

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

COMCAST CABLE COMMUNICATIONS, LLC,
Petitioner,

v.

TOUCHSTREAM TECHNOLOGIES, INC.,
Patent Owner.

Case No. IPR2024-00322
U.S. Patent No. 8,356,251

**PATENT OWNER'S RESPONSE
PURSUANT TO 37 C.F.R § 42.120**

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PATENT OWNER’S EXHIBIT LIST

Exhibit No.	Description
2001	Request for an Extension of Time dated May 9, 2019 re Reply to Office Action of 01/08/2019 (‘751 Remarks)
2002	Lex Machina Report – District Judge James Rodney Gilstrap Order Stats between Jan. 1, 2012 – April 12, 2024
2003	2:23-cv-00060 (E.D. Tex. 2023), Docket Control Order (Dkt. 71) filed June 16, 2023
2004	Docket Navigator – Judge Rodney Gilstrap Milestone timeline accessed April 10, 2024
2005	2:23-cv-00062 (E.D. Tex. 2023), Dkt 1 (Feb. 17, 2023)
2006	2:23-cv-00060 (E.D. Tex. 2023), Dkt 156 (Order Denying Transfer)
2007	Touchstream’s Disclosure of Asserted Claims and Infringement Contentions and Accompanying Document Production to Comcast Defendants dated May 19, 2023
2008	Charter Notice of Preliminary Election of Asserted Prior Art dated April 4, 2024
2009	Defendants’ Third Supplemental Disclosures Pursuant to P.R. 3-3 and 3-4 dated March 27, 2024
2010	Defendants’ Disclosures Pursuant to P.R. 3-3 and 3-4 dated August 4, 2023
2011	Comcast Defendants’ Preliminary Election of Asserted Prior Art dated (April 4, 2024)
2012	Comcast Defendants’ Stipulation Regarding Invalidity Defenses (Dkt. 129) filed January 9, 2024
2013	2:23-cv-00060 (E.D. Tex. 2023), Dkt 158 (Order deconsolidating cases and reconsolidating to 2:23-cv-00059)
2014	U.S. Patent No. 11,048,751 issued June 29, 2021; <i>Play Control of Content on a Display Device</i>
2015	RESERVED
2016	RESERVED

Exhibit No.	Description
2017	'751 File History, Office Action, January 8, 2019
2018	Comcast Docket Sheet (2:23-cv-00062-JRG) as of April 23, 2024
2019	Charter Docket Sheet (2:23-cv-00059-JRG) as of April 23, 2024
2020	Altice Docket Sheet (2:23-cv-00060-JRG) as of April 23, 2024
2021	Declaration of Philip A. Eckert
2022	Excerpt from Transcript of January 17, 2024 Hearing in <i>Touchstream v. Google</i> , No. W-21-cv-569 (W.D. Tex.)
2023	Lex Machina Report – District Judge James Rodney Gilstrap Order Stats between Jan. 1, 2012 – April 12, 2024, filtered for “Stay Pending PTAB”
2024	Claim Construction Order dated July 9, 2024 re <i>Touchstream v Comcast</i> ; Lead Case No. 2:23-cv-00059 (Member Case 2:23-cv-00062)
2025	Declaration of Stephen B. Wicker, Ph.D. In Support of Patent Owner’s Response

I. INTRODUCTION

Petitioner Comcast Cable Communications, LLC fails to meet its burden of proof to show any of claims 1-26 of U.S. Patent No. 8,356,251 (the “’251 patent,” Ex. 1101) would have been obvious over Danciu (Ex. 1112) in view of Mahajan (Ex. 1114) (“Ground A”), Danciu in view of Mahajan and further in view of Calvert (Ex. 1111) (“Ground B”), or Aldrey (Ex. 1115) in view of Mahajan (“Ground C”). Accordingly, Patent Owner Touchstream Technologies, Inc. respectfully requests that the Board confirm the patentability of all challenged claims.

First, claims 1–21 should be confirmed patentable. The Mahajan reference used in every asserted Ground lacks the critical *conversion* limitation present in each of these claims. *See infra*, § VII.A. Specifically, the claims require “converting, *by the server system*, the universal playback control command into corresponding programming code to control playing of the video content of the display device by the particular media player.” But in Mahajan, the alleged conversion of universal commands is not performed by Mahajan’s *server*, but rather by its *client* (*i.e.*, the device that plays the media content). Furthermore, Mahajan’s alleged “generic commands” are the *output* of the alleged conversion process performed by the server—not the *input* as the claims require. Petitioner thus fails to show Mahajan’s teaching of the claimed “programming code” or the conversion from *universal commands*. Because Mahajan fails to teach this critical *conversion* step in every

Ground regarding this limitation of claims 1 and 11, Petitioner has failed to prove obviousness of claims 1–21.

Second, Petitioner’s asserted grounds for claims 22–26 fail for several reasons, including because Petitioner ignores the unique requirements of these claims. *See infra*, § VIII. For example, claim 22 requires the display device to obtain and load two different media players, each identified to the display device by the server system. And those media players must be identified by information *retrieved* by the display device (not merely transmitted by the *server system*). The asserted references fail to teach all these limitations.

For at least these reasons, Touchstream respectfully requests the Board to reject Comcast’s challenges and confirm the patentability of claims 1–26 of the ’251 Patent.

II. THE ’251 PATENT

The ’251 patent, titled “Play Control of Content on a Display Device,” issued on January 15, 2013, from U.S. Patent Application No. 13/245,001. Ex. 1101 (cover). It generally relates to methods for presenting and controlling media content using a *display device*, a *server system*, and a *personal computing device*. *See id.* The application that matured into the ’251 patent was filed September 26, 2011, and claims priority to an earlier utility application (filed June 10, 2011) that issued as U.S. Patent No. 8,904,289 (the “’289 patent”). *Id.* The ’251 patent also claims

priority to an earlier provisional application (filed April 21, 2011). *Id.* The '251 patent names David Strober as its sole inventor and Patent Owner as the assignee. *Id.*

A. Claims

The '251 patent has 26 claims, of which three—claims 1, 11, and 22—are independent. Independent claim 1 recites:

1. A machine-implemented method of controlling presentation of video content on a display device that loads any one of a plurality of different media player players, the method comprising:
assigning, by a server system, a synchronization code to the display device;
receiving, in the server system, a message from a personal computing device that is separate from the server system and separate from the display device, wherein the message includes the synchronization code;
storing, by the server system, a record establishing an association between the personal computing device and the display device based on the synchronization code;
receiving, in the server system, one or more signals from the personal computing device, the one or more signals specifying a video file to be acted upon and identifying a particular media player for playing the

video content, the one or more signals further including a universal playback control command for controlling playing of the video content on the display device by the particular media player, converting, by the server system, the universal playback control command into corresponding programming code to control playing of the video content on the display device by the particular media player, wherein converting the universal playback control command includes selecting from among a plurality of specific commands, each of which represents a corresponding playback control command for a respective media player; and storing, in a database associated with the server system, information for transmission to or retrieval by the display device, wherein the information specifies the video file to be acted upon, identifies the particular media player for playing the video content, and includes the corresponding programming code to control playing of the video content on the display device by the particular media player in accordance with the universal playback control command.

Ex. 1101, 11:22–60.

Independent claim 11 differs in several respects. Notably, it claims a system, not a method. It also differs in that it recites both a “first database” and “second

database.” Ex. 1101, 12:34–35, 12:41–63. The “first database” is responsible for, *inter alia*, storing a relationship “between a personal computing device and the display device,” and the “second database” stores “information for transmission to or retrieval by the display device.” *Id.* Claim 11 has sundry other differences, and this is not an exhaustive list.

Independent claim 22 recites a method that differs from the method of claim 1 in several ways. For example, claim 22 includes a sequence of steps—“retrieving,” “obtaining,” “loading,” and “executing”—that involve “first information,” a “first video file,” a “first playback control command” (and corresponding “programming code”), and a “first media player.” Claim 22 further includes a similar series of subsequent steps involving “second information,” a “second video file,” “second playback control command,” and “second media player,” requiring that the “second media player” be different from the first. Claim 22 recites:

22. An automated machine-implemented method of presenting video content on a display device that loads any one of a plurality of different media player, the method comprising:

displaying, by the display device, a synchronization code that was assigned to the display device by a server system, the server system subsequently storing, based on a message from a personal computing device that is separate from the server

system and the display device, an association between the display device and the personal computing device, the message from the personal computing device including the synchronization code;

retrieving, by the display device from a server system, first information that specifies a first video file to be acted upon, that identifies a first media player for playing the first video file, and that indicates corresponding programming code to control playing of the first video file on the display device by the first media player in accordance with a first playback control command, wherein the server system previously received, from the personal computing device, one or more signals specifying the first video file identifying the first media player and including the first playback control command;

obtaining, by the display device, over the Internet the first media player for playing the first video file;

loading the first media player in the display device;

executing the first playback control command with respect to the first video file using the first media player;

subsequently retrieving, by the display device from the server system, second information that specifies a second video file to be acted upon, that identifies a second media player different from the first media

player for playing the second video file, and that indicates corresponding programming code to control playing of the second video file on the display device by the second media player in accordance with a second playback control command, wherein the server system previously received, from the personal computing device, one or more signals specifying the second video file, identifying the second media player and including the second playback control command;

obtaining, by the display device, over the Internet the second media player for playing the second video file;

loading the second media player in the display device;

