates to annotations based on use of the Fig. 7 screenshot must have already been sent from the client to the server, i.e., via a user selecting the "Update" button, for updating the server-side database*. The current annotations would not be current on Fegan's Fig. 5 "portal" page if the "Update" button in the Fig. 7 edit screen only caused cue point information to be "locally updated on the client device," as Dr. Mahon opines.

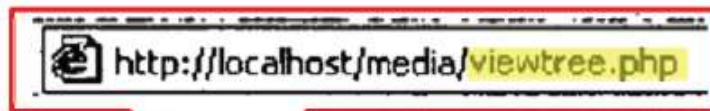


FIGURE 5

The folder created that appears on the user's portal page along with the annotation. Clicking on the folder shows the annotations in the folder as well as bringing up the controls to edit the settings of the folder (rename it, move it to another folder, delete it, etc...)

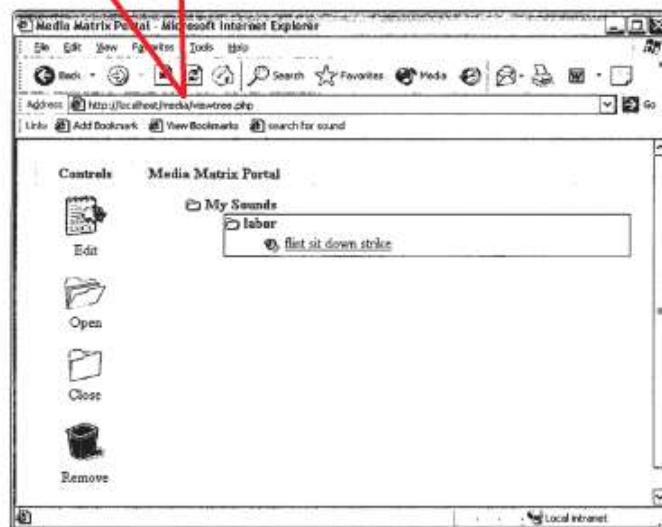




FIGURE 7

by clicking the edit button, a user can edit any of the information for that annotation including re-editing the time-offsets from the source.

....

Therefore, [] a POSITA having ordinary creativity and accompanying common sense would have understood that user selection of the ... “Update” button[] in Fegan causes the client to transmit a cue point editing command to the server with segment/annotation information for storage, thereby creating/modifying a cue point on the server.

I also note that such understanding likewise tracks the '286 Patent's reference to “generating” a cue point by saving it to the server, as I discussed above. See Section II.A above. (citing Ex. 1001, 23:12-37).

Ex. 1023 ¶¶ 90–95 (citations omitted). Dr. Houh's testimony persuasively establishes that a POSITA reading Fegan would have understood that selecting the “Update” button generates a cue point editing command received from a client terminal over the network at the server side of the computer system. See *In re Baxter Travenol Labs.*, 952 F.2d at 390; see also *In re Preda*, 401 F.2d 825, 826 (CCPA 1968) (“[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.”).

Dr. Houh’s testimony is consistent with Fegan. Fegan’s use of different PHP scripts to view a saved annotation as shown in Figure 5 (“viewtree.php”), and to edit that saved annotation as shown in Figure 7 (“sound_editor.php”), discloses the dynamic client-server architecture being used to store-edit-update-store cue point video file annotations. A remote client enters edits to a video file annotation into a browser interface and selects “Update” to send a cue point editing command that is received and executed on the server side of the system where the annotation is updated by server side software—PHP scripts—and stored in a server database.

The ’286 patent discloses the same functionality and command structure. Although the ’286 patent does not define a cue point editing command, the patent does describe the same mechanism used in Fegan for dynamically editing cue points:

In other embodiments, the method *may only generate and/or save the cue point after the client submits the information*. For example, the cue point information form may be displayed on a client terminal while the cue point editor resides on a server terminal. In this example, the client may be required to *submit the form over a network to the server computer before the cue point editor has the information it needs to generate the cue point*.

Additionally, as illustrated, various virtual buttons are provided, including . . . a “Save” button for allowing a client to save the current cue point editing and possibly *submit the cue point information*.

Ex. 1001, 23:16–23, 27:40–57 (emphasis added); see Reply 5 (citing same). The ’286 patent (Figure 6) describes how generation and editing of cue point information can occur when the cue point information is entered into form fields on the client browser and the client selects the “Save” button and submits the updated cue point information to the cue point server—“*receiving a cue point*

editing command over the network from a remote client terminal”—where the cue point is updated (edited) and stored. *Id.* at 27:40–57 (describing Figure 6); *see also id.* at 7:42-45 (cue point servers “serve cue point information”).

Dr. Mahon does not disagree. He testified at his deposition as follows:

Q Do you see anything in Figure 6 that represents a cue point editing command?

A Yeah, I don't understand the question. A command versus a picture of a system and as part of an exemplary for -- showing what the UIM looks like to the client, how -- I guess I just don't understand the question.

Q So you can't say whether the save button shown in Figure 6 of the '286 patent would cause a cue point editing command to be detected?

A Again, if you provide context, details, I can answer that question, but you're basically providing a high-level question without details without reference to my declaration that I can answer.

Ex. 1024, 142:3–145:15 (objections omitted). Dr. Mahon’s deposition testimony does not contradict or undercut Dr. Houh’s testimony quoted above. Therefore, we credit Dr. Houh’s testimony, which is consistent with the '286 patent.

For the reasons given above, we determine the Petition has established by a preponderance of the evidence that Fegan discloses “*receiving a cue point editing command over the network from a remote client terminal disposed at the server side of the public network using the computer system*” as recited in limitation 13.4.

3. *Fegan discloses “modifying a portion of the cue point information at the server side of the public network according to the cue point editing command” (13.5)*

The Petition maps limitation 13.5 to Fegan as follows:

Fegan discloses *modifying a portion of the cue point information (e.g., editing annotation information) at the server side of the public network (e.g., at remote server) according to the cue point editing command received over the public network from the client terminal (e.g.,*

command received in limitation 13.4).

When the client computer makes changes in the editing interface of Fig. 7 and selects “Update,” the edited information is sent over the network to modify the annotation at the remote server.

Pet. 46–47 (citing Ex. 1002 ¶¶ 178–179; Ex. 1005 ¶¶ 80–85, Fig. 7; Pet. 43–46 (limitation 13.4 argument and evidence)). Dr. Houh refers to his testimony regarding limitation 13.4. Ex. 1002 ¶ 179. He again explains that when a user at the client side in Fegan’s system makes changes in “Edit” mode and selects “Update,” “the edited annotation information is sent over the network (*e.g.*, Internet) to modify the annotation at the server.” *Id.*

Patent Owner references the same arguments addressed above regarding limitation 13.4. Resp. 43 (“Fegan does not disclose that edited annotation information is modified “*at the server-side*” in response to a command transmitted from the client. Mahon Decl., ¶223. See Section X.C.1 above.”).

Our analysis for limitation 13.4 applies equally to limitation 13.5. Therefore, for the reasons given above, we determine the Petition has established by a preponderance of the evidence that Fegan discloses “*modifying a portion of the cue point information at the server side of the public network according to the cue point editing command received over the public network from the client terminal*” as recited in limitation 13.5.

4. Patent Owner’s “localhost” url argument

Patent Owner argues that the reference to “localhost” in the URLs depicted in Fegan Figures 5 and 7 “shows that the user-selected Folder in Figure 7 is local storage, not a remote server.” Sur-Reply 12–13. Patent Owner’s argument is conclusory and unavailing. As counsel for Petitioner explained at the oral hearing:

[T]he argument actually contradicts Fegan’s express teachings of separate client and server.

Fegan's entire purpose as I mentioned is to provide the server side environment that avoids burdening the client hardware. If the client were the sole computing system that handled it, that doesn't make any sense frankly. Because you don't receive the benefits of having server computer hardware handle these tough computational aspects.

Moreover, Fegan for instance at paragraphs 8 and 15 as set forth in our Slide 63 explicitly refers to receiving, at the server side environment, receiving information from the client. That doesn't make any sense when the server is the client as is Patent Owner's local host argument.

Hearing Transcript ("Tr.") 28. Fegan paragraph 15 explicitly discloses "a method for managing a plurality of multimedia files in a server-side environment, comprising . . . receiving the multimedia file annotation information *from the client computer*," which is inconsistent with Patent Owner's argument that a client computer locally stores the annotation information. Ex. 1005 ¶ 15 (emphasis added). Dr. Houh further explains why the reference to "localhost" in the url does not support Patent Owner's argument:

Fegan specifically illustrates that the browser transition from Figure 5 to Figure 7 involves requesting a **different** PHP script ("viewtree.php" -> "sound_editor.php") to be executed. Given that these two screenshots are based on different PHP scripts, a POSITA would have understood that each screenshot is separately retrieved from the web server I also note that while these screenshots refer to "localhost", a POSITA would have clearly recognized that *the use of localhost is merely for ease of generating the actual screenshots used for the patent application*, particularly since Fegan's main objective relates to a server-side environment distinct from the client.

