

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

COMCAST CABLE COMMUNICATIONS, LLC,
Petitioner,

v.

TOUCHSTREAM TECHNOLOGIES, INC.,
Patent Owner.

Patent No. 8,356,251

Filing Date: September 26, 2011

Issue Date: January 15, 2013

Title: PLAY CONTROL OF CONTENT ON A DISPLAY DEVICE

Inter Partes Review No.: IPR2024-00321

**PETITION FOR *INTER PARTES* REVIEW
UNDER 35 U.S.C. §§ 311-319 AND 37 C.F.R. § 42.100 *et seq.***

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Ex. 1006:	U.S. Pub. No. 2008/0235588 (“Gonze”)
Ex. 1007:	U.S. Pat. No. 8,327,403 (“Chilvers”)
Ex. 1008:	U.S. Pub. No. 2007/0155506 (“Malik”)
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Ex. 1020:	Joint Claim Construction Statement, <i>Touchstream Technologies, Inc. v. Google LLC</i> , 6:21-cv-00569-ADA (WDTX) (Feb. 8, 2022)
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- Ex. 1034: U.S. Pub. No. 2004/0098533 (“Henshaw”)
- Ex. 1035: U.S. Pub. No. 2004/0172656 (“Kim”)
- Ex. 1036: Reserved
- Ex. 1037: U.S. Pat. No. 7,343,419 (“Robinson”)
- Ex. 1038-40: Reserved
- Ex. 1041: CODING OF MOVING PICTURES AND AUDIO, *MPEG-4 Overview* (Int’l Org. Standardisation 2002)
- Ex. 1042: ROBERT GODWIN-JONES, DIGITAL VIDEO UPDATE: YOUTUBE, FLASH, HIGH-DEFINITION, 11 LANGUAGE LEARNING & TECH. 16, 17 (2007)
- Ex. 1043: John C. Paolillo et al., *A Network View of Social Media Platform History: Social Structure, Dynamics and Content on YouTube*, PROC. 52ND HAWAII INT’L CONF. ON SYS. SCIS., 1, (2019)
- Ex. 1044: *YouTube Opens Internet Video to Masses; Serving 3 Million Videos Daily and Growing, YouTube Unveils a Fast, Fun, and Easy Service for Consumers to Broadcast Original Video*, MARKET WIRE, Dec. 15, 2005
- Ex. 1045: *Hulu Debuts via Private Beta and on Distribution Partners AOL, Comcast, MSN, MySpace and Yahoo!; Company Announces Major Licensing Deals with Metro-Goldwyn-Mayer Studios Inc. and Sony Pictures Television; Providence Equity Partners Makes Strategic Investment in News Corporation/NBC Universal Online Video Joint Venture*, BUS. WIRE, Oct. 29, 2007
- Ex. 1046: *Blockbuster Offers Cheaper Online Rental*, ASSOCIATED PRESS, Jun. 13, 2007
- Ex. 1047: *Adobe Delivers Flash Player 9 With H.264 Video Support; HD Quality Web Video and Audio Now Available With Adobe Flash Player Update*, BUS. WIRE, Dec. 4, 2007

- Ex. 1048: *Microsoft Unveils Silverlight to Power the Next Generation of Media Experiences on the Web; Leading Media Companies and Solution Providers Announce Support for New Solution for Video and Interactivity on Mac- and Windows-Based Web Browsers*, PR NEWswire US, Apr. 16, 2007
- Ex. 1049: *Former Apple Multimedia Pioneers Unveil WebTV; New Company Brings Internet to Television Viewers*, PR NEWswire, Jun. 12, 1996
- Ex. 1050: *Netflix, TiVo Team Up After 4-Year Courtship*, ASSOCIATED PRESS, Oct. 30, 2008
- Ex. 1051: *TiVo and Amazon.com Announce New Service Enabling Amazon Unbox Video Download to TiVo; TiVo Subscribers Will Soon Be Able to Watch Amazon Unbox Movies and TV Shows on Their TVs*, BUS. WIRE, Feb. 7, 2007
- Ex. 1052: *Wall Crumbling Between Televisions and Computers*, AGENCE FRANCE PRESSE – ENGLISH, Jan. 8, 2009
- Ex. 1053: *Enhanced TV Binary Interchange Format 1.0, ETV (OpenCable Specifications)*, Nov. 25, 2009
- Ex. 1054: *Award-Winning Sonos™ Digital Music System Begins Shipping to Customers*, PR NEWswire US, Jan. 27, 2005
- Ex. 1055: *Sonos Introduces the Sonos™ ZonePlayer ZP80*, PR NEWswire, Jan. 4, 2006
- Ex. 1056: *Sonos Introduces the Sonos Controller for iPhone; Free Application Lets Music Lovers Control Leading Multi-Room Music System from Their iPhone*, PR NEWswire, Oct. 28, 2008
- Ex. 1057: *AT&T Opens R&D Lab in Cambridge, England*, BUS. WIRE, Feb. 10, 1999
- Ex. 1058: *Microsoft Releases Windows NT 4.0 Terminal Server Edition*, M2 PRESSWIRE, Jun 16, 1998
- Ex. 1059: *TeamViewer: TeamViewer 3.0 Beta Published; Next Generation of the Popular Remote Support Software*, M2 PRESSWIRE, Aug. 27, 2007

- Ex. 1060: *3am Labs Announces \$10 Million Series A Financing; McNamee Lawrence & Co. Acts as Exclusive Financial Advisor to 3am Labs*, BUS. WIRE, Nov. 16, 2004
- Ex. 1061: *Expertcity's GoToMyPC Product Wins A People's Choice Award At Upside Events' Showcase 2001*, INTERNET WIRE, Feb. 1, 2001
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- Ex. 1063: *CES Innovations 2005 Award and Red Herring Finalist for 100 Most Innovative Companies are Latest Commendations for Sling Media*, BUS. WIRE, Nov. 11, 2004
- Ex. 1064: Final Written Decision, IPR2022-00795 (Sep. 27, 2023)
- Ex. 1065: Patent Owner Response, IPR2022-00795 (Jan. 13, 2023)
- Ex. 1066: Reserved
- Ex. 1067: *Progressive Networks Launches the First Commercial Audio-On-Demand System Over the Internet*, BUS. WIRE, Apr. 10, 1995
- Ex. 1068: *Progressive Networks' RealVideo Launched With Wide Industry Support*, PR NEWswire EUROPE, February 10, 1997
- Ex. 1069: Reserved
- Ex. 1070: U.S. Pat. Application No. 61/477,998
- Ex. 1071: U.S. Pat. No. 8,904,289 to Strober (“the ’289 Patent”)
- Ex. 1072: Certified Copy of Prosecution History of U.S. Pat No. 8,904,289
- Ex. 1073-81: Reserved
- Ex. 1082: Stipulation Regarding Invalidity Defenses

MANDATORY NOTICES

Real Parties in Interest (37 C.F.R. § 42.8(b)(1))

The real parties-in-interest for this petition are (i) Comcast Cable Communications, LLC and (ii) Comcast Corporation.

No unnamed entity is funding, controlling, or directing this Petition for *inter partes* review (IPR) of U.S. Patent No. 8,356,251 (“the ’251 Patent”), or otherwise has an opportunity to control or direct this Petition or Petitioner’s participation in any resulting IPR.