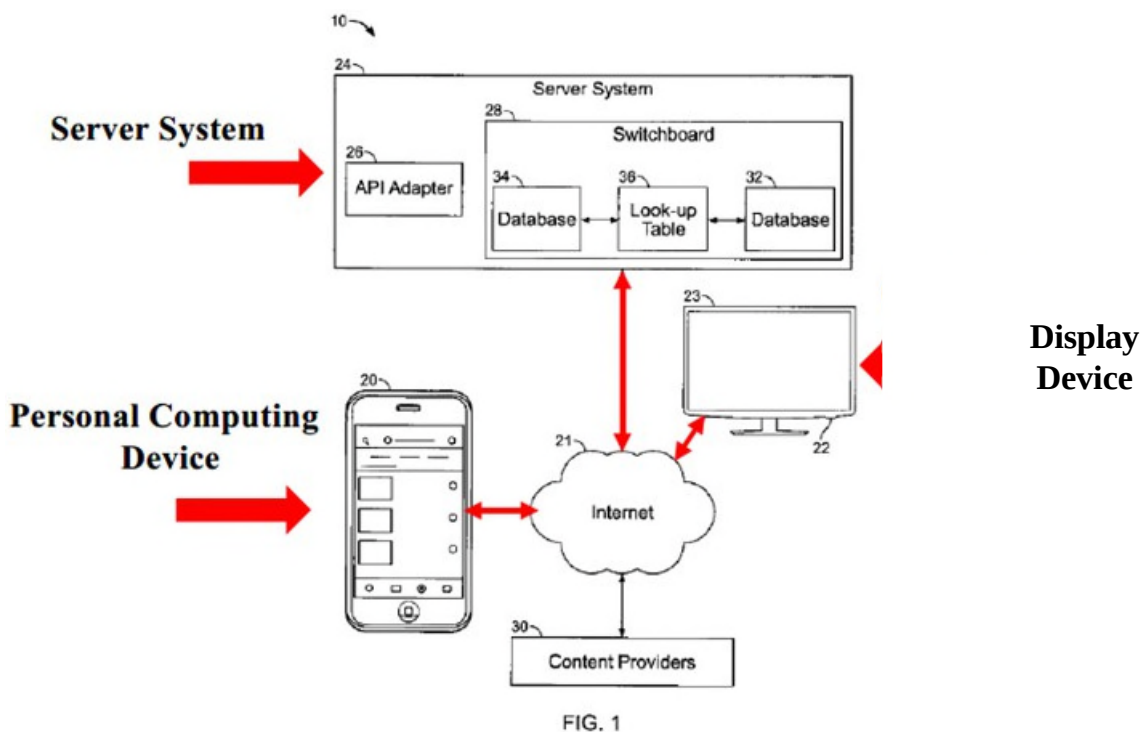
and

executing the second playback control command with respect to the second video file using the second media player.

Ex. 1101, 13:48–14:20.

B. Specification

The '251 patent discloses various embodiments to illustrate how the invention allows a user to locate content (e.g., video content) on a personal computing device, like a mobile phone, and cause playback of that content on a second device (e.g., a television set) or other display device. As recited in the claims, a server system facilitates this process.



Ex. 1101 (Fig. 1, annotated)

Figure 1 (reproduced above in annotated form) depicts an overview of the system according to certain embodiments. Ex. 1101, 2:41–42. As shown, the mobile device, digital device (e.g., television set with a display), and server system of this embodiment are connected to the Internet. *Id.*, 2:66–3:1. The personal computing device (here, mobile device) acts as a controller, locating and selecting content via the Internet and sending commands that instruct the television set to obtain the selected content from the Internet and to present the content. *See id.*, 3:1–29. In one embodiment, a mobile phone sends messages to a server system when a user selects content and requests that it be displayed on the television set. *Id.*, 3:12–15. The television set “is operable to link back to a server system 24 from which the

television set receives commands.” *Id.*, 3:10–11. The server system may send commands instructing the television set, in some embodiments, “to access a content provider 30 through the Internet 21, load a specific media player, load the media player-specific content (e.g., a video) and play the content on the television display 23.” *Id.*, 3:18–23.

For the television set to present selected content, a user must have already established a connection between the mobile phone and the television set. *See id.*, 4:65–5:7. For certain embodiments, establishing that connection involves a “synchronization code” that identifies the display device, *e.g.*, television set. *Id.*, 5:8–10, 5:14–16. For example, the user may run software on the display device that connects it to the server system. *See id.*, 7:17–23. Upon connection, the server system may assign the television set a synchronization code (or sync code), which in some embodiments may then appear on the television set display (*e.g.*, as text or a QR code). *See id.*, 5:16–21, 5:26–29, 7:24–25. The user enters the sync code (or scans it, if a QR code is used) using the mobile phone, which then sends the sync code to the server system in a message. *See id.*, 5:16–21, 5:36–41, 7:25–31. The server then establishes a connection between the mobile phone and the television set that the sync code identifies. *Id.*, 5:32–41, 7:32–35.

FIG. 1 is a block diagram of a system architecture. The system is divided into four main sections, each enclosed in a colored box and labeled with a number: 1 (red), 2 (yellow), 3 (green), and 4 (blue).
 Section 1 (Content Providers) contains multiple 'Content Providers' blocks (100, 102, 104) and an 'XML Data File' block (106).
 Section 2 (Smart Phone) contains a 'Start App' block (108), a 'Request Video Data' block (110), a 'Display List of Videos' block (112), an 'Action Selected' block (114), and a 'Selection Sent to Database' block (116).
 Section 3 (Back-end Servers) contains a 'Target Verification / Switchboard' block (118), a 'Message Added to Smart Phone Database' block (120), an 'Account Verification' block (122), a 'Message Received from Smart Phone' block (124), a 'Universal API Adapter' block (126), and a 'Message Copied to Display Device Database' block (128).
 Section 4 (Display Device) contains a 'Switch Video Player' block (130), a 'Load New Video' block (132), a 'Play/Pause/ffwd/etc...' block (134), and a 'Presentation of Video' block (136).
 Arrows indicate the flow of data and control between these components. For example, arrows show data flowing from Content Providers to the Smart Phone, from the Smart Phone to the Back-end Servers, and from the Back-end Servers to the Display Device. There are also feedback loops and internal flows within each section.

Ex. 1101 (Fig. 2, annotated)

Patent Owner's Response

the phone to send a message to the server system. *Id.*, 4:23–29. In embodiments, the message “contains a transmission code that includes data regarding the user information . . . , the secondary display it wants to connect to . . . , the location and name of the media player for the selected video, the command (e.g., play, pause, rewind, etc.), and the video file to be acted upon.” *Id.*, 4:29–35; *see id.*, Fig. 3 (depicting a possible transmission code format).

Because different media players may require different programming codes (e.g., JavaScript commands), the server system 24 loads protocols for the particular media player identified by mobile phone 20. *Id.*, 5:54–67. (3) Using these protocols, the server system converts an incoming universal command (e.g., play, pause etc.) “into the correct JavaScript (or other programming) code used by the target device 22 to control the specific player (block 120).” *Id.*, 5:58–62, 5:65–6:3; *see id.*, 6:7–18, 6:51–62. The correct programming code replaces the universal command in the message, which the display device may then retrieve from the server system. *See id.*, 6:3–6, 6:19–29. (4) The display device executes the message from the server, retrieving the identified content, retrieving and/or loading the particular media player identified (if not already stored and loaded on the display device), and executing the programming code that corresponds to the universal command. *See id.*, 3:18–23, 6:30–46, 6:60–62.

C. Prosecution History

The claims of the '251 patent issued after rigorous examination during which application claim 1, corresponding to issued claim 1, was twice rejected as anticipated by U.S. Published Application No. 2011/00600998 (“Schwartz”). Ex. 1104, 218–33, 62–67; *see id.*, 218–249, 62–82 (office actions rejecting claims, including claim 1). Over the course of prosecution, Applicant amended claim 1 to distinguish over Schwartz. *See* Ex. 1104, 275–276, 209. These amendments added limitations to recite that the display device “loads any one of a plurality of media players” and to require several steps pertaining to “the particular media player” identified in the “one or more signals” received in the server system from the personal computing device. *Id.* Applicant also added a limitation to the “converting” step requiring that “converting the universal playback control command includes selecting from among a plurality of specific commands, each of which represents a corresponding playback control command for a respective media player.” *Id.*, 209. And the first three claim steps—“assigning,” “receiving,” and “storing,” which all pertain to a “synchronization code”—were added in their entirety through an Examiner’s amendment to obtain allowance. *Id.*, 270, 274–76.

Further, the prosecution history of the '251 patent made remarks about the meaning of the claim term “media player”:

In the context of the present application, it is clear that a

“media player” refers to application software for playing back the video content.¹ Thus, the claims and specification refer in some cases, for example, to “loading” or “unloading” a media player. A particular display device, therefore, may, in some cases, be able to load or store any one of different media players.

Ex. 1104, 190 n.2 (internal citations omitted).

After a subsequent rejection (*id.*, 217), the ’251 patent claims were allowed with an examiner’s amendment. *See id.*, 271–287. That amendment added, in part, a requirement to claim 1 that the recited “display device” “loads any one of plurality of different media [] players,” and that the “media player” recited in the body of the claim be a “particular media player.” *Id.*, 276–77 (underlining in original).

¹ Then-pending claims in what became the ’251 patent recited “specifying a video file” and “playing of the video content.” Ex. 1104, 209–15.

III. PETITIONER'S GROUNDS AND CITED REFERENCES

Petitioner asserts through three (3) grounds that the challenged claims would have been obvious over Danciu² and Mahajan³ (Ground A); Danciu, Mahajan, and Calvert⁴ (Ground B); or Aldrey⁵ and Mahajan (Ground C). Pet., 16–17.