Ex. 1023 ¶ 108 (citing Ex. 1005 ¶¶ 6–8). In other words, the use of the "localhost" url within the screenshots of the browser pages in Figures 5 and 7 is for ease in generating screenshots, such as the screenshots in the '286 patent application. The "localhost" url does not indicate local storage on the client side of Fegan's system as argued by Patent Owner.

5. Fegan discloses the remaining limitations in claim 13

We have reviewed the Petition’s arguments and evidence and determine the Petition establishes by a preponderance of the evidence that the remaining limitations recited in claim 13, limitations 13.2 (“*receiving a set of video information at the video editing environment using the computer system*”), 13.3 (*receiving a set of cue point information at the video editing environment using the computer system*”), 13.6 (“*receiving a cue point selection over the network from the remote client terminal identifying one of the cue points . . .*”) and 13.7 (“*streaming the portion of the video information to the client terminal over the network . . .*”) are disclosed in Fegan. Pet. 35–43, 47–49 (citing Ex. 1002 ¶¶ 158–168, 180–187; Ex. 1005 ¶¶ 3, 5, 7–10, 12–13, 69–71, 73, 76, 78, 82–85, Figs. 3–5). Patent Owner does not contest the Petition’s evidence and argument that Fegan discloses limitations 13.6 and 13.7, and does not specifically address the claim language recited in limitations 13.2 and 13.3 beyond the arguments addressed above. Resp. 35–43 (addressing limitations “13.1–13.5” and citing Ex. 2015 ¶¶ 181, 183–193, 197–214, 216–218, 223). Having reviewed the Petition’s evidence and argument, we determine Petitioner has established by a preponderance of the evidence that Fegan discloses limitations 13.2, 13.3, 13.6, and 13.7 for the reasons stated in the Petition.

For the reasons give above, we determine the Petition has established by a preponderance of the evidence that Fegan anticipates claim 13 of the ’286 patent.

C. Fegan Anticipates Claims 14–15 and 20; Not Claims 18–19

Claims 14–15 and 18–20 depend directly, or indirectly, from claim 13. Petitioner contends that claims 14–15 and 18–20 are anticipated by Fegan. Pet. 49–52 (citing Ex. 1002 ¶¶ 188–209). Patent Owner directly addresses claims 15 and 18, and otherwise relies on its arguments regarding claim 13 to distinguish

Fegan from claims 14–15 and 18–20, arguments that we addressed above. Resp. 43–45 (citing Ex. 2015 ¶¶ 227–236). For the reasons given below, we find the Petition has established by a preponderance of the evidence that Fegan discloses the limitations recited in claims 14–15 and 20, but not the limitations recited in claims 18–19. We begin by addressing claim 15.

1. *Fegan anticipates claim 15*

Dependent claim 15 recites: “*The method of claim 14, further comprising: receiving an edit mode entry signal over the network from the client terminal representing entry into the cue point edit mode, and switching the video editing environment to the cue point editing mode in response to receiving the edit mode entry signal.*”

The Petition contends that Fegan discloses claim 14 because “[a] cue point editing mode is entered when a client computer selects the “Edit” control button for a selected annotation (in Fig. 5) to display the interface of Fig. 7.” Pet. 49 (citing Ex. 1002 ¶¶ 188–192; Ex. 1005 ¶ 81; arguments and evidence regarding limitation 13.4). The Petition further contends that Fegan reads on claim 15:

Fegan discloses *receiving an edit mode entry signal (e.g., signal for entry to the interface(s) for editing annotations; from selecting “Edit” in interface of Figs. 5-6) over the network from the client terminal (e.g., from client computer over the network) representing entry into the cue point edit mode (e.g., representing entry into the interface(s) for editing annotations) and switching the video editing environment to the cue point editing mode in response to receiving the edit mode entry signal* (switching the software executed by remote server and databases to display the interface(s) for editing annotations; Fig. 7 interface).

Pet. 50 (citing Ex. 1002 ¶¶ 193–199; Ex. 1005 ¶¶ 44, 81, Figs 5–7; Pet. 43–46 (arguments and evidence regarding limitation 13.4)). Dr. Houh testifies that a “A POSITA would have understood the plain meaning of ‘edit mode entry signal’ to

be a signal, sent from the remote client terminal and received by the computer system, to enter an edit mode.” Ex. 1002 ¶ 197 (citing Ex. 1018 (definition of “signal”)). Dr. Houh further testifies that “when a user selects the ‘Edit’ option in interface of Fig. 5 for a selected annotation, the remote server receives an edit mode entry signal—an indication to the computer system to enter an edit mode.” *Id.* ¶ 199.

Patent Owner contends “there is no disclosure in Fegan that selecting the ‘Edit’ button on Figure 5 causes the transmission of a command signal that is sent ‘*over the network*’ to the server-side. Fegan only discloses that the directory in Figure 5 includes control buttons to ‘select, open, edit, close, or delete the annotative information.’” Resp. 43-44 (citing Ex. 1005 ¶ 81; Ex. 2015 ¶¶ 227–229). Dr. Mahon testifies that “Fegan’s disclosure and Figures 5-6 only indicate that selecting the ‘Edit’ button causes the segment/annotation edit window of Figure 7 to be displayed.” Ex. 2015 ¶ 229. We agree with Petitioner.

As stated previously with regard to limitations 13.1 and 13.4, Fegan discloses the use of server-side PHP scripts to generate dynamic webpages in response to client web browser requests. Ex. 1005 ¶ 10. When a client sends a request signal, for example a request to edit a webpage, or sends a command signal to update an annotation in a server-side database, the request or command is answered server-side by dynamically generating a webpage, for example via PHP scripts. *Id.* ¶¶ 10, 37, 42; Ex. 2025, 499–500 (a “PHP script produces a new HTML page and that page is sent back to the browser for display”; . . . “PHP . . . [is] used when interaction with a remote database is needed”). Reply 31–34. We are particularly persuaded by Petitioner’s argument and Dr. Houh’s supporting testimony that when a client in Fegan’s system transitions from Figure 5’s “Edit” annotation function to Figure 7’s “Update” annotation function, that transition

involves executing a different server-side PHP script (“viewtree.php”→“sound_editor.php”). Therefore, selecting the “Edit” button in Figure 5 (generated by web server executing “viewtree.php” PHP script) transmits a client request (i.e., edit mode entry signal) to the web server to execute “sound_editor.php” PHP script to generate Figure 7’s dynamic webpage.

Reply 32 (citing Ex. 1023 ¶¶ 105–109). As Dr. Houh explains:

Given that these two screenshots are based on different PHP scripts, a POSITA would have understood that each screenshot is separately retrieved from the web server and that selecting the “Edit” button in Figure 5 involves a client request (i.e., the claimed “edit mode entry signal”) to the web server to execute the “sound_editor.php” PHP script and serve the dynamic web page of Figure 7 to the client.

Ex. 1023 ¶ 108. Patent Owner’s response—“[e]ven if, arguendo, there was a signal, Figures 5-7 demonstrate that it would be sent entirely locally, i.e., to the ‘localhost,’ not over the public network as required by Claim 15”—is not persuasive for the reasons explained above in Section III.B.2–4. Sur-Reply 18–19.¹⁹

For the reasons give above, we determine the Petition has established by a preponderance of the evidence that Fegan anticipates claim 15 of the ’286 patent.

¹⁹ Petitioner’s Reply argument regarding the use of PHP scripts is not an “improper new theory” as argued by Patent Owner. Sur-Reply 19. The Reply expands on the Petition’s argument that Fegan discloses the use of PHP scripts to execute server-side software, including in response to “Edit” and “Update” annotation request/command signals as described and depicted in Figures 5 and 7. Pet. 34, 43–46. The Reply is also proper rebuttal to Patent Owner’s Response argument that selection of the “Edit” button in Fegan Figure 5 does not “cause[] the client to transmit a command ‘over the network’ to the server side.” Compare Resp. 44 with Reply 31–34; see *Rembrandt Diagnostics, LP v. Alere, Inc.*, 76 F.4th 1376, 1384 (Fed. Cir. 2023) (reply argument not improper if it “simply expands on previously raised arguments” or “is offered ‘to explain, repel, counteract, or disprove the evidence of the adverse party’”) (citations omitted).

2. *Fegan does not anticipate claims 18–19*

The Petition maps claim 18 to Fegan as follows:

Fegan discloses *receiving, over the network, authentication information (e.g., information concerning user’s identity) relating to access authority of the remote client terminal (e.g., concerning which “personal portal” client computer can access).*

Authentication information is received over the network as “each user has a **personal** ‘portal’ hosted on the system” and the client provides user identity information to the remote server to control access such as editing.

Pet. 50–51 (citing Ex. 1002 ¶¶ 200–203; Ex. 1005 ¶¶ 9 (personal portal “allows the user to edit and organize collected materials to create complex publications and presentations”), 81 (“After a user designates a location for storage and retrieval of the annotative information, the information appears on the user’s **personal** portal page.”), 50 (describing security protocol that “locks out one or more functions of a processor until an appropriate password is entered”)). Dr. Hough emphasizes the disclosure in Fegan paragraph 50 that a “security protocol . . . locks out one or more functions of a processor until an appropriate password is entered.” Ex. 1002 ¶ 202. From that slender reed, Dr. Houh links an unspecified “security protocol” to “some form of authentication information” and testifies that “a POSITA would have understood that Fegan is referring to such user authentication when it references terminology such as a web-based ‘personal portal’ page.” *Id.* ¶ 203.