Related Matters (37 C.F.R. § 42.8(b)(2))

The ’251 Patent, along with related U.S. Patent Nos. 11,048,751 (“the ’751 Patent”) and 11,086,934 (“the ’934 Patent”), is being asserted against Comcast Cable Communications, LLC, d/b/a Xfinity, Comcast Cable Communications Management, LLC, and Comcast of Houston, LLC in the Eastern District of Texas in *Touchstream Technologies, Inc. v. Comcast Cable Communications, LLC d/b/a Xfinity et al.*, 2:23-cv-00062-JRG (“EDTX Litigation”). The earliest date of service on the Comcast entities named in the EDTX Litigation was March 1, 2023, however the ’934 and ’751 Patents were first asserted in a First Amended Complaint served on May 25, 2023.

The ’251, ’751, and ’934 Patents are also being asserted against Charter Communications, Inc., Charter Communications Operating, LLC, Spectrum

Management Holding Company, LLC, Time Warner Cable Enterprises, LLC, and Spectrum Gulf Coast, LLC in *Touchstream Technologies, Inc. v. Charter Communications, Inc. et al*, 2:23-cv-00059-JRG (EDTX); and against Altice USA, Inc., Cequel Communications, LLC, CSC Holdings, LLC, and Friendship Cable of Texas, Inc. in *Touchstream Technologies, Inc. v. Altice USA, Inc. et al*, 2:23-cv-00060-JRG (EDTX).

The '251 Patent is also being asserted against Google LLC in *Touchstream Technologies, Inc. v. Google LLC*, 6:21-cv-00569-ADA (WDTX) along with related U.S. Patent Nos. 8,782,528 (“the '528 Patent”) and 8,904,289 (“the '289 Patent”). The '251, '528, and '289 Patents were the subject of requests for *inter partes* review filed by Google LLC in IPR2022-00795, IPR2022-00793, and IPR2022-00794 (presently on appeal). The real parties-in-interest in this Petition are not involved in those IPRs. The '251, '528, and '289 Patents were previously asserted against Vizbee, Inc. in *Touchstream Technologies, Inc. v. Vizbee, Inc.*, 1:17-cv-06247-PGG-KNF (SDNY) which was terminated by stipulated dismissal on January 24, 2020.

According to the Office’s records, the '251 Patent is a continuation of U.S. Pat. App. No. 13/157,821, filed June 10, 2011 (issued as U.S. Pat. No. 8,904,289), which claims priority to Provisional App. No. 61/477,998, filed April 21, 2011.

No other prior petitions for *inter partes* review, post-grant review, or covered business method review have been filed against the '251 Patent.

This is the first of two petitions for *inter partes* review filed by Petitioner against the '251 Patent. Petitioner is also filing petitions for *inter partes* review against the related '751 and '934 Patents.

Lead and Back-Up Counsel (37 C.F.R. § 42.8(b)(3))

Petitioner designates counsel listed below. A power of attorney for counsel is being concurrently filed.

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I. INTRODUCTION

Comcast Cable Communications, LLC (“Petitioner”) petitions for *inter partes* review and cancellation of claims 1-26 of U.S. Patent No. 8,356,251 (“the ’251 Patent”).

II. SUMMARY OF ARGUMENT

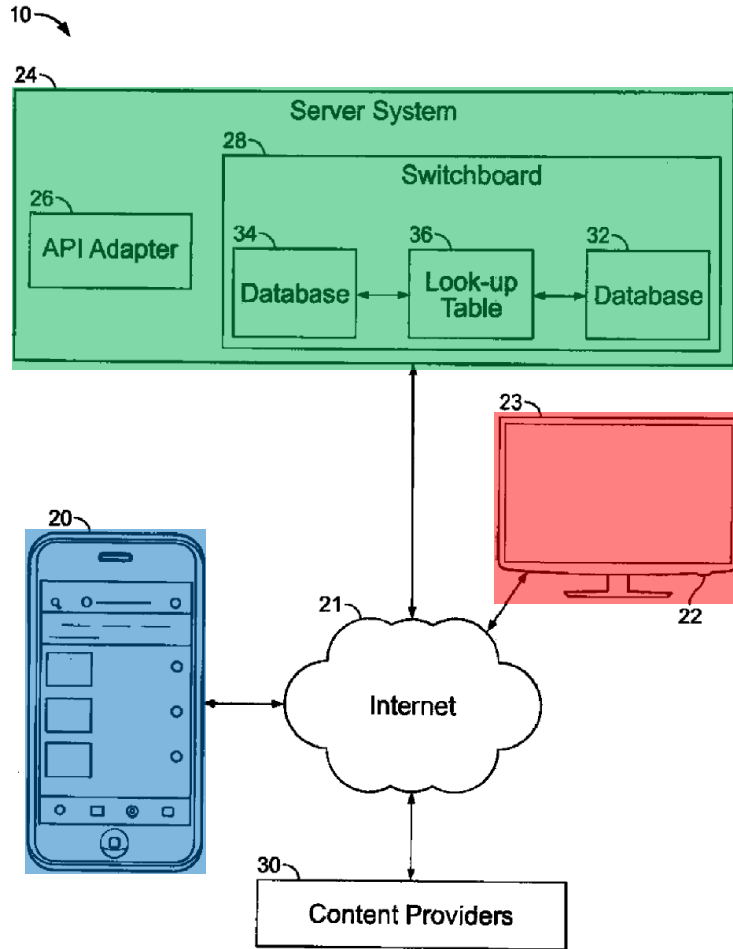
The ’251 Patent claims methods for translating commands among associated devices to control media. A server controls presentation of video content, using one of various media players, via messages transmitted from a computer. The messages are converted into commands for the selected media player and then transmitted to a display device. In one embodiment, the display device is assigned a synchronization code used to associate the computer with the display device and stored in the server.

The ’251 Patent claims are disclosed and rendered obvious by the prior art relied on herein.

III. OVERVIEW OF THE ’251 PATENT

A. Brief Description

The ’251 Patent describes a system 10 for using a server system 24 (**green**) to facilitate a connection between a personal computing device 20 (**blue**) for selecting content, and a television/display device 22 (**red**) for displaying the selected content. Ex. 1001, 2:66-3:11.



Ex. 1001, Fig. 1 (annotated)

As shown in Figure 1, a personal computing device connects to and “acts as a controller” for a display 23 that receives and plays content selected by a user. The display “respond[s] to commands that originate at the personal computing device.” *Id.*, 3:2-7. For example, television 22 can be commanded “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.*, 3:19-23.

The connection between the personal computing device (*e.g.*, a mobile phone) and the display may be established by the user selecting from a list of devices or entering a synchronization code on the mobile phone uniquely associated with the display. *Id.*, 5:8-16. The code can be, *e.g.*, a text or QR code displayed on the screen of the display device. *Id.*, 5:16-23. The server system may then store the association between the personal computing device and display in a look-up table. *Id.*, 5:29-35.

Personal computing device 20 controls the selection of and playback of content on the display through server system 24, rather than directly. *Id.*, 3:10-18, 3:36-41. The signal which selects content or controls playback is formatted and transmitted by personal computing device 20 in a message sent via the Internet to server system 24. *Id.*, 4:27-42, Fig. 3. Server system 24 then converts the incoming commands from the mobile device 20 into the correct code used by the display to control the specific player. *Id.*, 5:67-6:3. Server system 24 “interpret[s] and convert[s] a standard or universal command (*e.g.*, play, pause, etc.) into the specific command recognized by the media player” playing content on the display. *Id.*, 5:58–62. Then, server system 24 “copies the converted version of the message to the database 34 associated with the [television set] 22.” *Id.*, 6:3-6. The display receives and executes the converted message (*id.*, 6:23–33), *e.g.*, “load[s] and unload[s] different video players.” *Id.*, 6:34-48.