A. Danciu

Danciu (Ex. 1112) is U.S. Patent, No. 9,490,998, filed March 7, 2011, that purports to claim priority to U.S. Provisional Application 61/411,386, filed November 8, 2010. Danciu is assigned on its face to Google Inc. During trial in *Touchstream Techs. Inc. v. Google, LLC*, Google presented testimony that Danciu spawned from, and describes, Google's YouTube Remote and YouTube Leanback products. Ex. 2022, at 43–44, Dkt. 262, Transcript of Proceedings on Jul. 19, 2023, at 975:6-15.

Danciu discloses a remote control 14 (blue) that is external to the servers 24A–24N (green), which receive messages including a remote control identifier and

² U.S. Patent No. 9,490,998 to Danciu (Ex. 1112).

³ U.S. Published Application, No. 2009/0248802 to Mahajan (Ex. 1114).

⁴ U.S. Published Application, No. 2004/0078812 to Calvert (Ex. 1111).

⁵ U.S. Published Application, No. 2009/0172757 to Aldrey (Ex. 1115).

control information, and sends a message to a single controlled device 18 (red) to control its operation. Ex. 1112, 1:39–50, 4:58–67, Figs. 1, 6; *see also* Ex.2025 ¶ 33.

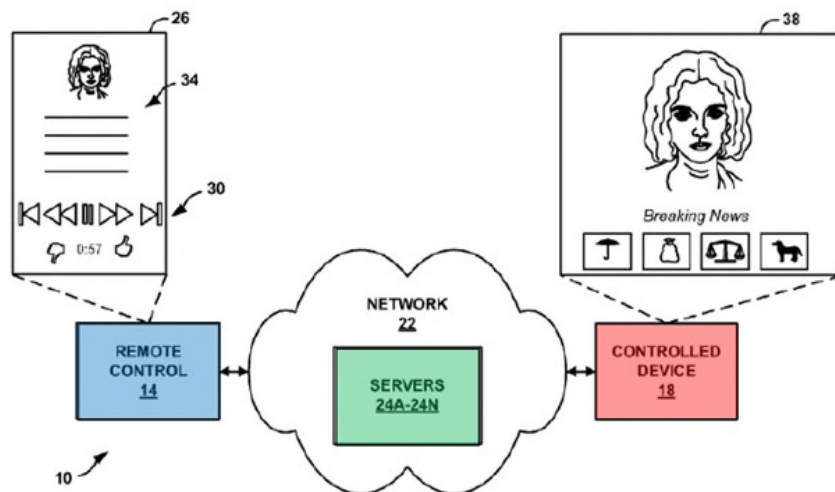


FIG. 1

Ex. 1112, Fig. 1 (annotated by Petitioner)

B. Mahajan

The Mahajan reference is a U.S. Published Patent Application describing systems and methods for managing multimedia operations in remote sessions. Ex.1114. It envisions a client and a server, each with an “RTS Media Abstraction Module.” Ex. 1114, [0025]; *see also* Ex.2025 ¶¶ 29–32.

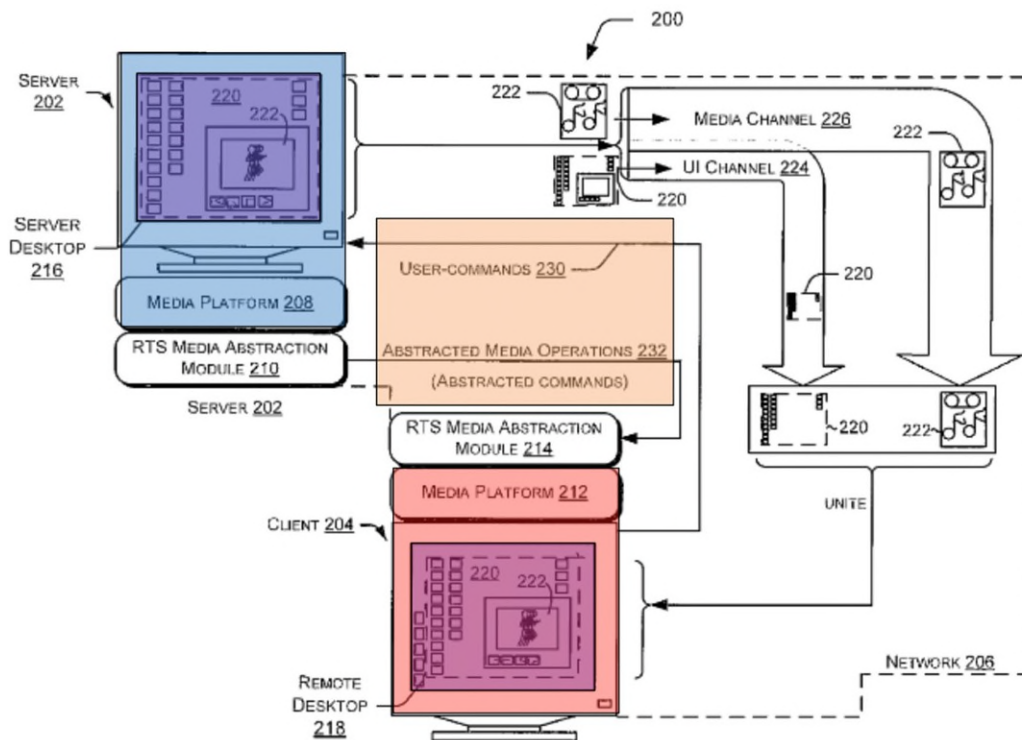


Fig. 2

Ex. 1114, Fig. 2 (annotated by Petitioner)

Mahajan teaches a “client-server collaboration session” wherein a client can use aspects of the server remotely. For example, the client uses the server’s graphical user interface (220), which is rendered within the client’s graphical user interface (shown in “remote desktop 218”). See Ex. 1114, [0011], [0025]–[0026], Fig. 2. The client 204 can also display media (shown in “media component 222”) from the server 202. *E.g., id.*, [0026]. Because the client and the server may use different “media platforms,” Mahajan describes a protocol for translating commands specific to the server platform into commands specific to the client platform. See *id.*, [0035]–[0042], Fig. 3; see also Ex.2025 ¶¶ 29–32.

Using this protocol, the user, operating client 204, first sends platform-specific commands for the server's platform from the client to the server. *See id.*, [0035]; *see also id.*, [0037] (“[T]he server’s [remote terminal session (RTS)] media abstraction module 210 can receive media commands that are specific to the server’s media platform.”), Fig. 3. The server, using this RTS module, then translates the platform-specific commands to “generic or abstract” commands.” *See id.*, [0038]. The server then sends these commands to the client, which re-translates them into commands specific to the client’s media platform. *See id.*; *see also* Ex.2025 ¶¶ 30–32.

As described by Petitioner, Mahajan employs a five-step process to translate and re-translate commands within Mahajan’s “client-server collaboration session wherein a user may enter commands (**orange**) on Mahajan’s server (**blue**) for controlling content (**purple**) that is playing on a client device (**red**).” Pet., 28–29; *see also* Ex.2025 ¶ 32.

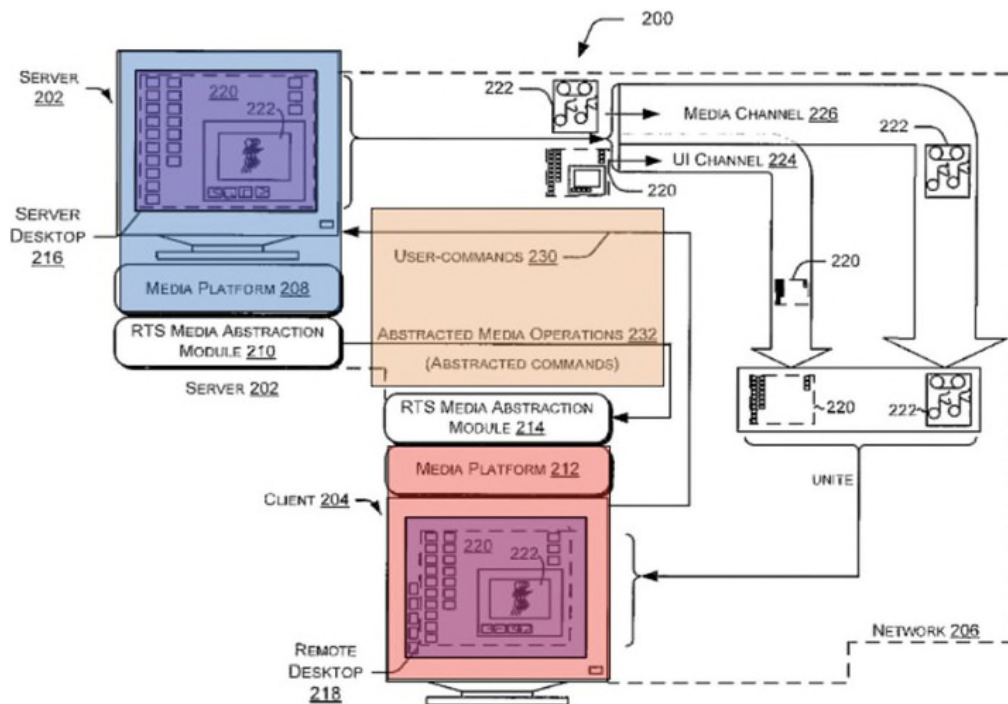
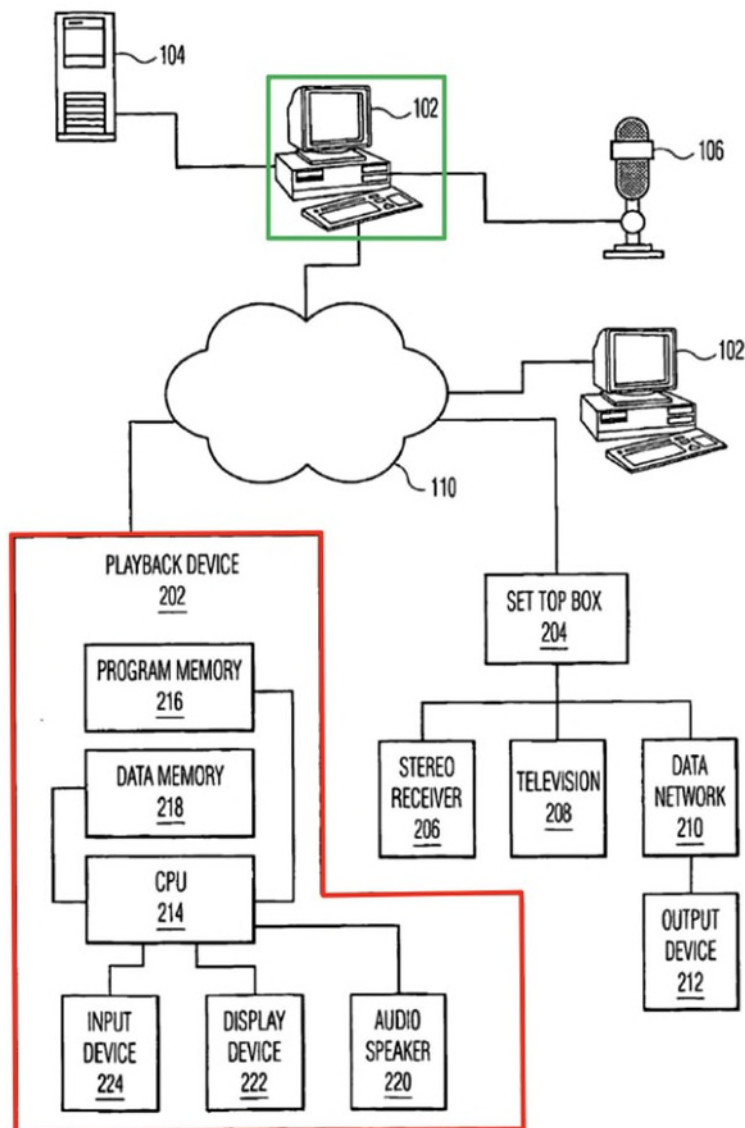