We agree with Patent Owner that the passages in Fegan cited in the Petition “do not disclose sending ‘*authentication information relating to access authority*’ ‘*over the network*’ to the server-side” as recited in claim 18. Resp. 44 (citing Ex. 2015 ¶¶ 233–236). We are particularly persuaded by Dr. Mahon’s testimony that the “security protocol” disclosure in Fegan paragraph 50 “does not disclose the client terminal sending ‘*authentication information relating to access authority over the*

network’ to the server-side per Claim 18.” Ex. 2015 ¶ 235. As Dr. Mahon points out, “there are multiple other mechanisms that could be used in Fegan for security information to be entered other than by transmitting authentication information to the server over the network.” *Id.* ¶ 236 (citing *id.* ¶¶ 172–177). For example, Dr. Mahon explains that Gupta, like Fegan, “do[es] not expressly disclose that read/write access rights (or associated credentials) are transmitted over the network to the annotation server 10.” *Id.* ¶ 174. Dr. Mahon explains:

For example, a POSITA would understand that authenticated users with read/write access rights could be preauthorized at the annotation server such that there is no need for the authentication information to be transmitted over the network to the annotation server. Alternatively, *authentication information* could be directly received into annotation server 10 by a service representative directly entering the information from a local terminal. Accordingly, it is not inherent that Gupta discloses receiving *authentication information* from the client.

Id. ¶ 175. We are persuaded by Dr. Mahon’s testimony that although Fegan (and Gupta) may disclose a form of authentication information required for a user to access the system, Fegan does not expressly disclose that such authentication information is “*receiv[ed] over the network*” as recited in claim 18.²⁰ For claim 18, Petitioner has crossed the line from arguing anticipation to arguing obviousness. Rather than explain what a POSITA would understand from reading a disclosure in Fegan, Dr. Houh’s testimony improperly expands the express disclosures in Fegan in an effort to read Fegan onto claim 18 as an anticipation. *See In re Baxter Travenol*, 952 F.2d at 390.

Petitioner’s one-sentence reply argument is not persuasive because it only reiterates Dr. Houh’s testimony that Fegan’s disclosure of a user’s “personal”

²⁰ At the Oral Hearing, counsel for Petitioner confirmed that Petitioner is “not relying on inherency for any of our anticipation reference[s].” Tr. 81:16–20.

portal page is a disclosure of “sending authentication information to the server (e.g., via user/login credentials) to grant/deny portal access.” Reply 34 (citing Ex. 1002 ¶¶ 202–204; Ex. 1023 ¶¶ 110–112). There is no such express disclosure in Fegan.

For the reasons given above, we determine the Petition has not established by a preponderance of the evidence that Fegan anticipates claim 18 of the ’286 patent. Because claim 19 depends from claim 18, we also determine that the Petition has not established by a preponderance of the evidence that Fegan anticipates claim 19 of the ’286 patent.

3. Conclusion

Having reviewed the Petition’s evidence and argument, we determine that Petitioner has established by a preponderance of the evidence that Fegan discloses the limitations recited in claims 14 and 20 for the reasons stated in the Petition. Pet. 49, 51–52 (citing Ex. 1002 ¶¶ 188–192, 204–209; Ex. 1005 ¶¶ 7, 9, 13, 33, 37, 57, 81, Figs. 5, 7). Patent Owner does not contest Petitioner’s argument and evidence beyond the arguments already addressed for claim 13.

For the reasons give above, we determine the Petition has established by a preponderance of the evidence that Fegan anticipates claims 13–15 and 20 of the ’286 patent, but not claims 18 or 19.

D. Fegan and Sull Render Claim 17 Obvious (1101 IPR Ground 2)

Claim 17 depends from claim 13 and further recites: “*generating, automatically by using the computer system, at least a portion of the set of cue point information.*”

Petitioner contends that Sull teaches claim 17 and that the combination of Fegan and Sull would have rendered claim 17 obvious to a POSITA. 1101 IPR Pet. 53–55 (citing Ex. 1002 (1101 IPR) ¶¶ 185–191; Ex. 1005 Abstract, ¶¶ 3, 7–10,

12, Fig. 4; Ex. 1007 Abstract, ¶¶ 52–55, 61–167, 205, 209, Fig. 3).

Patent Owner contends that “Claim 17 is patentable over Fegan and Sull for at least the reasons set forth above for Claim 13,” without further discussion.

Resp. 45 (citing Ex. 2015 ¶ 238 (same)).

Sull describes methods for “tagging, indexing, searching, retrieving, manipulating, and editing video images on a wide area network such as the Internet.” Ex. 1007, Abstract. Sull further describes a method allowing users to add bookmarks to multimedia files. *Id.* Sull describes the system as a server storing videos wherein a user can add, edit, or delete bookmarks via an interface from a client device. *Id.*, ¶¶ 50–60, 161–174, 188–213, 222–225, 262–263, Figs. 9–14. A user may select a bookmark and play back the video starting from the bookmarked point. *Id.*, ¶¶ 194, 206; Ex. 1002 ¶¶ 138–39.

The Petition argues that Sull teaches claim 17:

Sull teaches *generating, automatically by the computer system, at least a portion of the set of cue point information* because Sull describes using the computer system (server) to automatically generate the “time code” portion of the cue point information when the “add-bookmark control” is selected. Specifically, if “time code” information is available for the newly added bookmark then the computer system will automatically obtain this information for the bookmark.

1101 IPR Pet. 53–54 (citing Ex. 1007 ¶ 209). Sull paragraph 209 states that “[w]hen the add-bookmark control is selected ... [a] check is made in step 1106 to determine if the information on the bookmarked position such as time code is available ... execution is moved to step 1108, where the bookmarked position is obtained.”). Dr. Houh explains:

A POSITA would have appreciated that creating the bookmark by automatically generating the time code information by populating that field based on the time when the multimedia content playback was suspended would *save the user time and effort by avoiding the user’s*

need to closely analyze the video and/or tediously input all cue point information. For example, a POSITA would have recognized that if the computer system would automatically detect a cue point's time position information from the current position in the video when the video is paused and populate that information into the cue point's "time" field, the system would present several benefits, such as: (i) allowing for the video to be annotated more quickly; (ii) making it more likely that the user will be willing to annotate the video; (iii) providing a single-click solution to simplify the system's operation; and (iv) eliminating the potential for errors and incorrect annotations that would be introduced when requiring a user to manually enter time information.

Ex. 1002 (1101 IPR) ¶ 190 (emphasis added).

We are persuaded by Dr. Houh's unchallenged testimony that a POSITA would have recognized the benefits of Sull's bookmarking process that automatically generates time code information when creating a bookmark. We credit Dr. Houh's testimony that a POSITA would have recognized the benefits of saving time and eliminating the potential for introducing incorrect annotations by using Sull's automatic time code generation technique in Fegan's annotation system. *Id.* ¶¶ 190–191; *see KSR*, 550 U.S. at 417 ("if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill"). *Id.* at 417. We further credit Dr. Houh's unchallenged testimony that a POSITA would have had a reasonable expectation of success incorporating Sull's automatic time code generation technique into Fegan's system because Fegan and Sull teach similar systems of adding bookmarks/annotations to portions of video and the implementation would have been a matter of routing programming within the skill level of a POSITA. *Id.* ¶ 191 (citing Ex. 1005 Abstract, ¶¶ 3, 7–10, Fig. 4; Ex. 1007 Abstract, ¶¶ 52–055, 61–167).

For the reasons given above, we determine the Petition has established by a preponderance of the evidence that claim 17 of the '286 patent is obvious over Fegan and Sull.

IV. VASILEVSKY AND LOGAN – GROUND 5

Petitioner contends that claims 13–15 and 17–20 are unpatentable as obvious over Vasilevsky and Logan. Pet. 73–89 (citing Ex. 1002 ¶¶ 308–376); 1101 IPR Pet. 73–87 (citing Ex. 1002 (1101 IPR) ¶¶ 274–327). Patent Owner argues that Vasilevsky and Logan do not teach or otherwise render obvious limitations 13.1–13.5 and further contends that Vasilevsky and Logan do not teach or otherwise render obvious claims 15 or 18. Resp. 57–76 (citing Ex. 2015 ¶¶ 304–394). Patent Owner relies on its arguments regarding claim 13 in support of the patentability of claims 14–15 and 17–20, but does not otherwise directly address claims 14, 17, 19 or 20. Resp. 74–76; Sur-Reply 20–29. We begin with a discussion of Vasilevsky and Logan.