B. Prosecution History

During prosecution, all claims were rejected as anticipated by U.S. Publication No. 2011/00600998 to Schwartz or as obvious over Schwartz alone or in view of a non-patent publication. Ex. 1004, pp. 61-81. In response, Applicant stated, “[i]n the context of the present application, it is clear that a ‘media player’ refers to application software for playing back the video content.” *Id.*, p. 190, footnote 2. The Notice of Allowance included an Examiner’s Amendment that the display device “loads any one of a plurality of different media players” to place the claims in condition for allowance. *Id.*, pp. 272-287.

C. Earliest Priority Date for the Claims

The earliest possible priority date for the claims of the ’251 Patent is April 21, 2011. Ex. 1001, cover.

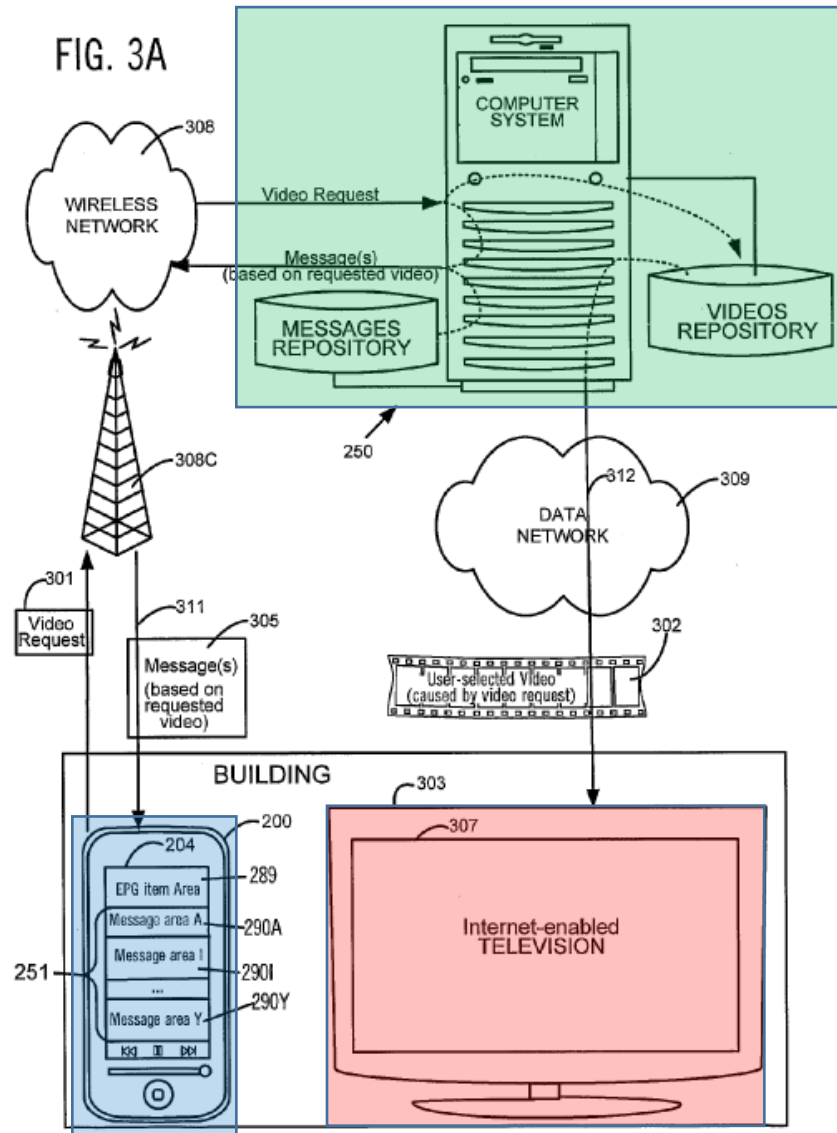
IV. OVERVIEW OF PRIOR ART

A. Redford

Redford, U.S. Patent No. 8,660,545 (Ex. 1005), issued on an application filed on January 6, 2010, and is prior art at least under 35 U.S.C. § 102(e). Ex. 1002, ¶ 82.

Redford discloses a computer system 250 (green) including various video content provider computers 281A-281N and a computer 282 that authorizes transfer of video based on a user’s request. Ex. 1005, 2:59-67, Fig. 2B; Ex. 1002, ¶ 83. Computer system 250 responds to requests from a handheld device 200 (blue) by sending a signal carrying user-selected video, for presentation, to an internet-enabled

television 303 (red). Ex. 1005, 6:40-52, 11:37-12:12, 21:20-30, 22:5-46, Figs. 2B, 3A-3C, 6A-6B, 8A-8B, 11A; Ex. 1002, ¶¶ 84-100.



Ex. 1005, Fig. 3A (annotated)

B. Gonze

Gonze, U.S. Publication No. 2008/0235588 (Ex. 1006), published on September 25, 2008, and is prior art under 35 U.S.C. § 102(b). Ex. 1002, ¶ 101.

Gonze discloses a system for making content available from multiple providers such that a playback device can request, receive, and present the content utilizing a playlist and a consistent user interface. Ex. 1006, Abstract, [0009]-[0010], [0034]-[0035], [0040], [0049], [0051], [0056], [0060]. Gonze describes that a browser and/or an operating system (OS) may use information from a file to determine software to be loaded to play the file. *Id.*, [0035]. The browser may determine whether the selected file can be played by any plug-ins. *Id.*; Ex. 1002, ¶¶ 102-109.

C. Chilvers

Chilvers, U.S. Patent No. 8,327,403 (Ex. 1007), issued from an application filed on September 7, 2007, and is prior art at least under 35 U.S.C. § 102(e). Ex. 1002, ¶ 110.

In Chilvers, user equipment identification information is used to select an appropriate format for commands that will be used by an application program interface (API) associated with the user equipment. Requests sent from a remote device in a generic format allow remote access to various user equipment having various APIs. A server uses a lookup table to convert the generic instructions to an appropriate format for a particular user equipment. Ex. 1007, 27:57-65, 28:9-19, 28:29-37, 28:64-29:6, Fig. 13A; Ex. 1002, ¶¶ 111-122.

D. Malik

Malik, U.S. Publication No. 2007/0155506 (Ex. 1008), published on July 5, 2007, and is prior art under 35 U.S.C. § 102(b). Ex. 1002, ¶ 123.

Malik discloses control of an interactive game playing on a set-top box (STB) and hosted on a network server. Ex. 1008, Abstract, [0005], [0015], [0025]-[0028]. Malik describes a method to bind the STB and wireless devices for game control wherein the game server provides a unique identifier communicated by the devices. *Id.*, [0005]-[0007], [0015], [0021], [0022], [0027], [0030], [0035], [0036], [0043], [0051]-[0052], Figs. 4, 5; Ex. 1002, ¶¶ 124-126.

E. Bartfeld

Bartfeld, U.S. Pub. No. 2006/0107299 (Ex. 1018), published on May 18, 2006, and is prior art under 35 U.S.C. § 102(b). Ex. 1002, ¶ 127.