Fig. 2

Ex.1114, Fig. 2 (annotated by Petitioner)

C. Calvert

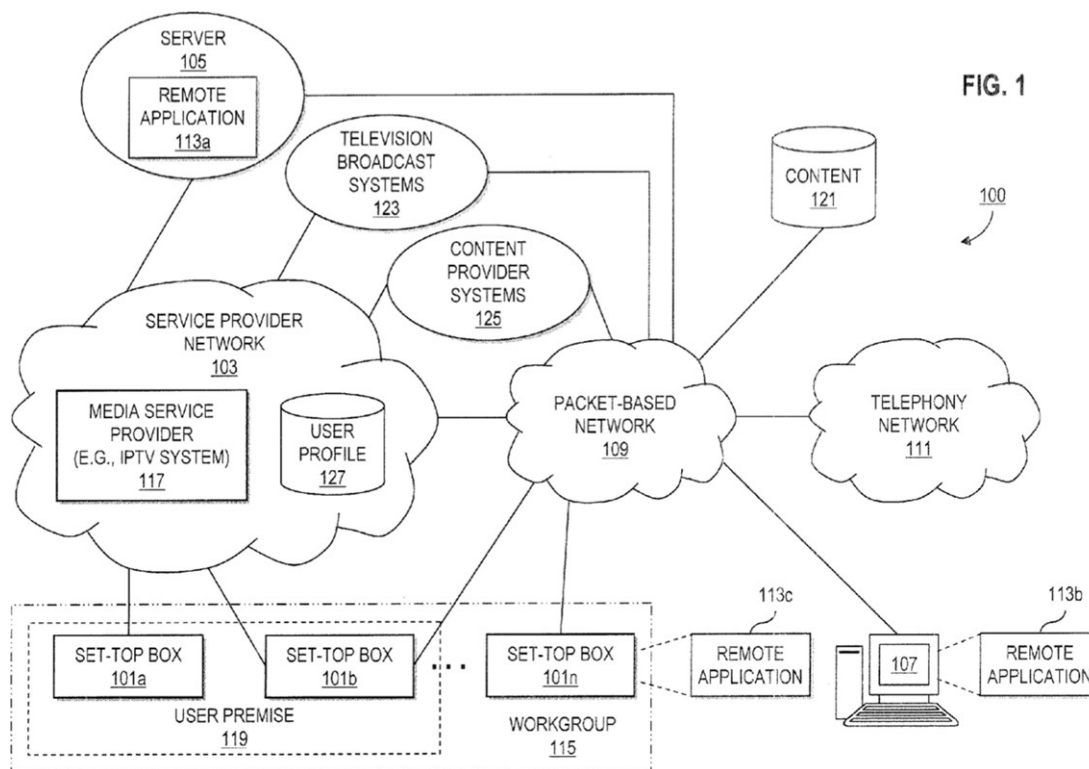
The Calvert reference is a U.S. Patent application disclosing a method and apparatus for acquiring media services available from content aggregators. *See generally* Ex. 1111; *see also* Ex.2025 ¶ 35. It describes media players embedded in “document object model” structure and requested from aggregators (including codecs), wherein the embedded data structure comprises media service menus, locations, and types of media. *Id.*; Ex. 1111, [0031]. No remote control is discussed, except in the unrelated context of a traditional television remote. [0064].



Ex 1111, Fig. 2 (annotated by Petitioner)

D. Aldrey

The Aldrey reference is a U.S. Patent Application that teaches a method and apparatus for remote set top box management. Ex. 1114; *see also* Ex.2025 ¶ 34. It envisions a remote application by which a user may adjust configuration settings on their set top box.



Ex. 1114, Fig. 1.

For instance, a user may adjust parental controls or available channel information:

“remote application 209 may generate one or more control commands, transmit those commands to STBs 101a-101n, wherein the devices may be configured according to the commands. As such, the children will be able to immediately experience the VOD program instead of having to wait until their parent arrives home from work to manipulate one or more STBs to acquire the media content.”

Ex. 1114, [0082]. Aldrey describes various other manipulatable settings, such as available channel information, favorite channels, program recording settings, viewing history, or software loaded in the STB. Ex. 1114, [0020].

IV. LEVEL OF ORDINARY SKILL IN THE ART

As Dr. Wicker explains, a person of ordinary skill in the art of the '251 Patent (also referred to herein as an ordinary artisan) would have had (1) the equivalent of a four-year, B.S. degree from an accredited institution in computer science, computer engineering or an equivalent field; (2) approximately two years of professional experience with Internet-based video delivery systems; and (3) working proficiency with network architecture, including Internet-hosted server-client systems, and with computer programming. Ex.2025 § V; *see also id.* ¶¶ 5–10 (Dr. Wicker summarizing his qualifications in the relevant field).

V. CLAIM CONSTRUCTION OF “MEDIA PLAYER”

The Patent Trial and Appeal Board has already interpreted the term “Media player” in adjudicating IPR2022-00795, which related to the same patent. *See Google LLC v. Touchstream Techs., Inc.*, IPR 2022-00795, Paper 35 at 12–13. In that decision, the Board used “Media player” to “refer[] to software and not to a hardware device, and [] appl[ied] this interpretation in [the Board’s] patentability analysis.” *Id.* at 13. Furthermore, in *Touchstream Technologies, Inc. v. Charter Communications, Inc.* (in which the '251 patent is one of the patents-in-suit), the district court construed “media player” to mean “software for playing media.” Ex.2024 at 9. Construing “media player” to mean “software for playing media” would therefore be consistent with the district court’s construction as well. Although

“the [B]oard is not generally bound by a prior judicial construction of a claim term,” *In re Trans Tex. Holdings Corp.*, 498 F.3d 1290, 1298 (Fed. Cir. 2007), a district court’s construction of a claim term should be considered. *See Power Integrations, Inc. v. Lee*, 797 F.3d 1318, 1326 (Fed. Cir. 2015).

VI. LEGAL STANDARDS

Petitioner bears the burden of proving unpatentability by a preponderance of the evidence, and that burden never shifts to Patent Owner. *See In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1375 (Fed. Cir. 2016) (citing 35 U.S.C. § 316(e), *Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015)). Where (as here) a petitioner asserts obviousness, it must prove that “the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.” 35 U.S.C. § 103(a) (2012). This showing requires evidence of (among other facts) “the scope and content of the prior art” and “the differences between the claimed invention and the prior art.” *E.g., Eisai Co. Ltd. v. Dr. Reddy’s Labs., Ltd.*, 533 F.3d 1353, 1356 (Fed. Cir. 2008) (quoting *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966)).

The Board, in its analysis “should be aware . . . of the distortion caused by hindsight bias and must be cautious of arguments reliant upon ex post reasoning.”

KSR Int’l Co. v. Teleflex, Inc., 550 U.S. 398, 421 (2007). “Although the *KSR* test is flexible, the Board ‘must still be careful not to allow hindsight reconstruction of references . . . without any explanation as to *how* or *why* the references would be combined to produce the claimed invention.’” *TriVascular, Inc. v. Samuels*, 812 F.3d 1056, 1066 (Fed. Cir. 2016) (quoting *Kinetic Concepts, Inc. v. Smith & Nephew, Inc.*, 688 F.3d 1342, 1368 (Fed. Cir. 2012)). “Without any explanation as to how or why the references would be combined to arrive at the claimed invention, we are left with only hindsight bias that *KSR* warns against.” *Metalcraft of Mayville, Inc. v. Toro Co.*, 848 F.3d 1358, 1367 (Fed. Cir. 2017).