A. Vasilevsky (Ex. 1008)

Vasilevsky discloses a “centralized Digital Video Recording (DVR) and reproduction system” with a “centralized media server [that] allows system users . . . to pause and resume the same programs from the same marker points (‘bookmarks’) established by any system user.” Vasilevsky Ex. 1008, Abstract, claim 4. Vasilevsky’s DVR system is administered by a Home Area Network (“HAN”), a “typically small-scale electronic cable or wire based communication network[] used to interconnect a variety of small to moderate sized appliances, computers, and consumer electronic devices . . . especially suitable for typical homes or smaller buildings.” *Id.* at 4:11–15. “The media server acts as a centralized Digital Video Recorder and Playback device for all of the receivers

connected to the HAN.” *Id.* at 11:1–2. The media server is “coupled to the network . . . [and] is further adapted to allow a user to, from one reproduction device, place a program bookmark in a program” by communicating with the media server over the network. *Id.* at 7:3–17, 15:5–17, 16:8–12. Vasilevsky’s bookmarks are “electronic marker[s] . . . placed in memory indicating exactly where the program was paused, along with other particulars such as the identity of the user, and that date and time of the bookmark.” *Id.* at 19:13–16. “A system user can enter or modify all of the [bookmark] information” via a GUI presented to receivers on the client side of the network. *Id.* at 22:8–15; *see also id.* at 9:16–18, 10:4–6 (a GUI “enabling a user to enter a description of the bookmark”).

B. Logan (Ex. 1009)

Logan discloses an Internet-based, client-server architecture in which a client user can generate and edit metadata for television programming, including tags and bookmarks for television program segments, which may be sent to a remote location to be shared with others. Logan Ex. 1009, ¶¶ 48–57, 65, 112, 124, 134, 177–178, 221–229, 308, Figs. 1–2. Users can create video bookmarks to save a video segment for later viewing. *Id.* ¶¶ 177–179; Ex. 1002 ¶¶ 309–10. Logan expressly discloses use of the Internet, a public network, to transmit metadata and/or content from a client user to a remote server for access by others. Ex. 1009 ¶¶ 50–51, 62–63, 112, 229.

C. Vasilevsky and Logan Render Claims 13–14 and 17–20 Obvious; Not Claim 15

For limitation 13.1, Petitioner contends “Vasilevsky’s bookmarks are *cue points*,” the centralized media server “executes software for editing bookmarks and streaming video” (*a video editing environment*), and the centralized media server is “accessible by, and readily and contemporaneously controlled by multiple local

client devices via a HAN” (media server is *disposed at the server side of a public network*). Pet. 73–76 (citing Ex. 1002 ¶¶ 308–314). To the extent Vasilevsky “does not explicitly disclose its network (HAN) is a ‘public’ network,” Petitioner argues that “implementing Vasilevsky’s system on a public network, as taught by Logan would have beneficially allowed more users in a broader public network to participate in the system to add, modify, and playback video bookmarks.” *Id.* at 77–78 (citing Ex. 1002 ¶¶ 315–326; Ex. 1009 ¶¶ 50, 308). Petitioner further contends that Vasilevsky (and Logan) disclose limitations 13.2–13.7 and the limitations recited in claims 14, 15, and 17–20. Pet. 78–89 (citing Ex. 1002 ¶¶ 327–376); 1101 IPR Pet. 86–87 (citing Ex. 1002 (1101 IPR) ¶¶ 318–327).

1. Vasilevsky-Logan Teaches Limitation 13.1

There is no dispute that Vasilevsky’s centralized DVR system generates “*cue points*” in the form of pause and playback “bookmarks,” and those bookmarks can be edited by a user. *See* Resp. 59 (“Vasilevsky discloses that a user can create/edit bookmarks by providing an input to the application unit 134, which converts user inputs to commands.”). Patent Owner argues, however, that there is no disclosure of a software application for creating/editing bookmarks in Vasilevsky. *Id.* at 59–62 (citing Ex. 1008 10:11–11:2, 15:15–16:5, 18:13–19:20, 20:1–10, 21:1–19, 22:8–23:8, 23:14–20, Figs. 1–7; Ex. 2015 ¶¶ 309–312 (e.g., ¶ 312: “Vasilevsky does not describe that any of the components in the alleged VEE executes a software application for editing bookmarks.”), 318–324 (e.g., ¶ 318: Vasilevsky “do[es] not teach a server-side application that performs editing of cue points/bookmarks as claimed.”). We disagree.

a. Vasilevsky’s Application Unit comprises a VEE

First, as stated above in our claim construction discussion in Section II.B., the claimed VEE is not limited to any particular type of software, hardware,

application program, cue point server, application server, or configuration to accomplish the functions of generating and editing video cue points. Dr. Mahon, for example, testifies that Vasilevsky “does not disclose any *specific software application* for editing bookmarks.” Ex. 2015 ¶ 309 (emphasis added). But claim 13 does not recite a specific software application or configuration for the VEE.

Second, we are persuaded that Vasilevsky’s Application Unit in the centralized media server (in two-way communication with an Application Services module that controls video programming) comprises video editing software because it is “responsible for generating a graphical user interface (GUI) containing an electronic program guide (EPG) for display” on a user’s receiver and is also responsible for “convert[ing] user commands to commands compatible with the media server.” Reply 37–38 (quoting Ex. 1008, 15:15–20); citing Ex. 1023 ¶¶ 126–130); *see also* Pet. 74–75, 78–84 (citing Ex. 1008, Abstract, 15:15–17, 19:16–18, 20:11–17, 21:9–20, 22:8–15 (describing bookmarking GUI generated by “Application Unit 134” on the media server), claims 5, 11; Ex. 1002 ¶¶ 315–323, 344–46). We credit Dr. Houh’s on-point testimony:

Vasilevsky teaches the centralized media server including components 120, 122, 134 (*which is the Application Unit*), 136 and 152 (*which is the Application Services*). Vasilevsky’s configuration results in processor and memory being at the server-side such that the *centralized media server executes software for serving clients* such as “‘thin’ clients” and generating a user interface.

The computer-readable media of Vasilevsky comprises a video editing environment in the form of *software for both editing bookmarks and streaming video, executed by the centralized media server and storages*. The centralized media server executes software for editing bookmarks and for streaming video.

Vasilevsky describes such computer system being disposed at the server side of a public network (*e.g.*, [home area network] HAN or

Internet), in contrast to a client side of the HAN (*i.e.*, the side where client 124 is located).

....

Vasilevsk[y] discloses that when the client 124 modifies existing bookmarks in the FIG. 6 interface, *the centralized media server modifies the bookmarks* and the *Application Unit 134 stores the modified bookmarks* in bookmark database 162.

Ex. 1002 ¶¶ 318–320, 346 (citations omitted (emphases added)).

Dr. Houh supports his testimony with extensive quotations from Vasilevsky. We agree that the Application Unit in the centralized media server executes software for editing video (TV) program bookmarks according to client commands, as taught by Vasilevsky:

The system users communicate with the media server via a user interface or *Application Unit 134, which converts user commands to commands compatible with the media server*. The Application Unit 134 is *also responsible for generating a graphical user interface (GUI)* containing an electronic program guide (EPG) for display, and input by an Application Services Unit 152. The Application Services Unit 152 controls the recording and playback of programs. . . .

When a command is received to enter a bookmark, the *Application Unit 134 causes the bookmark to be stored in a bookmark database 162*, along with program identity information so that the bookmark can be matched to the appropriate program stored in memory 118.

....

The system of Claim 1, wherein said *media server is adapted to enable a particular program bookmark to be edited only by a user* purporting to have established the particular bookmark.

The system of Claim 7, wherein said *bookmark indicia are modifiable by a user*, and said bookmark indicia further comprise bookmark name information.

Ex. 1008, 15:15–16:1, 19:16–20, Fig. 6, claims 5, 11 (emphases added). We find that a POSITA would have understood that Vasilevsky’s centralized media server

Application Unit (“*disposed on the server-side of a . . . network*”) contains software that converts client-side bookmarking commands—communicated over a network via a bookmarking GUI to the central media server’s Application Unit—to compatible media server commands for editing and storage of bookmarks on the server side of the network (“*a video editing environment*”).²¹ Nothing more is required to satisfy limitation 13.1.

We further credit Dr. Houh’s testimony that a POSITA, having a Bachelor’s degree in Electrical or Computer Engineering (or Computer Science) and two years of experience with video file navigation, annotation, and bookmarking, would have known that “such server components at the time would generally be software-based and would have recognized the many benefits of including software such as the ability to make bug fixes or improve any functionality via software updates.” Ex. 1023 ¶ 130.²² See KSR, 550 U.S. at 420 (“any need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed”). It stretches credulity for Patent Owner to suggest that a POSITA would not have known that Vasilevsky’s media server *Application* Unit (including two-way communication with the *Application* Services module) somehow lacks *application* software to accomplish the stated functionality: “Application Unit 134, which converts user commands to commands compatible with the media server.” Ex. 1008, 15:15–17;

²¹ We discuss below a “*public network*” in view of the disclosures in Logan.