Bartfeld discloses a system for user-assisted association between a television and a telephony device. Ex. 1018, Abstract. A server generates a code, associates it with a set-top address, and transmits it back to the STB. *Id.* The STB displays the code on a television. *Id.*, [0007], [0025]-[0026]; Ex. 1002, ¶¶ 128-132.

V. IDENTIFICATION OF CHALLENGE PURSUANT TO 37 C.F.R. § 42.104(b)

A. Claims for Which Review is Requested and Grounds on Which Challenge Is Based

Petitioner requests review of claims 1–26 on these grounds.

Ground	References	Basis	Claims Challenged
A	Redford	§103	1-2, 5, 7-11, 16, 18-21
B	Redford-Gonze	§103	1-2, 5, 7-11, 16, 18-21
C-D	Each of Grounds A-B + Bartfeld	§103	1-2, 5, 7-11, 16, 18-26
E-H	Each of Grounds A-D + Chilvers	§103	2-4, 12-15
I-L	Each of Grounds A-D + Malik	§103	6, 17

None of the prior art was cited during prosecution of the '251 Patent.

B. 314(a) Discretion Does Not Apply

The Fintiv factors as set forth in the Director's June 21, 2022 Guidance Memorandum do not warrant discretionary denial.

Factor one appears neutral. Petitioner has filed IPR petitions challenging all three patents asserted in the District Court. If trial is instituted, Petitioner expects to request a stay, as decisions in Petitioner's favor would resolve the dispute in its entirety.

Factor two does not warrant denial. The District Court case against Petitioner is consolidated with the cases against Charter and Altice with the Altice case designated as the lead case. Trial in all three cases is set for October 28, 2024; Petitioner's trial will occur on or after that date. Furthermore, motions to transfer are awaiting ruling.

Factor three does not warrant denial. The District Court has not yet begun the claim construction process and fact discovery does not close until June 2024.

Factor four strongly favors institution. The petition challenges all claims in the '251 Patent while only claims 1-2, 5, and 7-9 are asserted in the District Court. Furthermore, Petitioner stipulates not to pursue in the District Court any ground that utilizes the same combination of prior art references relied upon in the instituted petition. Ex. 1082.

Factor five does not warrant denial as Petitioner is a defendant in the District Court case.

Factor six favors institution. Petitioner presents compelling unpatentability challenges that merit institution, relying on entirely different prior art than that of the previously-considered Google petition.

C. 325(d) Discretion Does Not Apply

The Board should not exercise its 35 U.S.C. § 325(d) discretion to deny institution. The grounds raised herein are not the same or substantially the same as the art and arguments raised during prosecution, and if they are, Examiner erred in a manner material to the patentability of the challenged claims.

D. Level of Ordinary Skill

A person of ordinary skill in the art (a “POSITA”) at the time of the alleged invention would have had a degree in computer or electrical engineering, computer

science, information systems, or a similar discipline, along with three-to-four years of experience with the design and/or implementation of network-based content delivery systems, such as video-on-demand cable systems and Internet video streaming. Ex. 1002, ¶¶ 30-32.

E. Claim Construction

For purposes of this petition only, all claim terms herein are given their ordinary and customary meaning to a POSITA. 37 C.F.R. § 42.100(b). No terms need be specifically construed in order to resolve any controversy in the instant Petition. *See Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999) (“[O]nly those terms need be construed that are in controversy, and only to the extent necessary to resolve the controversy.”). Petitioner does not contend that the claims include any means-plus-function limitations.

In the Touchstream-Google case involving the '251 Patent, Patent Owner advocated that plain and ordinary meaning applies for all claim terms¹, and the Court agreed. Ex. 1020, pp. 2-4; Ex. 1022, p. 22. In the earlier Touchstream-Vizbee case involving the same patents, Patent Owner advocated that plain and ordinary meaning applies for certain claim terms but for other terms proposed constructions which it seems to have now abandoned. Ex. 1021, pp. 1-14.

¹ For some terms, Patent Owner provided its view as to what that meaning is.

In IPR2022-00795, involving the '251 Patent, the Board noted that “the parties agree that the term ‘media player’ refers to software and not to a hardware device.” Ex. 1064, 13. The prior art relied on herein includes software media players.

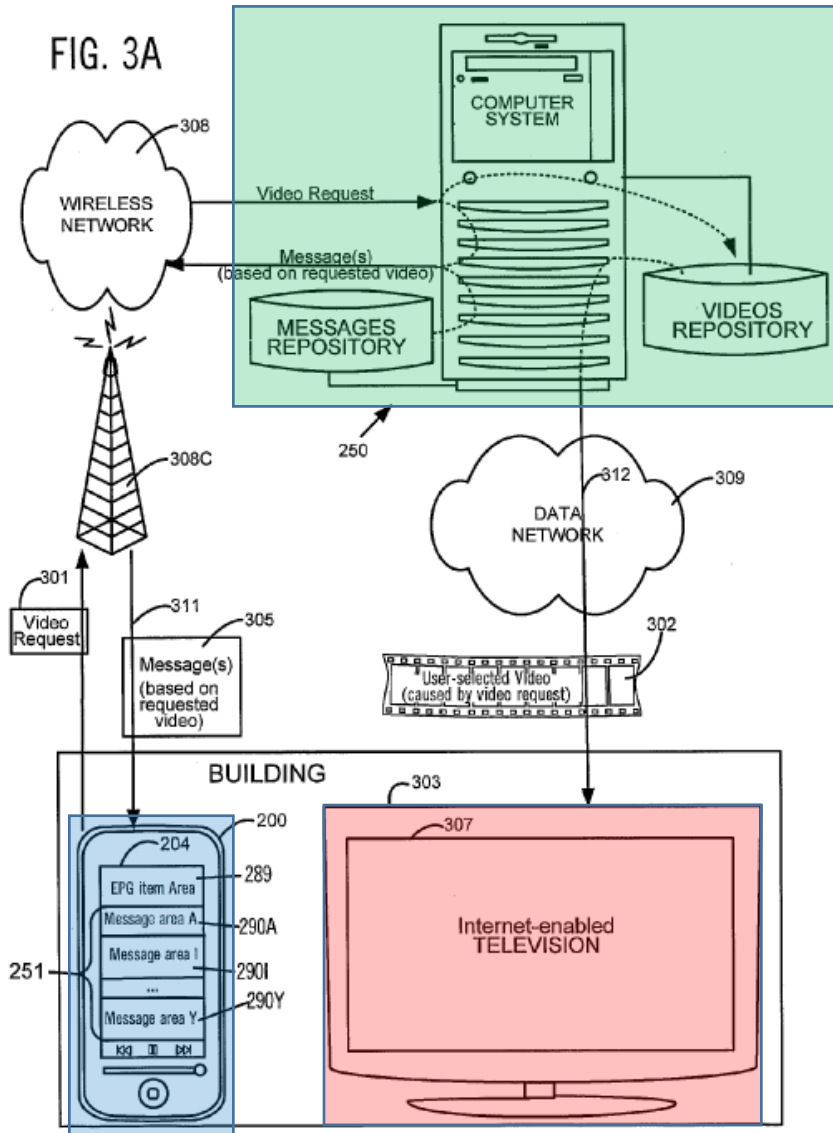
VI. SPECIFIC GROUNDS FOR UNPATENTABILITY