VII. GROUNDS A–C ALL FAIL AGAINST CLAIMS 1–21 BECAUSE PETITIONER RELIES ON MAHAJAN IN ALL THREE GROUNDS FOR LIMITATIONS IT NEITHER DISCLOSES NOR RENDERS OBVIOUS

Petitioner fails to establish obviousness of claims 1–21 for multiple independent reasons. First, Petitioner relies on Mahajan for all limitations relating to the *converting* step recited by independent claims 1 and 11. Mahajan does not disclose those limitations, and Petitioner fails to show how or why an ordinary artisan would have combined Mahajan with Petitioner’s other cited references to achieve the conversion required. Petitioner’s challenge therefore fails as to independent claims 1 and 11, as well as the dependent claims based on them.

Further, these deficiencies apply equally to independent claim 11, which requires “one or more non-transitory computer-readable media storing instructions

that when executed by the server system, cause the server system to perform operations including *converting the universal playback control command into corresponding programming code.*” Ex. 1101, 12:50-60.

The insufficiency of Mahajan infects each Ground. Ground A fails because Mahajan does not teach “converting, by the server system, the universal playback control command into corresponding programming code to control playing of the video content of the display device by the particular media player” or the “storing” of information including the “programming code.” Danciu is not combined with Mahajan to remedy any of Mahjan’s deficiencies in Ground A.

Ground B fails for the same reasons; Calvert is only added for purportedly receiving signals “specifying a video file,” for “identifying a particular media player,” and for including a “universal playback control command.” Pet., 34–38. Petitioner does not contend that Calvert remedies the deficiencies of Mahajan.

Ground C fails for similar reasons: Mahajan fails on the same limitations it did in Grounds A and B, and Aldrey does not remedy these deficiencies.

A. Mahajan Does Not Disclose the Step of *Converting, by the Server System, the Universal Playback Control Command into Corresponding Programming Code*, Required by All of Claims 1–21

Mahajan does not disclose the limitations associated with the *converting* step of independent claims 1 and 11 (and their dependent claims). See Ex.2025 ¶¶ 43–47. In arguing otherwise, Petitioner fails to account for the substantial differences

between Mahajan’s architecture and the architecture required by claims 1–21 of the ’251 patent.

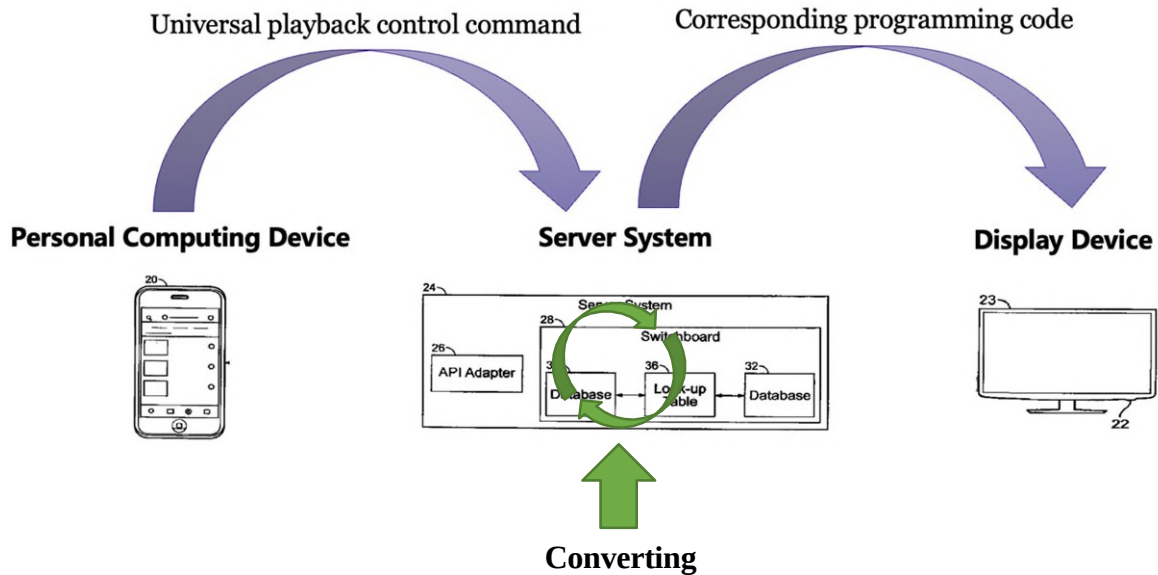
The *converting* step of claim 1 recites:

converting, by the server system, the universal playback control command into corresponding programming code to control playing of the video content on the display device by the particular media player, wherein converting the universal playback control command includes selecting from among a plurality of specific commands, each of which represents a corresponding playback control command for a respective media player [. . .]

Ex. 1101, 11:43–51. Claim 11 similarly recites “one or more non-transitory computer-readable media storing instructions that when executed by the server system, cause the server system to perform operations including *converting the universal playback control command into corresponding programming code*.” Ex. 1101, 12:50–60.

Both claims also require the *universal playback control command* be included in *one or more signals* received in the *server system*, from the *personal computing device*. *Id.*, 11:35–42, 12:42–49. That *personal computing device* must be “separate from the server system and separate from the display device.” *Id.*, 11:28–30, 12:38–40. The *programming code* is then stored in a database for transmission to or

retrieval by the *display device*. *Id.*, 11:52–60, 12:61–63. The flow chart below conceptually represents this process:



In contrast with the claims, Mahajan describes a two-part server-client architecture where the relevant conversion is done not by the server *but by the client*. Ex.2025 ¶ 49. In Mahajan’s architecture, the server (202) and the client (204) each have an RTS (Remote Terminal Session) media abstraction module (210, 214). *Id.*; Ex. 1114, [0037], Figs. 2, 3.

Ex. 1114, Fig. 2 (annotated)

abstraction modules work together to create a “collaboration media abstraction layer 130” that “can abstract or genericize media playback commands specific to [the server’s] media platform 122.” *Id.*, [0022]; *see id.*, Fig. 1.

Referring to Mahajan’s Figure 3 (as annotated below), the user-commands (306A–I, **red**) for the server’s media platform are genericized by the server’s RTS media abstraction module (210, **orange**) using RTS mapping table 302. *See* Ex.2025 ¶¶ 49–51. The corresponding generic commands (308A–I, 310A–I, **grey**) are sent to the client’s RTS media abstraction module (214, **blue**), which then converts the generic commands into platform-specific media commands (312A–I, **green**) for the client’s media platform:



Fig. 3

Ex. 1114, Fig. 3 (annotations added)

Given this operation of Mahajan’s architecture, Petitioner fails to show that Mahajan teaches or suggests the *converting* step required by the independent claims. First, Mahajan does not teach or suggest *converting* by the claimed component—*i.e.*,

converting a universal playback control command into corresponding programming code by the server system. See Ex.2025 ¶¶ 49–51. Second, Mahajan does not teach or suggest any conversion that *includes selecting from among a plurality of specific commands, each of which represents a corresponding playback control command for a respective media player.* See Ex.2025 ¶¶ 52–55. Third, Mahajan teaches that the generic commands alleged to be *universal playback control commands* are sent by the server to the client but fails to teach or suggest that the generic commands are ever *received* by a *server system*, as the claim recites. See Ex.2025, ¶¶ 44–47.

1. Mahajan does not teach converting, by the server system, the universal playback control command

The process identified by Petitioner as being the *converting* step is performed by Mahajan’s client, not by the server. Ex.2025 ¶¶ 49–51. Mahajan teaches that the RTS abstraction modules work together to translate commands specific to a first media platform into commands specific to a second specific platform, using generic commands as a kind of shared language. Ex. 1114, [0013]–[0014]. The server’s RTS abstraction module in Mahajan only converts specific commands into generic commands (alleged by Petitioner to be “universal commands”). *Id.*; *see also* [0063]. The only conversion of the alleged *universal commands* is performed by the *client’s* RTS abstraction module, not by the server. *Id.*

Petitioner acknowledges this aspect of Mahajan’s disclosure, which Petitioner describes as follows:

- 1) commands for a type of media playing application on the server are received at Mahajan’s server,
- 2) the commands are translated into a universal command,
- 3) the universal command is transmitted,
- 4) *the client* re-translates the universal command, and
- 5) the new specific command is executed.

Pet., 29 (citing Ex. 1114, [0035]–[0036], Figs. 1, 2) (italics added); *see also* Ex.2025 ¶¶ 29–32.

In this five-step process identified by Petitioner, Mahajan performs two separate translations. Even using Petitioner’s contentions, the first step translates ***to*** a “universal command,” so it does not result in the recited conversion to *programming code to control playing of the video content on the display device by the particular media player*. *See id.* Mahajan’s second translation, where it “re-translates the universal command,” is on the client, which corresponds to Petitioner’s alleged *display device*. *Id.* (citing Ex. 1102 ¶ 158); *see also id.*, 32 (arguing that in the combination with Danciu, the “controlled device” of Danciu—the alleged *display device*—would perform the second translation); Ex.2025 ¶¶ 48–49.

Likewise, Petitioner concedes that “[t]he RTS Media Abstraction module ***of the client*** (an API converter[]) ***converts the commands*** received by the client [] from the server [].” Pet., 40 (emphasis added) (citing Ex. 1114, [0037]–[0043], Figs. 3, 5). Petitioner thus concedes that Mahajan does not teach or suggest the alleged

converting is *by the server system* and relies solely on obviousness for this limitation of the *converting* step. *See id.*, 41 (asserting “it would have been obvious . . . that one or more RTS Media Abstraction Modules *could* operate at a server”) (emphasis added), 72 (same). But Petitioner fails to support this conclusory assertion of obviousness, as discussed below. *See infra*, § VII.B.