²² Patent Owner challenges one of the Petition’s citations to Vasilevsky—disclosing that the media server components “might be implemented in a client system or other end-user equipment”—as failing to “suggest anything about a software application being executed to edit bookmarks per limitations 13.1-13.5.” Resp. 61 (citing Pet. 74–75 (citing Ex. 1008, 20:11–17)); Ex. 2015 ¶¶ 314–316). The Petition cites other evidence to establish the point.

see also id. at Abstract (“centralized media server (152) allows system users (124, 128, 132)” to “establish[]” and “access” “bookmarks”), 19:16-18 (“Application Unit 134 causes the bookmark to be stored in bookmark database 162”), claim 5 (“media server is adapted to enable a particular program bookmark to be edited”), claim 11 (“wherein said bookmark indicia are modifiable by a user”), 7:13-17 (“The media server is further adapted to allow a user to ... resume reproduction of the program from the program bookmark.”). Patent Owner even acknowledge that “[a]t most, the cited passages [in Vasilevsky] describe application unit 134 as having the **functionality** of creating and editing bookmarks” based on user input. Resp. 62 (citing Ex. 2015 ¶ 318).

Third, Dr. Houh emphasizes the inconsistency of Dr. Mahon’s declaration testimony, that Vasilevsky’s media server components could be implemented solely as “hardware including gates for logical operations[,] as opposed to being implemented using software,” with Dr. Mahon’s deposition testimony. Ex. 1023 ¶ 129 (citing Ex. 2015 ¶ 320). Dr. Mahon testified at deposition that “[t]here would be ... various types of software running on any instantiation where you’re providing a server for clients to access.” Ex. 1024, 57:15–17. We credit Dr. Mahon’s deposition testimony, which is consistent with Dr. Houh’s on-point testimony.

b. Addressing Patent Owner’s other Arguments

Patent Owner next challenges Dr. Houh’s credibility for testifying that Vasilevsky describes such computer system being disposed at the server side of a public network (*e.g.*, [home area network] HAN or Internet), in contrast to a client side of the HAN (*i.e.*, the side where client 124 is located).

Resp. 57–58 (quoting Ex. 1002 ¶ 320; citing Ex. 1008, 11:9–13; Ex. 2015 ¶ 306; Ex. 2039). Patent Owner asserts that a home area network is a private network, not

a public network. *Id.* But in the very next paragraph of his declaration, Dr. Houh explains that “to the extent Vasilevsky does not explicitly disclose its network (HAN) is a ‘public’ network[,] Logan discloses a similar bookmarking system to Vasilevsky and teaches implementing a television program bookmarking system using a public network, *i.e.*, the Internet.” Ex. 1002 ¶ 321. Dr. Houh further testifies that “[a] POSITA would have been motivated to modify Vasilevsky’s network [HAN] to be a public network such as the Internet as taught by Logan.” *Id.* ¶ 322; Reply 35 (citing Ex. 1002 ¶ 320–322). Patent Owner does not dispute that the Internet is, indeed, a public network as taught by Logan. Resp. 57–67. As stated previously, the Petition relies on modifying Vasilevsky’s system by replacing the HAN with the Internet—an indisputably public network exemplified in Logan’s very similar Internet-based system—in support of its obviousness argument. Pet. 76–78 (citing Ex. 1002 ¶¶ 315–323; Ex. 1009 ¶¶ 15–16, 50, 62, 223–224); Reply 35.

In short, Patent Owner’s criticism of Dr. Houh’s credibility is not merited when Dr. Houh’s testimony is viewed in proper context.

Patent Owner’s inoperability argument fares no better. Resp. 63–67; Sur-Reply 20–23. Patent Owner posits that in Petitioner’s proposed combination of Vasilevsky and Logan:

Significantly, the Petitioner and its expert exclude from the alleged VEE the following components of Vasilevsky’s system: digital and analog television tuner/demodulators 108/112, conditional access decoder and re-encryptor 142, and video encoder 114.

Resp. 63 (citing Ex. 1008, 13:5–15:4; Pet. 75). From that faulty premise, Patent Owner argues that Vasilevsky-Logan would “preclude [the server] from receiving television program transmissions” because there would be “no cable line connections to the cable TV system.” *Id.* at 64 (citing Ex. 2015 ¶¶ 326–339). Dr.

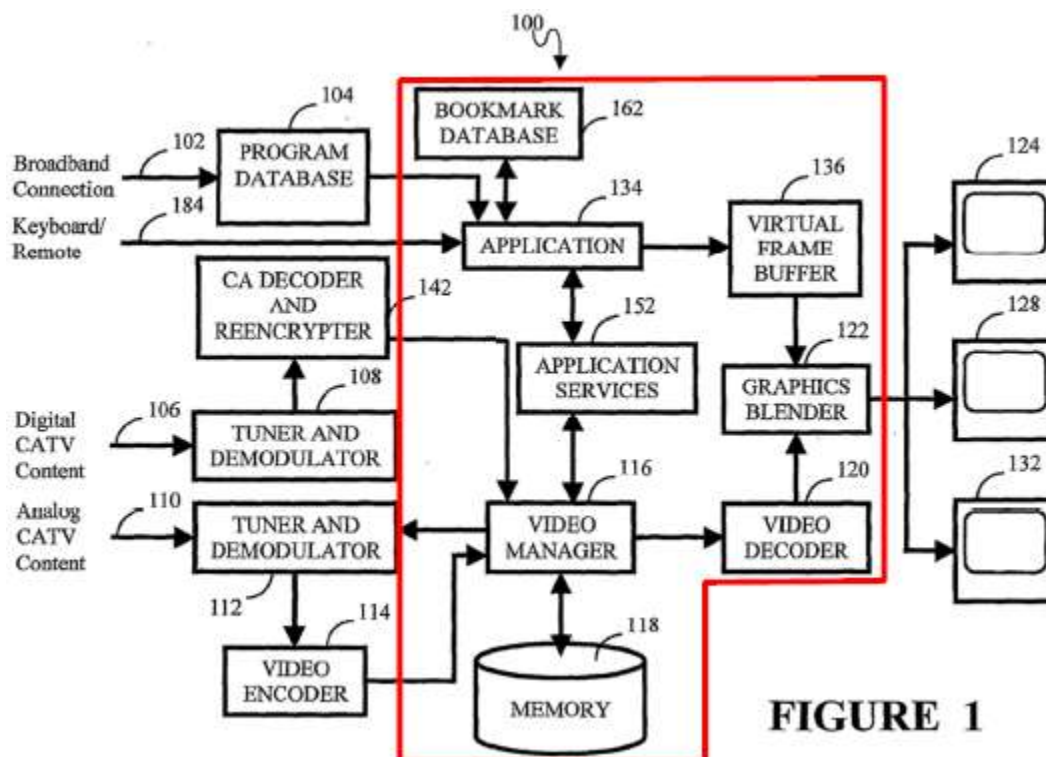
Mahon testifies as follows:

If the Vasilevsky system is changed from the HAN network in the home to the public Internet, the system no longer has cable connections to the cable delivery system to receive the analog CATV program transmissions and digital CATV program transmissions. See Vasilevsky, Fig. 1 (cable connections 106, 110).

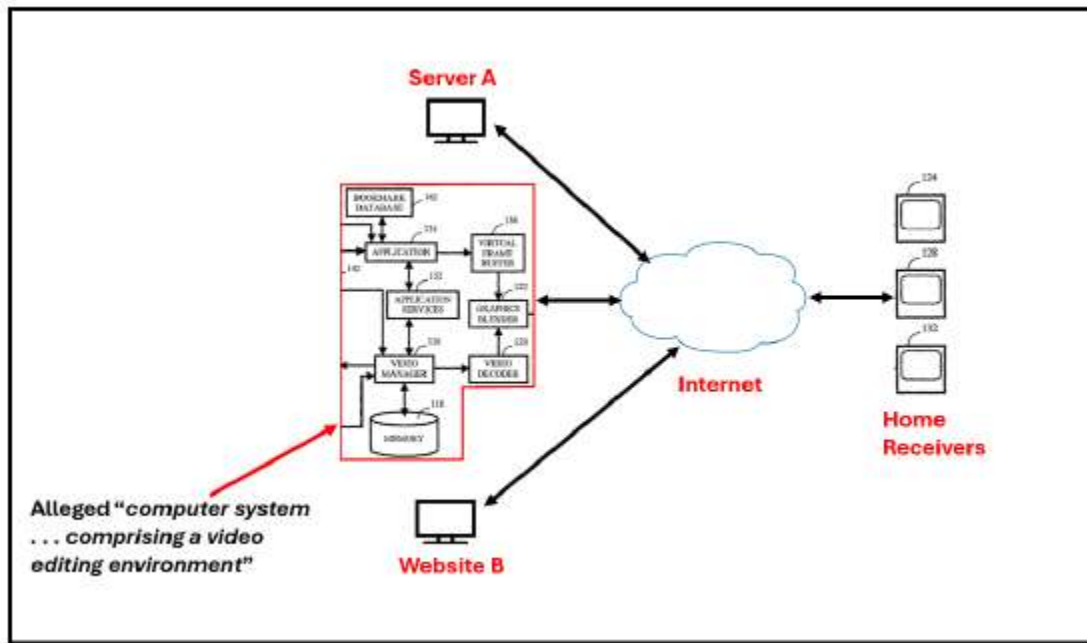
As proposed, the modified Vasilevsky system would no longer have cable connectivity and instead would purportedly have connectivity to the Internet. The modified system would not work because there would be no way for the modified system to receive analog and digital television programming transmissions over the cable infrastructure.