A. Grounds A-D: Redford, Redford-Gonze, Redford-Bartfeld, and Redford-Gonze-Bartfeld Render Claims 1-2, 5, 7-11, 16, and 18-26 Obvious

1. Independent Claim 1

- a. [1A]: “A machine-implemented method of controlling presentation of video content on a display device that loads any one of a plurality of different media players, the method comprising:”

If limiting, each of Redford and Gonze disclose the preamble. Redford discloses a computer system 250 (green) including various video content provider computers 281A-281N and a computer 282 that authorizes transfer of video (“*machine-implemented method of controlling presentation of video content*”). Ex. 1005, 2:59-67, Fig. 2B; Ex. 1002, ¶¶ 159-160. Specifically, computer system 250 responds to requests 301 from a handheld device 200 (blue) by sending a signal carrying user-selected video 302, for presentation, to an Internet-enabled television 303 (red) (“*display device*”). Ex. 1005, 6:40-52, 11:37-12:12, 21:20-30, 22:5-46, Figs. 2B, 3A-3C, 6A-6B, 8A-8B, 11A; Ex. 1002, ¶ 161.



Ex. 1005, Fig. 3A (annotated)

Television 303 is a display device that loads any of a plurality of different media players (“display device that loads any one of a plurality of different media players”). Ex. 1002, ¶ 162. Television 303 executes predetermined software, called authority-compatible set-top interface software, to display video 302 retrieved from a specific service provider, via the Internet, in response to user request 301. Ex. 1005,

12:5-12. Specifically, Figure 9A illustrates television 303 as including a microcontroller 901 and processor 911 that runs software stored in memory. *Id.*, 30:23-61, Figs. 9A-9B; Ex. 1002, ¶ 162.

Redford describes, in a set-top SDK API, a function, VideoPlay, that allows video content to be played using protocols such Real Time Streaming Protocol (RTSP), User Datagram Protocol (UDP), and Hypertext Transfer Protocol (HTTP) Streaming, including media player codecs needed for decoding the content for display. Ex. 1005, 40:24-29, 40:56-58, 40:66-41:2, 41:53-54. Redford teaches that RTSP has varying implementations depending on the content provider and service; therefore, several implementations of VideoPlay may exist to support various RTSP players. *Id.*, 40:56-41:2; Ex. 1002, ¶ 163. Since different RTSP players are supported, a POSITA would have understood that Redford teaches that television 303 was configured to load any of the plurality of different RTSP application software for playing back the video content for a particular VideoPlay implementation. *Id.* Redford discloses limitation [1A].

Additionally, Redford teaches that video plays on screen 307. A POSITA would understand that different media players would be loaded to support the media player format for different streaming video providers, “respective content providers A-N”, as shown by example in Figure 2A, Netflix, YouTube, ZillionTV, and Paramount Pictures. Ex. 1005, 2:65, 7:27-43, Fig. 2A; Ex. 1002, ¶ 165.

Further, if it is determined that Redford does not expressly disclose that television 303 may load any of a plurality of different media players, it would have been obvious to implement television 303 to include the claimed capability given Redford's teaching of multiple, different RTSP players being supported in Internet-enabled television 303, which was well-known in the art, and the general knowledge of the POSITA that different content providers would use different players. Ex. 1005, 4:18-20, 30:23-61, Fig. 9A; Ex. 1002, ¶ 166. A POSITA would have understood that the function of presenting video content from Netflix (*e.g.*, content provider A, 281A) as opposed to YouTube (content provider B, 281B), ZillionTV (content provider I, 281I), or Paramount Pictures (content provider N, 281N), would be accomplished by a different RTSP player ("any one of a plurality of different media players") to be loaded onto the television. Ex. 1005, Figs. 2B, 9A; Ex. 1002, ¶ 166.

Redford renders obvious limitation [1A].

It was generally known before the priority date of the '251 Patent that display devices were enabled with the capability to load any of a plurality of different media players as shown by Gonze. Ex. 1002, ¶ 168.

Gonze discloses a system for making content available from multiple providers such that a playback device can request, receive, and present the content by utilizing a playlist by causing one of various media players to load: "The operating system...determines an appropriate application, such as a media player,

that should be loaded to handle the file based on information from the file.... [and the] operating system can cause a locally-installed media player to load.” Ex. 1006, Abstract, [0010], [0034], [0035], [0040], [0049], [0051]. *See* Section IV.B, *supra*. Gonze discloses various media formats (*e.g.*, RealMedia, QuickTime, Windows Media) requiring different media player applications (*e.g.*, RealPlayer, QuickTime player, Microsoft Media Player) to properly output the content. Ex. 1006, [0006], [0060]; Ex. 1002, ¶ 169.

The appropriate media player is selected based on information in a browser-interpretable document playlist. Ex. 1006, [0034]. Gonze describes determining “whether a media player capable of playing a media file in the playlist has been installed on the computing device on which the instant method is implemented,” and, “[i]f no such media player has been installed, the device may be provided with a link through which an appropriate media player can be obtained.” *Id.*, [0058], Fig. 1. “Once an appropriate media player has been identified and its installation status confirmed, the browser in which the instant method is implemented can cause **the computing device to load the appropriate media player.**” *Id.*, [0059] (emphasis added), Fig. 1. Gonze’s playback device “loads any one of a plurality of different media players.” Ex. 1002, ¶ 170.

Gonze further describes an example in which a playback device may look at a content file’s extension to determine an appropriate application to be loaded. Ex.

1006, [0035]. For instance, the file name “example.mp3” is identified as a media file, thus allowing the operating system of the playback device to cause a locally-installed media player to load, and send instructions to the locally-installed media player to play the file. *Id.*; Ex. 1002, ¶ 171.

Based on Gonze, a POSITA would have understood that a media playback device, such as television 303 of Redford, would include multiple, different media players. The appropriate media player for a particular content can be determined based on information in a browser-interpretable document playlist, *e.g.*, a content file’s extension, as taught by Gonze. Ex. 1002, ¶ 172. A POSITA would further have understood that information on what media player corresponds to a particular piece of content could beneficially be supplied to handheld device 200 before a user selects the piece of content, and information on the corresponding media player would be included in messages from handheld device 200 to computer system 250 and subsequently in the message from computer system 250 to television 303. Ex. 1005, 2:59-67, 5:42-58, Figs. 2B, 10A-10C; Ex. 1002, ¶ 173.

Since Redford already provides the capability of executing additional applications, (Ex. 1005, 41:56-67), a POSITA would have been motivated to apply Gonze’s teaching of loading uninstalled media players to a playback device to supplement Redford’s system in order to enable the easy loading and selection of various media players to Redford’s system. Ex. 1002, ¶¶ 174-176. A POSITA would

have appreciated that content from different providers, especially proprietary providers, would require proprietary media formats (*e.g.*, RealMedia, QuickTime, Windows Media) requiring proprietary media player applications (*e.g.*, RealPlayer, QuickTime player, Microsoft Media Player) to properly output the content. Ex. 1006, [0006], [0060]. A POSITA would have sought to combine Redford and Gonze to better support multiple proprietary players to easily play content from different providers. Ex. 1002, ¶ 176.

Combining Gonze with Redford would be merely using known techniques (supporting multiple media players for presenting content) to improve similar devices (the server-based video streaming systems taught in Redford and Gonze) in the same way (selecting between the multiple players based on the format of the content). Gonze teaches a system like Redford where information is received indicating what content is available, a user selects from that content, and a server informs the playback device regarding how to access and output the content. Ex. 1002, ¶ 177.