2. Mahajan does not teach or suggest *wherein converting the universal playback control command includes selecting from among a plurality of specific commands, each of which represents a corresponding playback control command for a respective media player*

No server in Mahajan’s system would have or use the *plurality of specific commands* of the claims for *converting the universal playback control command*, as the claims require. In particular, the *converting* of the claims produces *corresponding programming code to control playing of the video content on the display device by the particular media player*. And the *converting* must also include *selecting from among a plurality of specific commands, each of which represents a corresponding playback control command for a respective media player*.

Mahajan teaches, however, that the disclosed use of RTS abstraction modules means that neither the server nor the client needs to have information about the media platform(s) of the other. *See* Ex. 1114, [0042]. Rather, the generic commands in Mahajan’s system serve as a kind of shared language, which the server and the client each “know” based on the mappings maintained in their respective RTS

mapping tables (302, 304). *See id.*, [0038]. The server's table translates **to** the generic commands, and the client's table translates **from** the generic commands. *Id.*, [0038], [0042]. As a result, "the server RTS mapping table 302 may not need to take into account all the possible media platforms that can be employed on the client 204," and "[t]he same can be said of the client's media table 212." *Id.*, [0042]. Mahajan teaches that this approach provides simplicity. *Id.*; *see also* Ex.2025 ¶¶ 52–54.

In asserting this limitation is met, Petitioner relies entirely on Mahajan's disclosure that certain "commands 'may be specific to events associated with the playback of media files' such as 'when a media file is accessed for playback by one or more users at the client.'" Pet., 41 (quoting Ex. 1114, [0037]). This cited disclosure is irrelevant to the limitation requiring that "converting the universal playback control command includes selecting from among a plurality of specific commands." Ex. 1101, 11:46–49. The "commands" described in the cited paragraph of Mahajan are "the commands received by the server's RTS media abstraction module 210[.]" Ex. 1114, [0037]. Mahajan states in the preceding sentence that the commands received by the server's RTS media abstraction module are "media commands that are ***specific to the server's media platform*** 208." *Id.* (emphasis added). These commands are not (and are not alleged to be) universal control commands that are *converted*, as required by the claim.

Petitioner also fails to establish the relevance of this disclosure with its argument that “[m]essages containing the commands . . . are thus ‘selecting from among a plurality of specific commands, each of which represents a corresponding playback control command for a respective media player.’” Pet., 41–42 (citing Ex. 1102 ¶ 183). The claim language requires that *selecting from among a plurality of specific commands* be included in the step of *converting the universal playback control commands*. Ex. 1101, 11:46–49. A message is not a *conversion*, and there is no evidence or argument showing how the “[m]essages containing [] commands” relate to the alleged *converting* process. See Pet., 41–42; Ex. 1102 ¶ 183.

Petitioner therefore fails to show that Mahajan teaches or suggests the limitation of the “wherein” clause from the *converting* step.

3. Mahajan does not teach converting . . . the universal playback control command

Mahajan also does not teach or suggest that the alleged *universal playback control command* being *converted* is one that was included in *one or more signals received, in the server system, from the personal computing device*, as required by the claim. Ex.2025 ¶¶ 48–52.

Instead, Mahajan teaches that its server generates a generic command (the alleged *universal command*) by translating a platform specific command received from the client. See Ex. 1114, [0035]–[0037]; Pet., 29. Petitioner fails even to argue that Mahajan teaches or suggests a *universal playback control command* being

received by an alleged *server system* from a *personal computing device*. Without teaching or suggesting such a *universal command*, Mahajan also cannot disclose *converting* it, as claimed.

Nor is Petitioner’s argument that Mahajan teaches “translating between universal commands and platform specific commands that can be understood by the client’s media platform” persuasive. Pet., 29; *see also* Ex.2025 ¶¶ 48–52. The claims require that a *universal playback control command* is received *in the server system, from the personal computing device*, and that the same *universal playback control command* is *converted by the server system*. Ex. 1101, 11:35–45. As such, mere “understanding” by the client’s media platform is not the same as receiving a universal playback control command in the server system, from the personal computing device, and further converting the universal playback control command by the server system. Petitioner’s arguments fail.

Thus, because Mahajan fails to teach or suggest the claimed method step of *converting ... the universal control command*, Petitioner has not shown that its asserted combinations including Mahajan render the claims obvious.

B. A POSITA Would Not Have Been Motivated to Combine Mahajan with the Other Asserted Art

Petitioner fails to show that the claimed invention would have been obvious over Grounds A, B, or C, as all three grounds rely on Mahajan’s teachings alone for

the *converting* step of claim 1. *See* Pet., 39–42, 69–72. As shown in § VII.A above, Mahajan does not disclose key limitations associated with the *converting* step.

Petitioner also fails to show that an ordinary artisan had a reason to combine Mahajan with the other asserted art in such a way that it would have satisfied these missing limitations. Ex.2025 ¶¶ 36–42. “A reason for combining disparate prior art references is a critical component of an obviousness analysis; ‘this analysis should be made explicit.’” *InTouch Techs., Inc. v. VGo Commc’ns, Inc.*, 751 F.3d 1327, 1351 (Fed. Cir. 2014) (quoting *KSR Int’l Co. v. Teleflex, Inc.*, 550 U.S. 398, 418 (2007)). The Petition lacks this critical motivation to combine analysis because it “fails to explain why a person of ordinary skill in the art would have combined elements from specific references *in the way the claimed invention does.*” *ActiveVideo Networks, Inc. v. Verizon Commc’ns, Inc.*, 694 F.3d 1312, 1328 (Fed. Cir. 2012) (emphasis in original) (citing *KSR*, 550 U.S. at 418).

Moreover, as Dr. Wicker states, an ordinary artisan skilled in the art would not have combined Danciu with Mahajan or Danciu with Mahajan and Calvert because Mahajan is not related to remotely controlling a display device, nor does its specification teach or suggest using the disclosure in such a manner. *See* Ex.2025 ¶ 37. Accordingly, no person with ordinary skill in the art would have looked to Mahajan when seeking to convert control commands in light of Danciu. *Id.*

The Board previously reached a similar conclusion. In its October 9, 2024 Decision Granting Patent Owner’s Request on Rehearing of Decision Granting Institution of *Inter Partes Review* of a related patent, the Board noted that Petitioner’s proposed combination of Danciu and Mahajan does not clearly teach or suggest that the server system performs conversion of commands sent from a personal computing device on the basis that Mahajan’s disclosed translation of “generic commands” into “platform specific media playback commands” occurs at the controlled device. *Comcast Cable Communc’ns, LLC v. Touchstream Techs., Inc.*, IPR2024-00324 IPR, Paper 19 at 12–13 (PTAB Oct. 9, 2024); Ex. 1114, [0013]–[0014].

For at least these additional reasons, Petitioner fails to establish obviousness.

1. Petitioner fails to show the *converting* step would have been obvious over the combination of Mahajan with Danciu (with or without Calvert)

Petitioner fails to show that the limitations of the *converting* step would have been obvious over the combinations of Danciu and Mahajan or Danciu, Mahajan, and Calvert. Ex.2025 ¶ 36–42. Petitioner does not contend that either Danciu or Calvert discloses any of the limitations of the *converting* step that are absent from Mahajan. *See* Pet., 39–42. Further, because Mahajan does not disclose all the limitations of that step, any asserted combination with Mahajan is deficient, and Petitioner had failed to show obviousness. *See supra*, § VII.A; Ex.2025 ¶ 56.

Despite each Ground lacking the *converting* step, even in combination, Petitioner argues that the claims are obvious.⁶ *See id.* But Petitioner fails to explain how or why an ordinary artisan would have been motivated to combine Danciu with either Mahajan or Calvert in a manner that would have resulted in the claimed invention. Ex.2025 ¶¶ 40–42. Without such an explanation, Petitioner’s argument rests on nothing but hindsight. *See Metalcraft of Mayville*, 848 F.3d at 1367.

First, Petitioner fails to address critical deficiencies in Mahajan when it argues, “it would have been obvious to a POSITA that one or more RTS Media Abstraction Modules could operate at a server, such as in Servers 24A-24N.” Pet., 41 (citing Ex. 1114 [0018], [0058], [0078]; Ex. 1102 ¶ 182). Mahajan already discloses that one of the two RTS media abstraction modules—the one identified as module 210—operates at Mahajan’s server. *See* Ex. 1114, [0036]–[0037], Figs. 2, 3. Importantly, however, the abstraction module on Mahajan’s server does not perform the claimed *converting*. *See supra*, § VII.B. Petitioner’s proposed combination merely substitutes one or more of Danciu’s servers 24A–24N for Mahajan’s server, without any insight on potential modifications. *See* Pet., 41–42; Ex.2025 ¶¶ 36–37. Petitioner

⁶ Petitioner does not contend that the further combination with Calvert affects obviousness as to the *converting* step. *See* Pet., 39–42 (no discussion of Calvert).

has therefore failed to show a proper combination that satisfies the limitations of the *converting* step.