Ex. 2015 ¶¶ 329–330. We are not persuaded.

Patent Owner's argument assumes a POSITA would overlook the fact that Vasilevsky is a cable TV system and the cable line connections would need to be maintained. Reply 36 (citing Ex. 1023 ¶¶ 113–119; Ex. 1030; Ex. 1031). On page 75 of the Petition, on which Patent Owner relies, Petitioner did not exclude the front end digital and analog CATV connections in Vasilevsky's system:



Pet. 75. Annotated Figure 1 highlights VEE components with a red line around them for ease of discussion. Patent Owner re-casts the Petition's annotated Figure 1 to omit all CATV and Broadband connections, as shown below:



Ex. 2022. We are not persuaded by Patent Owner's revised depiction of Vasilevsky's annotated Figure 1 from the Petition. Nor are we persuaded by Dr. Mahon's declaration testimony concerning that revised depiction. Ex. 2015 ¶¶ 340–341.

Patent Owner's argument overlooks the fact that cable providers have offered Internet and TV over the same line since the mid-1990s, which would facilitate incorporating the Internet into Vasilevsky's system. Reply 36 (citing Ex. 1023 ¶¶ 113–19; Ex. 1030; Ex. 1031). As Petitioner notes, "Vasilevsky's system *already* has broadband connection 102 and is therefore already suited to implement the proposed public network modification." *Id.* (citing Ex. 1008, 12:8–13; Ex. 1023 ¶ 119); *see also id.* citing Ex. 1024, 178:7–79:1; Pet. 77–78). Dr. Mahon confirmed as much in his deposition:

Q So there is nothing in Vasilevsky that would preclude that home area

network from being connected to the Internet?

A If you look at the disclosures in Vasilevsky, it specifically references a broadband connection, which, again, could be considered a connection to a -- a high-speed network. And so certainly that's a possibility.

Q And by “broadband connection,” are you referring to what's illustrated in Figure 1 of Vasilevsky at the top left, I believe it's labeled 102?

A It does depict, or it does label 102 as a broadband connection.

Ex. 1024, 178:7–20. In short, we are not persuaded by Patent Owner’s argument that the Petition’s proposed Vasilevsky-Logan combination would not work due to the presumptive removal of front end connections needed in a cable TV system. Resp. 67 (citing Ex. 2015 ¶¶ 340–344; Ex. 2022); Sur-Reply 20–23 (citing Ex. 2015 ¶¶ 327-332, 340-344; Ex. 2022).

c. Motivation to combine Vasilevsky and Logan

We are persuaded that a POSITA would have been motivated to modify Vasilevsky’s HAN network with the Internet as disclosed in Logan. Logan discloses the desirability of implementing its bookmarking system over a public network such as the Internet “to permit the public (other viewers) to contribute to the metadata [bookmarked program segments].” Pet. 77 (citing Ex. 1009 ¶¶ 50, 308). As Dr. Houh testifies:

A POSITA would have been motivated to implement Vasilevsky’s system on a public network, as taught by Logan, to allow users to access the system when they are not on their home network (*e.g.*, access could now be from anywhere in the world as opposed to just over a user’s home network). A POSITA would have recognized that such a modification *would have beneficially allowed more users access via a wider public network to participate in the system to add, modify, and playback video bookmarks (e.g., this ease of access and expanded access* would allow the system to become more popular and allow sharing of bookmarked video clips with users outside the home

network).

Ex. 1002 ¶ 323 (emphasis added). Dr. Houh further explained his reasoning at his deposition:

Q. So how would you -- how would you implement Vasilevsky's system on a public network, as you state in paragraph 323?

A. Well, one -- one way is to have the media server be anywhere in the internet, somewhere in the internet that is publicly accessible. And -- and then other people can contribute things, like bookmarks and annotation -- like, whatever the equivalent is in Vasilevsky.

And -- and furthermore, that the users could access it from anywhere in the network as opposed to only in -- within the home. And so there are lots of reasons that one -- a person of ordinary skill to want to make that modification as taught by Logan. And -- and that's -- that's how -- that's how it'd be done, that -- that that server, media server, would be publicly accessible over the internet.

Ex. 2035, 204:17–205:8. We find Dr. Houh's testimony credible and consistent with the disclosures in Vasilevsky, Logan, and the other references cited by Petitioner.

We note that Patent Owner's expert, Dr. Mahon, argues that the asserted "modification of Vasilevsky's system would not work," thereby providing no motivation for a POSITA to make the asserted modification to the HAN network. Ex. 2015 ¶¶ 327– 339. We address that argument in the immediately preceding subsection above. We are not persuaded by Dr. Mahon's cited declaration testimony because it is based on a faulty premise—the presumptive removal of all CATV front-end connections without considering the availability of a high-speed broadband connection to provide cable and Internet connectivity.

We find Dr. Houh's testimony to be persuasive, credible, and consistent with the teachings of Logan regarding the benefits of allowing broader and easier user access, via a public network, to contribute and share bookmarked video clips in a

system such as taught by Vasilevsky. Therefore, we find that a POSITA would have understood that operating Vasilevsky’s system on a public network, as taught by Logan, provided the benefit of ease of access and allowing more users in a broader public network to participate in the system to add, modify, and playback video bookmarks. Pet. 77 (citing Ex. 1002 ¶¶ 315–23); Reply 37 (citing Ex. 2032 ¶ 3 (“It would therefore be beneficial to enable people to enjoy their television programming ... on computing devices ... regardless of location and without dependence on physical connections.”)). As stated in *KSR*, “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *KSR*, 550 U.S. at 416; *see also id.* at 417 (“simple substitution of one known element for another”).

We also find that a POSITA would have had a reasonable expectation of success in combining Vasilevsky and Logan because (i) Vasilevsky and Logan are drawn to similar systems of adding bookmarks to television programming and (ii) it would have been a simple and straightforward modification by substituting one network type with another (*i.e.*, substituting a private network with a public network) to obtain predictable results (*i.e.*, it would not affect the function of Vasilevsky’s system). Pet. 77–78 (*comparing, e.g.*, Ex. 1008, Abstract, ¶¶ 19:12–20:10 *with* Ex. 1009, Abstract, ¶¶ 177–178, 223–224); *see also id.* (citing Ex. 1012 ¶ 32; Ex. 1002 ¶ 324).²³

For the reasons given above, we determine the Petition has established by a preponderance of the evidence that Vasilevsky-Logan teaches limitation 13.1.

2. Vasilevsky-Logan Teaches Limitations 13.2 and 13.3

The Petition maps Vasilevsky to limitation 13.2 as follows:

²³ Patent Owner does not offer evidence of objective indicia of non-obviousness. Resp. 57–75.

Vasilevsky discloses *receiving a set of video information (e.g., receiving a collection of information concerning video recordings) at the video editing environment using the computer system (e.g., at the software for streaming video using the centralized media server and storages).*

Pet. 78. The Petition emphasizes that Vasilevsky describes “a media server for **receiving and storing multiple electronic audio-visual programs.**” *Id.* (citing Ex. 1008, 10:14–17, 11:1–2, 13:19–20). The Petition further explains limitation 13.2 is taught by Vasilevsky because “video recordings are received by the software executed by Application Unit 134, Video Manager 116, and Memory 118 such as when retrieving video to stream to client 124.” *Id.* (citing Ex. 1008, 15:15–16:5 (“The Application Services Unit 152 controls the recording and playback of programs.”), 14:5–7 (“[T]he **reading** of program content information from memory are **controlled by a video manager 116.**”), 13:19–14:1 (“television signals and other program signals are stored in memory 118”), 21:1–8, Fig. 2; Ex. 1002 ¶¶ 327–329.

Patent Owner construes Petitioner’s identification of the VEE in Vasilevsky’s annotated Figure 1 to mean that the video information recited in limitation 13.2, and the cue point information recited in limitation 13.3, are received **within** rather than **at** the VEE. Resp. 68–71 (citing Ex. 1008, 7:14-16, 8:7-9, 13:5–10, 13:19–14:7, 15:15-20, 19:12-20, 21:1-8, 22:8-15, Fig. 1; Ex. 2015 ¶¶ 361–375; Sur-Reply 25–26). Patent Owner, however, acknowledges that video information is retrieved from Memory 118 by Video Manager 116 (*i.e.*, by “*using the computer system*”). *Id.* at 68. Patent Owner further acknowledges that cue point information is retrieved from Bookmark Database 162 by Application Unit 134 (*i.e.*, “*using the computer system*”). *Id.* at 70. Thus, Vasilevsky’s technique for retrieving video and cue point information from storage “*using the computer*

system,” is not excluded by limitations 13.2 and 13.3 as argued by Patent Owner.