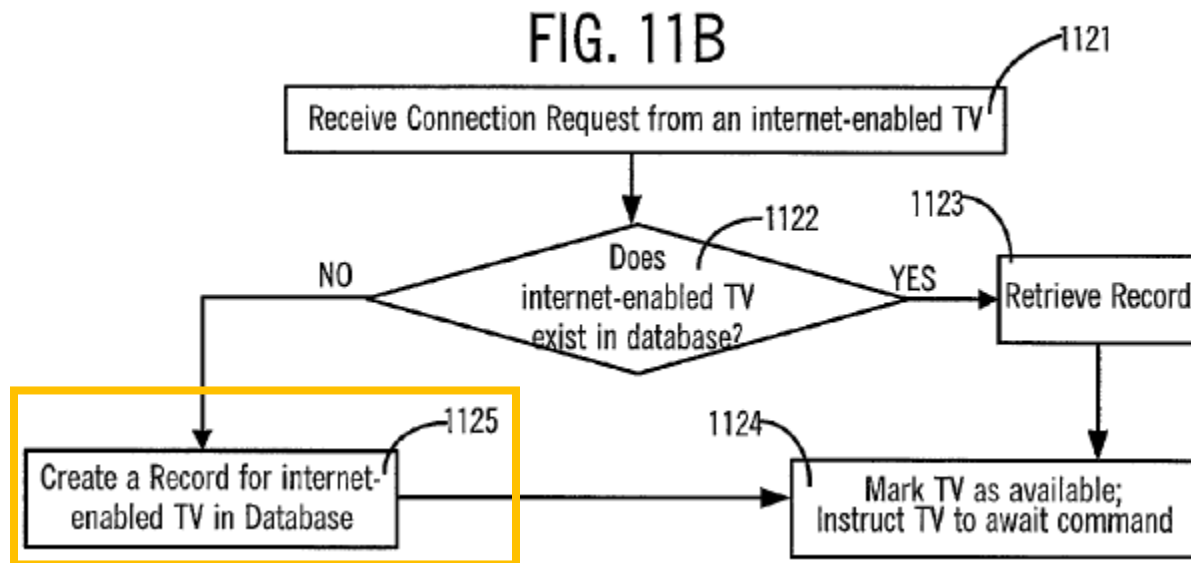
Additionally, a POSITA would have had the skill to implement support for multiple media players in Redford's system, as taught by Gonze, by programming Redford's Internet-enabled television to select between multiple media players, *e.g.*, based on information received in messages from the server. Ex. 1002, ¶ 178. The

combination requires only minor hardware, software, and/or firmware modifications, leading to an expectation of success. *Id.*

Redford-Gonze teaches limitation [1A].

b. [1B] “assigning, by a server system, a synchronization code to the display device;”

Redford discloses that server 282 of computer system 250 (“server system”) receives from television 303 registration information including an IP address, TV-name, and TV-password (each a “synchronization code”). Ex. 1005, 31:7-14, 44:44-48; Ex. 1002, ¶ 181. The registration process is illustrated in Figure 11B. Specifically, server 282 receives a connection request from television 303, checks if a record exists in a database for television 303, and if not, creates a new record in the database using the registration information (“synchronization code”) received from the television (“*assigning, by a server system, a synchronization code to the display device*”), shown in annotated Figure 11B below. Server 282 marks television 303 as being available. Ex. 1005, 35:25-36, Fig. 11B; Ex. 1002, ¶¶ 182-183.



Ex. 1005, Fig. 11B (annotated)

Redford discloses limitation [1B].

To the extent it is determined that Redford lacks an explicit disclosure that computer system 250 assigns a synchronization code to television 303, it would have been obvious that Redford's computer system 250 includes the claimed capability. A POSITA would have understood that at least for the example of an IP address, often when Internet-enabled television 303 connected to the Internet, it used Dynamic Host Configuration Protocol (DHCP) to automatically request an IP address from a DHCP server on computer system 250. The DHCP server assigned an available IP address to television 303 for a temporary period. Ex. 1005, 43:5-14; Ex. 1002, ¶¶ 184-185.

Redford renders obvious limitation [1B].

Bartfeld also teaches computer systems with the capability to create a synchronization code and assign it to a television Ex. 1002, ¶ 186. Bartfeld discloses a system for user-assisted association between a television and a telephony device. Ex. 1018, Abstract. A server generates a code, associates the code with a set-top address, and transmits the code back to the STB. *Id.* The STB displays the code on a television. *Id.*, [0007], [0025]-[0026]. Using a personal computing device, the code is transmitted by a user to the server. *Id.* The server identifies the personal computing device address, and using the code, associates the device with the STB. *Id.* Bartfeld discloses that a synchronization code “may be selected by any convenient manner such as random number generation, selection from a list, ... and the like ... Clearly, a never repeating [synchronization code] may be used.” Ex. 1018, [0025]. Accordingly, Bartfeld’s server “assigns” “a synchronization code to the display device.” Ex. 1002, ¶ 187.

Using Bartfeld, a POSITA would have understood that a server system, such as computer system 250 of Redford, could beneficially assign a synchronization code to a display device, such as Redford’s television 303 because Bartfeld describes that a set-top box, to be associated with a handheld computing device, may be embedded within a device capable of displaying video signals, *e.g.*, Redford’s television 303. Ex. 1018, [0005], [0030]. In the combination, computer system 250 assigns a synchronization code that is displayed on television 303 and subsequently

entered on the handheld device 200, where it is then sent to computer system 250 to create an association between television 303 and handheld device 200. Ex. 1018, Abstract, [0007], [0025]-[0026], Fig. 1; Ex. 1002, ¶ 188. A POSITA would have looked to supplement the association in Redford with the server generated code for display on a television and entry by a user on a handheld device as taught by Bartfeld in order to ensure that the user is easily and accurately associating the handheld device with a desired television, e.g., basement television. Ex. 1002, ¶ 189.

A POSITA would have been motivated to do so to easily provide more display options for playing back content to Redford's users. Ex. 1002, ¶ 189. Redford already uniquely identifies displays, and lets a user play content from a phone on a display via a server, thus recognizing the desirability to users of watching content of their choosing via devices of their choosing. Ex. 1005, 4:57-5:4, 5:34-36, 7:22-26, 7:33-35, 11:37-42, 12:8-12, 27:4-16; Ex. 1002, ¶ 189. Redford also provides the capability of receiving a synchronization code assigned to a television from a user's handheld device. Ex. 1005, 41:56-67; Ex. 1002, ¶ 189. The synchronization code in Bartfeld would have been combined with the system in Redford "because it allows the system to synchronize (e.g., pair) a mobile device to a particular display device for ease of use." Ex. 1005, 43:15-20; Ex. 1002, ¶ 189.

Combining Bartfeld with Redford would be merely using known techniques (association between a television and a personal computing device) to improve

similar devices (the server-based video streaming systems taught in Redford and Bartfeld) in the same way (assigning a synchronization code to a display device). Ex. 1002, ¶ 190. Bartfeld teaches a system like Redford where a synchronization code is assigned between a television and a handheld device, a user on the handheld device selects content for display on the television, and a server informs the television associated with the handheld device regarding how to access and output the content. *Id.*

Additionally, a POSITA would have had the skills and knowledge to implement the assigning of a synchronization code to a television in Redford's system, as taught by Bartfeld, by adding minor hardware, software, and/or firmware modifications, which would have been well within the skill set of a POSITA leading to an expectation of success. *Id.*, ¶ 191.