Mahajan teaches that it is the other RTS media abstraction module (214)—the one that operates at the client, not the server—that can translate “generic media commands . . . into commands that are specific to the client’s media platform.” Ex. 1114, [0036]; *see also id.*, [0038], [0040]; Ex.2025 ¶¶ 45–46. Notably, Mahajan’s server RTS media abstraction module (210) does not need information about the client’s media platform to operate. *Id.*, [0042]. Mahajan teaches that the server’s module (210) generates the generic commands that Petitioner identifies as the *universal commands*. An RTS media abstraction module merely operating on one of Danciu’s servers, instead of Mahajan’s server, would still not *convert the universal playback control command into corresponding programming code to control playing of the video content on the display device by the particular media player*. Ex.2025 ¶¶ 45–47. There is also no evidence that the *converting* performed by the server’s RTS media abstraction module, operating on Danciu’s servers instead of Mahajan’s server, would *include selecting from among a plurality of specific commands, each of which represents a corresponding playback control command for a respective media player*. *Id.*

Second, Petitioner proposes contradictory theories for the combination of Mahajan with Danciu, rendering its entire obviousness theory incoherent. For

example, in the context of the *receiving* step (identified as limitation [1E]), Petitioner theorizes that none of the operations performed by Mahajan's RTS media abstraction modules are implemented at the alleged *server system*. See Pet., 32. Petitioner argues in that context that Danciu's remote control, the alleged *personal computing device*, would perform the disclosed operations of the server's abstraction module in Mahajan. See Pet., 32 ("Danciu's remote control would translate commands associated with a first type of media playing application to a generic format, [and] transmit them to the controlled device"). In the same sentence, Petitioner asserts that Danciu's controlled device, the alleged *display device*, would perform the operations of Mahajan's client abstraction module. See *id.* ("Danciu's remote control would . . . transmit [generic commands] to the controlled device, which would translate them to a command associated with a second type of media playing application for execution.").

Under this alternate theory, Mahajan's abstraction modules operate entirely on components other than Danciu's servers. See Pet., 32. That stands in direct contradiction of Petitioner's argument (in the context of the *converting* step) that "it would have been obvious to a POSITA that one or more RTS Media Abstraction Modules could operate at a server, such as in Servers 24A-24N." Pet., 41. It also eliminates any possibility that the alleged *converting* from Mahajan would be performed by Danciu's servers 24A-24N—the alleged *server system*. Any

conversion would be performed instead by Danciu’s other system components, *i.e.*, the “remote control” and the “controlled device.” Thus, regardless which theory Petitioner applies, the resulting combination does not satisfy the *converting* step.

Third, the Petition merely asserts that “it would have been obvious to a POSITA that one or more RTS Media Abstraction Modules *could* operate at a server, such as in Servers 24A-24N.” Pet., 41 (citing Ex. 1114, [0018], [0058], [0078]; Ex. 1102 ¶ 182) (emphasis added). But whether it would have been obvious that these modules *could* operate at a server fails to set forth any prima facie case that a POSITA *would* have been motivated to make such a modification. This evidence is insufficient to prove obviousness. *Personal Web Techs., LLC v. Apple, Inc.*, 848 F.3d 987, 994 (Fed. Cir. 2017) (arguing that references “could” be combined “does not imply a motivation to pick [the references] and combine them to arrive at the claimed invention.”); *Belden Inc. v. Berk-Tek LLC*, 805 F.3d 1064, 1074 (Fed. Cir. 2015) (“Obviousness concerns whether a skilled artisan not only could have made but would have been motivated to make the combinations or modifications of prior art to arrive at the claimed inventions.”); *William Wesley Carnes, Sr., Inc. v. Seaboard Int’l, Inc.*, IPR2019-00133, Paper 10 (PTAB May 8, 2019), at 18 (“asserting that a POSITA ‘could’ have combined the references to reach the claimed invention [is] insufficient for obviousness”). Petitioner’s suggestion that certain operations “could” be performed on the server does nothing to establish that a

POSITA “would” have performed such operations on the server based on any motivation. Petitioner, therefore, fails to state a prima facie case of obviousness for this additional reason.

Fourth, Mahajan’s express teachings provide reasons not to perform the claimed *converting* at the server. Indeed, doing so would have been contrary to Mahajan’s principle of operation. Specifically, Mahajan teaches that by having the RTS Abstraction Module on the client perform the translation identified for the *converting* step, the server “may not need to take into account all the possible media platforms that can be employed on the client 204.” Ex. 1114, [0042]. And Mahajan further teaches that this approach provides advantageous simplicity to its system. *Id.* This simplicity would be entirely defeated by Petitioner’s proposed modification, which demonstrates Mahajan teaches away from such a modification and this modification would be contrary to Mahajan’s principle of operation.

For at least these reasons, therefore, Petitioner fails to show obviousness under Grounds A and B as to claims 1–21.

2. Petitioner fails to show the *converting* step would have been obvious over the combination of Mahajan with Aldrey

As with the Danciu-based Grounds, Petitioner fails to show how or why an ordinary artisan would have combined or been motivated to combine Mahajan with Aldrey in order to achieve the claimed invention. Petitioner again relies entirely on Mahajan for limitations of the *converting* step that Mahajan does not disclose. Pet.,

69–72; *see supra* § VII.A. Petitioner does not rely on Aldrey for these limitations at all. Pet., 69–72.

Petitioner’s rationale for the proposed Aldrey-Mahajan combination is virtually identical to the insufficient rationale provided for the other two grounds. *Compare* Pet., 69–72 *with id.*, 39–42. Petitioner suggests that “Mahajan’s RTS Media Abstraction Modules could operate at a server, such as Aldrey’s Service Provider Network 103.” *Id.*, 72. But Petitioner again fails to argue that this implementation would result in any modification to the modules, so its Ground 3 theories are deficient as to the *converting* step’s limitations.

Petitioner also fails to address the “wherein” clause of the *converting* step anywhere in its discussion of the Aldrey-Mahajan ground. *See id.*, 69–72. In this way, the Petition is even more deficient in its showing for Ground C than it is for Grounds A and B.

Further, Petitioner’s contention that a POSITA “could” make this modification fails to set forth a *prima facie* case that a POSITA “would” have made such a modification based on any motivation to do so. This alone is fatal to Petitioner’s proposed combination for the same reasons discussed above. *See* § VII.B.2, *supra*; *Personal Web Techs., LLC v. Apple, Inc.*, 848 F.3d 987, 993–94 (“But that reasoning seems to say no more than that a skilled artisan . . . would have understood that they *could be* combined. And that is not enough: it does not imply a

motivation to pick out those two references and combine them to arrive at the claimed invention.”); *Belden Inc. v. Berk-Tek LLC*, 805 F.3d 1064, 1073 (Fed. Cir. 2015) (“[O]bviousness concerns whether a skilled artisan not only could have made but would have been motivated to make the combinations or modifications of prior art to arrive at the claimed invention.”); *William Wesley Carnes, Sr.*, IPR2019-00133, Paper 10 at 18.

Finally, Mahajan’s express teachings provide reasons not to relocate the alleged *converting* from the client to the server because it is contrary to Mahajan’s principle of operation and would defeat Mahajan’s preferred simplicity, as discussed above. See § VII.B.1; Ex.2025 ¶ 45, 46.

For at least these reasons, Petitioner therefore fails to show obviousness under Ground C as to claims 1–21.

VIII. GROUNDS A–C ALL FAIL AGAINST CLAIMS 22–26 WOULD NOT HAVE BEEN OBVIOUS OVER THE ASSERTED REFERENCES

Claims 22–26 would not have been obvious over the asserted combinations of Danciu, Mahajan, Aldrey, and/or Calvert. Petitioner’s analysis of Claim 22 largely relies on its assertions regarding Claim 1 without analyzing the different and specific requirements of Claim 22. For example, Claim 22 requires the more narrow “*retrieving*” of information by a *display device* instead of claim 1’s *storing* information *for transmittal to or retrieval by the display device*. The Petition does not address this difference, and that failure is dispositive.

Moreover, with respect to the “retrieving” limitation of Claim 22, Petitioner inexplicably refers back to arguments about Claim 1’s step reciting the *server system* receiving signals *from the personal computing device*. Pet., 83–84; Ex.2025 ¶ 63. Petitioner’s cross-referenced discussion of Claim 1 fails to address the specific information that must be *retrieved* by the *display device* in Claim 22, including “information [] that indicates corresponding programming code.” *Id.* Instead, the cited sections of Claim 1 deal with the “signals [from the personal computing device] specifying a video file to be acted upon[,] identifying a particular media player[, and] including a universal playback control command.” Ex.2025 ¶¶ 64, 65. Those sections do not mention the *programming code* limitation of claim 1. Petitioner fails to reconcile these differences and thus provides no analysis applying Danciu, Mahajan, Aldrey, and/or Calvert to every limitation of Claim 22.

Further, as shown below, the proposed combination of Danciu and Mahajan, with or without Calvert, do not teach the messages *identifying a media player* required by Claim 22. Likewise shown below, the proposed Aldrey-Mahajan combination does not teach Claim 22’s recited steps of “*obtaining*” and “*loading*” of a “first media player,” let alone doing the same for a second media player. Claims 23–26 incorporate the limitations of Claim 22 by their dependency. Accordingly, Petitioner fails to show any of Claims 22–26 would have been obvious.

A. Danciu and Mahajan, With or Without Calvert, Do Not Render Obvious Claim 22

The Danciu-Mahajan combination, with or without Calvert, does not render obvious claim 22 for at least three reasons.

First, as noted above, a POSITA would not have been motivated to combine the Danciu and Mahajan references to achieve the claimed invention. *See supra*, § VII.B; Ex.2025 ¶¶ 40–42.

Second, claim 22 has more specific requirements than claim 1 for how information gets from the server system to the display device. Claim 1 only requires that information be stored “for transmission to or retrieval by the display device.” Ex. 1101, 11:52–54. Claim 22, however, requires “*retrieving*, by the display device from a server system, first information.” Ex. 1101, 14:5–6. Thus claim 22 imposes a requirement of the display device taking an active step to retrieve the information from the server, as opposed to the server initiating the communication. Ex.2025 ¶ 62. Petitioner ignores this requirement, and the Danciu-Mahajan combination, with or without Calvert, do not teach such an active step on the part of the display device. Pet., 83–84; Ex.2025 ¶ 63–65; Lett Tr. 43:22–45:17.