Once retrieved from storage using the computer system, the video and bookmark information are received “at” the VEE and available for processing. By way of contrast, for example, limitation 13.4 requires a cue point editing command be received “*over the network from a remote client terminal . . . using the computer system,*” thereby limiting how the information is to be received using the computer system. Limitations 13.2 and 13.3 do not contain any such limitation on how the information is received “at” the VEE using the computer system. Therefore, Vasilevsky reads on those claim limitations.

We determine the Petition has established by a preponderance of the evidence that Vasilevsky-Logan teaches limitations 13.2 and 13.3.

3. Vasilevsky-Logan Teaches Limitations 13.4 and 13.5

The Petition maps Vasilevsky to limitation 13.4 as follows:

Vasilevsky discloses *receiving a cue point editing command (e.g., command to edit a bookmark after modifying bookmark information in interface of Figure 6) over the network (e.g., HAN/Internet) from a remote client terminal disposed at a client side of the public network (e.g., client 124) using the computer system (e.g., the centralized media server and storages).*

Pet. 83 (italics added to identify claim language). The Petition explains that a client in Vasilevsky’s system can edit a bookmark via an interface, such as the interface shown in Vasilevsky Figure 6. *Id.* (citing Ex. 1008, 22:8–15). The computer system receives the command to edit a bookmark over the network (*e.g., over the HAN/Internet*) from the client side when a client user wants to modify the bookmark. *Id.* (citing Ex. 1008, 15:15-17 (“Application Unit 134, which converts user commands to commands compatible with the media server”), 19:16-20 (“when a command is received to enter a bookmark, the Application Unit 134 causes the bookmark to be stored in a bookmark database 162”), 22:8–15, Figs. 1,

6).

Patent Owner contends that Petitioner is relying on the same operation in Vasilevsky for teaching both limitations 13.3 and 13.4. Resp. 71–73. We disagree. The Petition explains that when a bookmark (“*cue point*”) is created by a client user and received at the centralized media server (the VEE), this step teaches limitation 13.3, but when the client user modifies that bookmark, a cue point editing command is received by the centralized media server Application Unit (VEE) to modify and store the new bookmark information in memory. Pet. 79–84. Patent Owner’s argument, that additional changes are needed to Receiver 124 in Vasilevsky’s system (Resp. 73), overlooks Vasilevsky’s disclosure of Ethernet/wireless networks connecting receivers and the media server, thereby rendering additional changes unnecessary. Reply 39 (citing Ex. 1008, 16:13–17:18 (“Using the [later Ethernet] approach, a station/receiver desiring to transmit information seeks a free carrier line . . . [and] begins transmitting.”)).

Therefore, we determine the Petition has established by a preponderance of the evidence that Vasilevsky-Logan teaches limitations 13.4 and 13.5.

4. *Vasilevsky-Logan Teaches the Remaining Limitations in Claim 13*

We have reviewed the Petition’s arguments and evidence and determine the Petition establishes by a preponderance of the evidence that Vasilevsky-Logan teaches the remaining limitations recited in claim 13, namely limitation 13.6 (“*receiving a cue point selection over the network from the remote client terminal identifying one of the cue points . . .*”) and 13.7 (“*streaming the portion of the video information to the client terminal over the network . . .*”). Pet. 84–86 (citing Ex. 1002 ¶¶ 347–353; Ex. 1008, Abstract, 6:13–14, 7:13–17, 8:7–12, 10:14–11:2, 15:5–17, 18:13–14, 18:19–19:2, 20:3–6, 21:11–13, 22:8–15, 23:2–4, Figs. 4, 6). Patent Owner does not contest the Petition’s evidence and argument that

Vasilevsky teaches limitations 13.6 and 13.7. Resp. 57–75 (addressing limitations 13.1–13.5, citing Ex. 2015 ¶¶ 304–390). Having reviewed the Petition’s evidence and argument, we determine Petitioner has established by a preponderance of the evidence that Vasilevsky teaches limitations 13.6 and 13.7 for the reasons stated in the Petition.

5. *Vasilevsky-Logan Does Not Teach Claim 15*

Claim 15 depends from claim 14. The Petition maps claim 15 to Vasilevsky as follows:

Vasilevsky discloses *receiving an edit mode entry signal (e.g., signal for entry to the interface(s) for editing bookmarks; from selecting the Figure 6 interface) over the network from the client terminal (e.g., from client 124 over the HAN/Internet) representing entry into the cue point edit mode (e.g., representing entry into the interface(s) for editing bookmarks), and switching the video editing environment to the cue point editing mode in response to receiving the edit mode entry signal (e.g., switching the software executed by the centralized media server and storages to display the interface(s) for editing bookmarks; editable bookmark fields in the interface of Figure 6).*

Pet. 87 (citing Ex. 1002 ¶¶ 359–64; Ex. 1008, 19:16–20, 22:8–15, claim 14; Pet. 83–84 (limitation 13.4 argument and evidence)). Dr. Houh emphasizes the following disclosure regarding Figure 6 in Vasilevsky:

Figure 6 shows a variation 600 of the bookmark display 400 in Figure 4. The elements 610, 620, 630, 640, 650 and 660 are analogous to the elements 410, 420, 430, 440, 450 and 460, 266 respectively. However, the identifier 650 is in the form of a more detailed text box that includes such information as the bookmark establisher’s name, a title of the bookmark, and a brief description of what occurred in the program just prior to the pause point. A **system user** can enter or **modify** all of the information.

Ex. 1002 ¶ 361 (quoting Ex. 1008, 22:8–15). Dr. Houh further testifies that a “POSITA would have understood that when a user selects the interface of FIG. 6

for a selected annotation, the centralized media server receives an edit mode entry signal—an indication to the computer system to enter an edit mode.” *Id.* ¶ 364. However, unlike the Fegan reference, for example, Vasilevsky does not teach an edit button or comparable configuration for the server to receive an “*edit mode entry signal over the network*” that will have the effect of “*switching the [VEE] to the cue point editing mode in response to receiving the edit mode entry signal*” as recited in claim 15. *See, e.g.*, Ex. 1001, 25:31–37 (“in other embodiments, the client may enter the cue point edit mode by selecting a navigational control which directs the client specifically to that mode”).

We agree with Patent Owner that the Petition has not sufficiently explained the assertion that a user’s selection of an existing bookmark via the Figure 6 GUI is a teaching of an “*edit mode entry signal*” received over the network for “*switching the [VEE] to the cue point editing mode*” (claim 15). Resp. 74–75 (citing Ex. 1008, 22:8–15; Ex. 2015 ¶¶ 378–379). As Dr. Mahon explains, Vasilevsky does not describe or teach a signal sent over the network to cause the VEE to “*switch[] . . . to the cue point editing mode*” in response to receiving an edit mode entry signal. Ex. 2015 ¶ 379. Specifically, for claim 14 the Petition asserts that selecting a bookmark for editing via the Figure 6 GUI is a signal for entering the “*cue point editing mode*” as recited in claim 14, a point Patent Owner does not contest beyond the arguments made for claim 13. Resp. 45. Petitioner, however, does not persuasively identify a teaching in Vasilevsky that the act of selecting a bookmark for editing will trigger the recited “*receiving of an edit mode entry signal*” for “*switching*” to the cue point edit mode as recited in claim 15. On balance, we are persuaded by Dr. Mahon’s testimony and the cited passages in Vasilevsky on which the Petition relies (Ex. 1008, 19:16–20, 22:8–15), that the Petition has not sufficiently explained or established that user selection of a video

bookmark for editing will generate an edit mode entry signal that switches the Application Unit (VEE) to the recited “*cue point editing mode*.” Ex. 2015 ¶ 382.

For the reasons given above, we determine the Petition has not established by a preponderance of the evidence that Vasilevsky-Logan teaches claim 15.

6. *Vasilevsky-Logan Teaches Claim 18*

The Petition maps claim 18 to Fegan as follows: “Vasilevsky discloses *receiving, over the network, authentication information (e.g., information concerning the user’s identity) relating to access authority of the remote client terminal (e.g., concerning which client may access or edit a bookmark)*. The Petition and Dr. Houh explain that user authentication information is received over the network because Vasilevsky discloses an embodiment where “**only a user who established a particular bookmark** can use that particular bookmark for resumption of playback.” Pet. 88 (citing Ex. 1008, 20:6–8, 21:17–19, claim 5 (“said media server is adapted to enable a particular program bookmark to be **edited only by a user purporting to have established the particular bookmark**”), claim 6; Ex. 1002 ¶¶ 365–368). The Petition reasons that in such an embodiment, where only a particular user (users) can access certain bookmarks, the centralized media server must receive client user authentication information over the network so that the media server has the required information to permit identification of an authorized user to access a particular bookmark. *Id.* (citing Ex. 1002 ¶ 368).

Patent Owner makes only a conclusory argument that there is no teaching or suggestion in Vasilevsky-Logan for receiving bookmark user authentication information “*over the network*.” Resp. 75–76 (citing Ex. 2015 ¶¶ 391–393). Dr. Mahon makes essentially the same argument raised against the Fegan reference (anticipation of claim 18 in Ground 2), namely that “such authentication

information could easily be received by the server-side of Vasilevsky-Logan by direct input and other manners other than over the network.” Ex. 2015 ¶ 393. However for this obviousness Ground 5, unlike the asserted anticipation by Fegan in Ground 2, we are persuaded by Dr. Houh’s testimony.