The proposed combinations that include Bartfeld also teach limitation [1B].

- c. **[1C]: “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;”**

Redford further discloses that server 282 of computer system 250 (“server system”) receives, from handheld device 200 (“personal computing device”), a command to form an association (*e.g.*, “message”) between the handheld device 200 and the television 303 (“display device”). Ex. 1005, 35:59-61, 43:15-20. Each of

Redford's computer system 250, handheld device 200, and television 303 are separate from each other. Ex. 1005, Fig. 8B; Ex. 1002, ¶¶ 194-195. The command to form an association process is illustrated at 1131 in Figure 11D.

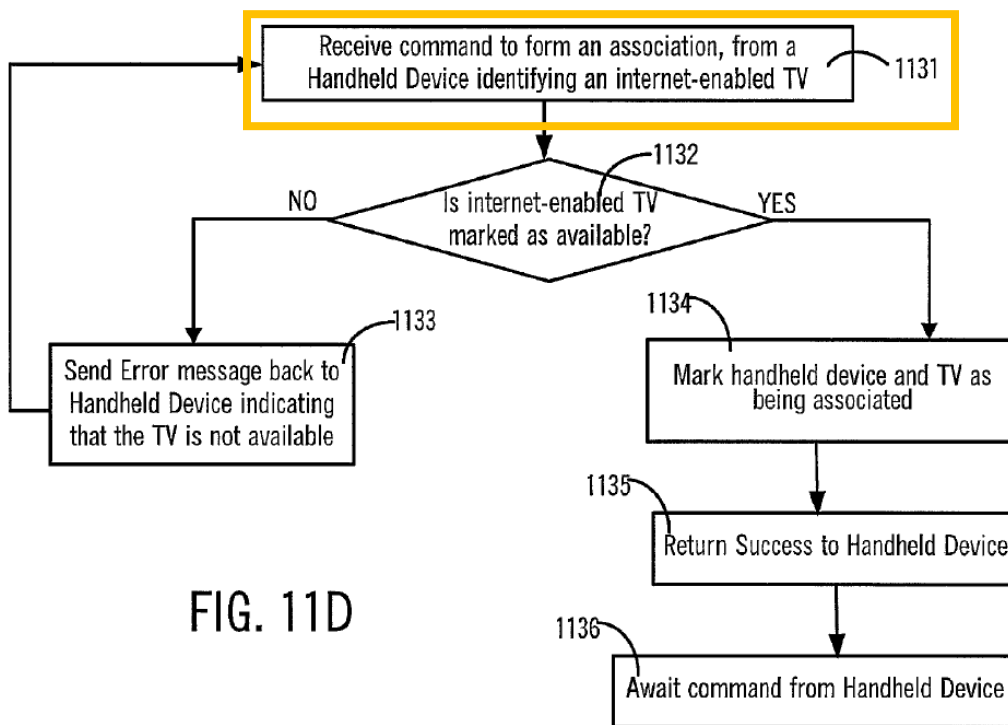


FIG. 11D

Ex. 1005, Fig. 11D (annotated)

“[S]erver 282 receives a command to form an association, from a handheld device 200 identifying an internet-enabled TV.” Ex. 1005, 35:59-61, *see also*, 32:18-30. Television 303 is identified by, *e.g.*, TV-name, TV-password, and IP address (each a “synchronization code”). *Id.*, 44:6-9; Ex. 1002, ¶ 196. An example of this command is RequestAssociation. “RequestAssociation is a command to associate the iPhone with a television. The input data for this command contains an identifier of the television (*e.g.* in the form of a nickname previously registered with

the server) and optionally a password for the TV.” Ex. 1005, 39:37-41, 44:6-9; Ex. 1002, ¶ 197.

Redford discloses limitation [1C].

In the combined Redford-Bartfeld system, as stated in Section VI.A.1.b, computer system 250 receives, from handheld device 200, a message that includes the synchronization code displayed on television 303 and entered by a user of the handheld device. Ex. 1018, [0007], [0025]-[0026]. Ex. 1002, ¶ 198.

The proposed combinations that include Bartfeld also teach limitation [1C].

- d. **[1D]: “storing, by the server system, a record establishing an association between the personal computing device and the display device based on the synchronization code;”**

Redford discloses that server 282 of computer system 250 (“server system”), after receiving the command to form an association from handheld device 200 (“personal computing device”), identifies handheld device 200 as being associated with television 303 (“display device”) by storing the association in a database. Ex. 1005, 36:2-3, 43:15-20. The storage of association information is illustrated at 1134 in Figure 11D. Ex. 1002, ¶ 200.

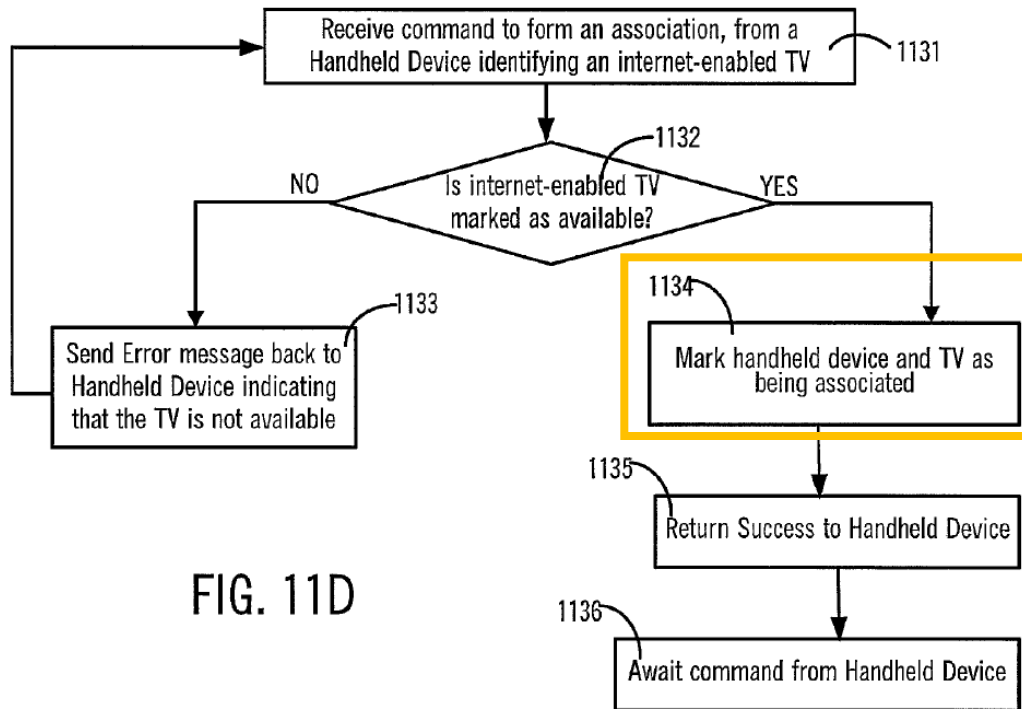


FIG. 11D

Ex. 1005, Fig. 11D (annotated)

Specifically, server 282 “maintains in its database” “[a]ssociation information (also called ‘pairing’)” including “identifier of the handheld device, ... IP address, TV-name and TV-password.” Ex. 1005, 43:15-20. Redford’s IP address, TV-name, and TV-password are examples of a “synchronization code.” Ex. 1002, ¶ 201. The record for the television 303, created in Figure 11B as described in Section VI.A.1.b, *supra*, and/or the record for the handheld device 200, updated in Figure 11D as described above in Section VI.A.1.c, *supra*, associates, or pairs, the two. *Id.*, ¶ 202. By maintaining association information in its database, the server can retrieve the identifier of the television 303 associated with the handheld device 200 in response to subsequent commands to play a video. Ex. 1005, 36:41-45; Ex. 1002, ¶ 203.