Third, the Danciu-Mahajan combination, with or without Calvert, does not teach “retrieving ... first information that ... identifies a first media player.” Ex. 1101, 14:5–15. Danciu only envisions control of a single media player at a time. Ex.2025 ¶ 74, 77. As the Board noted in its institution decision, Danciu

contemplates operation of YouTube, Hulu, and Netflix media players. Paper 13, at 24. Critically, however, Danciu does not contemplate swapping between media players using remote messages identifying particular media players. Ex.2025 ¶ 74.

Claim 22 requires that the retrieved identification of the first and second media players was received by the *server system* from the *personal computing device*. Ex. 1101, 14:5–15; Ex.2025 ¶¶ 67–69. The alleged *personal computing device* of Danciu makes no such identifications. Ex.2025 ¶¶ 70–73. Instead, Danciu teaches that a user first loads an application like YouTube on their controlled device, then initiates a remote control session from the controlled device *in that application*. Ex.2025 ¶ 74. At this point, this session only works for the YouTube application. *Id.* To apply Danciu’s teachings to another media player, like Hulu, the user would need to open the Hulu application, using the interface of their TV, and initiate a Hulu remote control session. *Id.* In short, while Danciu contemplates it may work for a media player besides YouTube, it only contemplates the control of a single media player (*i.e.*, the one in the session) at any given time. *Id.* This is why Danciu does not contemplate command conversion, as discussed above, and also why it does not teach identification of media players in messages from a personal computing device through a server system. *See supra* §§ I, III.A; Ex.2025 ¶¶ 67–77.

Petitioner asserts that Danciu teaches identification of media players because it teaches control information that may be “associated with content being played on

controlled device.” Pet., 26–27. Ignoring that this completely negates the need for the server system to convert commands and thus contradicts Petitioner’s arguments regarding limitation 1G, this argument also fails because control commands are not media player identifications. Ex.2025 ¶¶ 72–73. Sending either a generic command or a specific command for a media player does not on its own identify a media player. *Id.* A generic command has no relationship to a particular media player. Ex.2025 ¶ 72. And a specific command, on its own, does not identify the media player it is to be used with. Ex.2025 ¶ 73. The ’251 Patent itself provides an example: the command “loadNewVideo,” without anything more, does not say that it will work with Vimeo but not with YouTube. Ex.2025 ¶ 73; see Ex.1101, Fig. 5. Thus Petitioner’s assertions regarding either of Danciu’s commands—universal or specific—do not teach the identifying of a media player in messages from a separate personal computing device.

Mahajan does not remedy the failures of Danciu in this regard. As a preliminary matter, Mahajan does not teach remote control of a display device. Ex.2025 ¶ 45. But further, Mahajan teaches the sending of genericized commands such that the client or server do not need to track what media player each network element is using. Ex.2025 ¶¶ 31–32, 45–47, 78. Petitioner asserts that Mahajan teaches identification of a media player because “signals containing the commands, which are particular to the media content playing on the type of media player of

Mahajan’s server, are thus ‘specifying a video file to be acted upon and identifying a particular media player for playing the video content.’” Pet., 28–31; Ex.2025 ¶ 78. But even if such a disclosure were sufficient to satisfy the identification of a media player limitation, this disclosure is not actually present in Mahajan and instead directly contradicts Mahajan’s teaching of sending genericized commands. Ex.2025 ¶ 79.

The assertion further confuses Petitioner’s arguments regarding what the display device of Mahjan is, which Petitioner inconsistently maps. At first Petitioner implies Mahajan’s display device is its *client*, positing that Mahajan teaches “controlling content (purple) that is playing *on a client device*” in part by its “*platform specific* media playback commands *that can be understood by the client’s media platform.*” Pet.28–29 (emphasis added). But Petitioner then identifies Mahjan’s media-player specific commands as those “particular to the media content playing on the type of media player of Mahajan’s *server.*” Pet.31 (emphasis added). Petitioner’s inconsistent mapping of the display device underscores the fundamental incompatibility of Mahjan’s teachings with the ’251 Patent—Mahajan teaches sending of generic commands, not messages or signals containing specific commands to identify a media player. Ex.2025 ¶ 79. Petitioner’s assertions regarding Mahajan-Danciu’s identification of media players are not supported by the references and thus fail to disclose this limitation. Ex.2025 ¶¶31–32, 45–51, 67–79.

Petitioner’s resort to a third reference is similarly unavailing. Pet., 34–38. As described above, a POSITA would not have been motivated to combine Danciu and Mahajan with Calvert. *See supra*, § VII.B; *see also* Ex.2025 ¶¶ 40–42. But moreover, Calvert does not envision remote control and therefore does not envision messages from a server system to a display device that “identifies a particular media player ... wherein the server system previously received, from the personal computing device, one or more signals ... identifying the first media player.” Ex. 1101, 14:5–15; Ex.2025 ¶¶ 35, 80–82. Even if a POSITA were motivated to combine Calvert in some way, which they would not have been, Calvert’s teachings would be the selection of a media player from the device playing the media.

Calvert ignores remote control messages altogether. Instead, the user interacts directly with the device playing the media through traditional user interfaces. Ex.2025 ¶ 81. Consequently, there is no need to send messages from the server system to the client device with “first information that specifies a first video file to be acted upon, that identifies a first media player for playing the first video file, and that indicates corresponding programming code to control playing of the first video file on the display device.” ’251 Patent 14:5-15; Ex.2025 ¶ 40, 81. Petitioner also ignores the *wherein* clause of Claim 22’s *retrieving* step: “retrieving, by the display device from a server system, first information ... *wherein* the server system previously received, *from the personal computing device*, one or more signals

specifying the first video file identifying the first media player and including the first playback control command” ’251 Patent 14:5-15; Ex.2025 ¶ 81. Calvert does not teach this limitation because it does not envision remote control, much less a three-part architecture. Ex.2025 ¶ 40, 82. As Danciu, Mahajan, and Calvert do not teach this limitation, Petitioner has failed to carry its burden to show these references render obvious claim 22.

B. The Aldrey-Mahajan Combination Does Not Render Obvious Claim 22

Unlike claims 1–21, claim 22 further requires, among other things, “obtaining, by the display device, over the Internet the first media player for playing the first video file;” and “loading the first media player in the display device. Ex. 1101, 13:48–14:20. The Aldrey-Mahajan combination does not teach this additional limitation not present in claims 1–21 because neither reference envisions the programmatic obtaining and loading of media players, and certainly not the obtaining and loading of “*the* first media player.” Ex. 1101, 14:16–17; *see also* Ex.2025 ¶¶ 83, 88. Claim 22 requires more than the general idea of obtaining and loading a media player at some point in time: *the* first media player is part of the first information retrieved by the display device from the server system wherein the server system previously received an identification of the media player from the personal computing device. Ex.2025 ¶ 89. Moreover, a POSITA would not have been motivated to combine these references, as discussed above in VII.B.2.

Aldrey does not envision any programmatic obtaining or loading of media players. Ex.2025 ¶ 83. Petitioner attempts to conjure such functionality in Aldrey by pointing to the “remote application” of Aldrey. Pet., 84. But the remote application of Aldrey is central to its remote configuration methods and not to the obtaining or loading of a media player. Ex.2025 ¶¶ 84–86. Instead, Aldrey’s remote application is a user interface by which a user can adjust configurations for an STB remotely. Ex.2025 ¶ 85. Instances of the remote application running on an STB allow a user to configure the STB or other STBs, such as by updating user profile information or authenticating an account. *Id.* The remote application is also described as transmitting control commands to other parts of the STB or to other STBs to control media. *Id.* Petitioner’s expert, Mr. Lett, also asserts that a POSITA would have known at the time that media players could be obtained and loaded, but that assertion is neither accurate nor supported by the disclosure of Aldrey. *See* Ex.1102, ¶ 360; Ex.2025 ¶¶ 89–90. A POSITA considering Aldrey at the relevant time would have understood Aldrey to teach an STB that operated with a media player that is preloaded.

Mahajan does not teach the obtaining and loading of media players requirements of claim 22 either. Ex.2025 ¶ 88. Mahajan envisions a client and server arrangement wherein the client device is the device displaying the media, and the server sends only generic commands to the client that do not correspond to a

particular media player, much less identify one. Without such information from the server, Mahajan cannot teach the obtaining and loading steps of claim 22. Ex.2025 ¶ 88. Petitioner asserts that because Mahajan teaches the display of a webpage it teaches the obtaining and loading of a media player. Pet., 56 (citing Ex. 1114, [0019]–[0020]). This assertion ignores that the most popular web media player of the time, flash player, was a pre-loaded media player plugin for a device that would have been obtained and loaded ahead of time. Ex.2025 ¶ 90. And Petitioner does not even attempt to address how this disclosure teaches the obtaining and loading of “the first media player” of the claims. Pet., 84.

Neither Aldrey nor Mahajan teach these limitations, and a POSITA would not have been motivated to combine them. See Ex.2025 ¶¶ 42, 83, 88.

IX. CONCLUSION

For at least the foregoing reasons, Patent Owner respectfully requests that the Board confirm patentability of claim 1–26 of the ’251 Patent.

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CERTIFICATE OF WORD COUNT

Pursuant to 37 C.F.R. § 42.24(d), the undersigned certifies that the foregoing PATENT OWNER'S RESPONSE PURSUANT TO 37 C.F.R § 42.120, according to the word processing system used to prepare the paper and not including those parts excluded by § 42.24(a)(1), has 10,555 words, which is within the type-volume limit set by § 42.24.

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CERTIFICATE OF SERVICE

Pursuant to 37 CFR § 42.6(e), the undersigned certifies that on November 1, 2024, complete and entire copies of the foregoing Patent Owner's Response Pursuant to 37 C.F.R. § 42.120 and Exhibit 2025 were provided via email to Petitioner's counsel of record as follows:

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