We agree with Dr. Houh that it would have been obvious for Vasilevsky’s media server to receive a client user’s authentication information for authorizing access to a particular bookmark over the network “so the media server has the necessary information to determine whether this particular user has sufficient access for a particular bookmark.” Ex. 1023 ¶ 137. We further are persuaded that the only connection between clients and the media server disclosed in Vasilevsky is the network connection. *Id.* ¶ 136. In fact, Vasilevsky Figures 5 and 6 “depict usernames (*e.g.* ‘Schmidt’) attached to bookmarks, indicating that some authentication information must have been provided to the server in order for the client to be logged in with that username.” *Id.* Given the central role of the media server in the communication pathway between client-side users and the server-side bookmarking system taught by Vasilevsky, we are persuaded by Petitioner that an obvious way to communicate user authentication information to access particular bookmarks would have been for a client to communicate authentication information over the network to the media server. Moreover, such over-the-network transmission of authentication information would have been an obvious design choice for a POSITA, and Patent Owner does not persuasively argue to the contrary. *See KSR*, 550 U.S. at 421 (“When there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill has good reason to pursue the known options within his or her technical grasp.”).

For the reasons given above, we determine the Petition has established by a

preponderance of the evidence that Vasilevsky-Logan teaches claim 18.

7. Conclusion

Having reviewed the Petition's evidence and argument, we further determine the Petition establishes by a preponderance of the evidence that Vasilevsky-Logan teaches the limitations recited in claims 14, 17, 19, and 20. Pet. 86–89 (citing Ex. 1002 ¶¶ 354–358, 369–376; Ex. 1008, 15:5–17, 18:4–5, 19:16–20, 20:7–8, 20:11–15, 21:17–19, 22:8–15, claims 4–5, 6, 11, 18; Pet. 83–84 (limitation 13.4 argument and evidence)); 1101 IPR Pet. 86–87 (citing Ex. 1002 (1101 IPR) ¶¶ 318–327; Ex. 1008, Abstract, 19:12–20:10, 24:6–9; Ex. 1009 ¶¶ 145–151, 177–178, 223–224). Patent Owner does not contest the Petition's evidence and argument that Vasilevsky-Logan teaches the limitations in claims 14, 17, 19, and 20 beyond the arguments already addressed for claims 13, 15, and 18. Resp. 57–75 (addressing limitations 13.1–13.5, claim 15, and claim 18 (citing Ex. 2015 ¶¶ 304–390)).

For the reasons given above, we determine the Petition has established by a preponderance of the evidence that claims 13–14, and 17–20 are unpatentable as obvious over Vasilevsky and Logan. We further determine the Petition has not established by a preponderance of the evidence that claim 15 is unpatentable as obvious over Vasilevsky and Logan.

V. MOTION TO EXCLUDE EXHIBITS 2018–2022 and 2041

Petitioner moves to exclude Exhibits 2018–2022 and 2041 from consideration in this *inter partes* review as irrelevant, unauthenticated hearsay, and/or improper opinion testimony. Mot. 1–4. Patent Owner opposes the Motion arguing, *inter alia*, that Petitioner's objections to Exhibits 2018–2021 and 2041 are moot “because, as Petitioner concedes, they were not relied upon in Patent

Owner's papers. Accordingly, there is no reason to exclude them." Mot. Opp. 1 (citing Mot. 1–2). We address the parties' arguments below.

The party moving to exclude evidence bears the burden of proving that it is entitled to the relief requested—namely, that the material sought to be excluded is inadmissible under the Federal Rules of Evidence. *See* 37 C.F.R. §§ 42.20(c), 42.62(a).

We deny Petitioner's Motion to exclude Exhibits 2018–2021 and 2041 as moot, because Patent Owner did not rely on Exhibits 2018–2021 and 2041. As to Petitioner's insistence that Exhibits 2018–2021 and 2041 are inadmissible and must be excluded (Mot. Reply 1), we note the Board acts as gatekeeper and is well positioned to determine and assign the appropriate weight to be given each piece of evidence, including by giving it little or no weight. *Cf. Donnelly Garment Co. v. NLRB*, 123 F.2d 215, 224 (8th Cir. 1941) ("One who is capable of ruling accurately upon the admissibility of evidence is equally capable of sifting it accurately after it has been received."). Rather than excluding evidence that is allegedly irrelevant, unsupported, and/or unauthenticated hearsay, we instead give it little or no probative weight, as appropriate. Here, we give Exhibits 2018–2021 and 2041 no weight because Patent Owner did not rely on those exhibits. We do not reference or rely on those exhibits in this Decision.

Exhibit 2022, addressed above in Section IV.C.1.b. of this Decision, is a form of interpretive exhibit relied on by Dr. Mahon to support his opinion challenging the operability of Petitioner's modified Vasilevsky-Logan system. *See* Ex. 2015 ¶¶ 340–342, 371, 375 (referencing Ex. 2022). Petitioner argues for the exclusion of Exhibit 2022 as unauthenticated hearsay and "potentially attorney argument rather than evidence." Mot. 3. Patent Owner counters that such an exhibit is admissible within the rules governing expert opinions on a contested

issue in an *inter partes* review. Mot. Opp. 5 (citing 35 U.S.C. § 316(a)(8) (POR may include “declarations ... and expert opinions”); 37 C.F.R. §§ 42.53(a) (submission of direct testimony in the form of an affidavit or declaration), 42.52(b)(1)(ii) (providing for cross examination of declarant testimony); Consolidated Trial Practice Guide (“Practice Guide”) (Nov. 2019), 23 (providing for “cross-examination of the other side’s declarants”), 34 (“Expert testimony is presented in the form of an affidavit or declaration”), 35, 66 (patent owner response may include declarations)). Petitioner responds that it does not seek exclusion of Dr. Mahon’s testimony, only the exclusion of the graphic entered as a “standalone exhibit,” *i.e.*, Exhibit 2022, because the source and authenticity of the exhibit remains in question. Mot. Reply 2n.3.

Here, however, Dr. Mahon has given extensive and detailed expert opinion testimony concerning the graphic depicted in Exhibit 2022 and included the identical graphic, without modification, in his sworn declaration and identified it as Exhibit 2022. Ex. 2015 ¶¶ 340 (including graphic identified as “Ex. 2022”), 342, 371, 375 (referencing Ex. 2022). Counsel for Petitioner deposed Dr. Mahon and had the opportunity to question Dr. Mahon under oath concerning the provenance and accuracy of Exhibit 2022. See Ex. 1024, 179:2–15 (Dr. Mahon testified: “What I present is my understanding of what’s in the petitioner's proposed combination, and I illustrate that in the figure on the – on page 174 [Declaration ¶ 340].”).

Rule 703 of the Federal Rules of Evidence, moreover, provides leeway for an expert to give opinion testimony based on facts or data that may not be admissible in evidence, so long as the facts or data are “of a type reasonably relied on by experts in the particular field in forming opinions or inferences upon the subject.” Fed. R. Evid. 703. The Advisory Committee Notes clarify the flexibility

afforded experts in forming opinions in reliance on hypotheticals and “presentation of data to the expert outside of court and other than by his own perception,” *i.e.*, hearsay. *Id.* (Adv. Comm. Notes). And where a court acts as fact finder, rather than a jury, the danger of unfair prejudice to the objecting party is substantially diminished. *See Science Applications Int’l Corp. v. United States*, 175 Fed. Cl. 389, 395 (2025) (“bench trials limit the ‘concern for juror confusion or potential prejudice’”) (citations omitted). The Board, sitting as a non-jury tribunal with administrative expertise, is well-positioned to determine and assign appropriate weight to evidence presented, as we have done in the present case. *See Gnosis S.p.A. v. S. Alabama Med. Sci. Found.*, Case IPR2013-00118, slip op. at 43 (PTAB June 20, 2014) (Paper 64); *see also Donnelly*, 123 F.2d at 224 (“One who is capable of ruling accurately upon the admissibility of evidence is equally capable of sifting it accurately after it has been received.”). In rendering our Decision, we have assigned appropriate weight to Exhibit 2022 in view of the entire record before us.

For the reasons given above, we deny Petitioner’s motion to exclude Exhibit 2022.

VI. CONCLUSION

We conclude Petitioner has established by a preponderance of the evidence that claims 13–15 and 17–20 of the ’286 patent are unpatentable. In summary:

Claim(s)	35 U.S.C. §	Reference(s)/Basis	Claim(s) Shown Unpatentable	Claim(s) Not shown Unpatentable
13–15, 18–20	102	Fegan	13–15, 20	18–19
17	103	Fegan, Sull	17	
13–15, 17–20	103	Vasilevsky, Logan	13–14, 17–20	15
Overall Outcome			13–15, 17–20	

VII. ORDER

Accordingly, it is

ORDERED that Petitioner has shown by a preponderance of the evidence that claims 13–15 and 17–20 of the '286 patent are unpatentable;

FURTHER ORDERED that Petitioner's Motion to Exclude (Paper 34) is *denied*; 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.

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