Redford's description of "mark"ing the handheld device 200 and television 303 as being associated is storing an update to the record for the television 303, created in step 1125 in Figure 11B and described in Section VI.A.1.b, *supra*, maintained in the computer system 250 database. Ex. 1002, ¶ 204.

Redford discloses limitation [1D].

In the combined Redford-Bartfeld system, as stated in Section VI.A.1.c, computer system 250 receives, from handheld device 200, a message that includes the synchronization code displayed on television 303 and entered by a user of the handheld device. Ex. 1018, [0007], [0025]-[0026]. Redford-Bartfeld's computer system 250 stores a record of the association. Ex. 1005, 36:2-3, 43:15-20. Ex. 1002, ¶ 205.

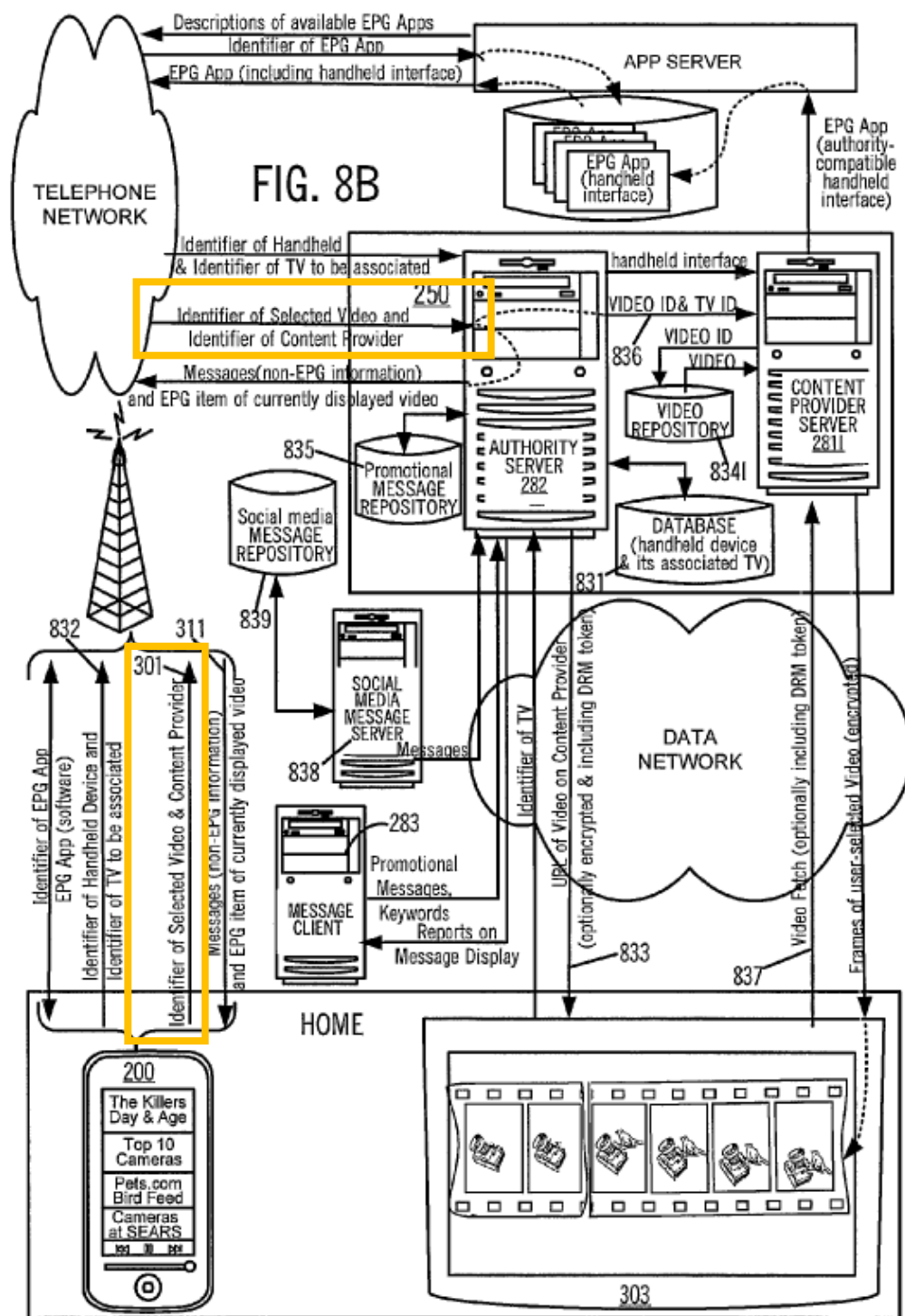
The proposed combinations that include Bartfeld also teach limitation [1D].

- e. **[1E]: "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,"**

Redford discloses that server 282 of computer system 250 ("server system") receives, from handheld device 200 ("personal computing device"), "an identifier of a video 302 in a video request 301" ("one or more signals specifying a video file to be acted upon"). Ex. 1005, 26:62-64, Fig. 8B. Redford further discloses that, in embodiments that support multiple content providers, such as Netflix 281A and

YouTube 281B in Figure 2B, server 282 also receives “an identifier of the content provider that maintains a repository 834I (Figure 8B) in which a file containing video 302 is available” (also “specifying a video file to be acted upon”). *Id.*, 26:64-27:3, *see also*, 36:18-43, 43:36-53, 44:6-18, Figs. 8A-8B; Ex. 1002, ¶¶ 207-208.

Redford describes that “a specific video can be made available to a user for selection by more than one content provider” *Id.*, 7:4-6, 7:22-26. Redford also discloses the need for video codecs (decoding video for example) to play streaming video content. *Id.*, 40:66-41:2, 41:53-54. A POSITA would understand that different video codecs are needed for the identified particular media player to play the video content. Thus, Redford teaches that an identifier of the content provider identifies a particular media player for playing the video 302. Ex. 1002, ¶¶ 209-210.



Ex. 1005, Fig. 8B (annotated)

As another example, Redford describes that “an identifier of each content provider computer 281I and an identifier of each video 208J available therefrom (see FIG. 2B) are combined into (e.g., by concatenation to form) a single globally unique identifier (GUID) in computer system 250.” Ex. 1005, 27:4-8. Redford teaches that upon selection of a particular GUID by a user causes handheld device 200 to send the particular GUID in video request 301 (“specifying a video file to be acted upon”) from a particular content provider (“identifying a particular media player for playing the video content”) which is received in step 801 by the computer system 250. *Id.*, 27:8-16, *see also*, 36:18-27, 43:36-53, 44:6-18, Figs. 8A-8B; Ex. 1002, ¶ 211.

Redford discloses and teaches limitation [1E].

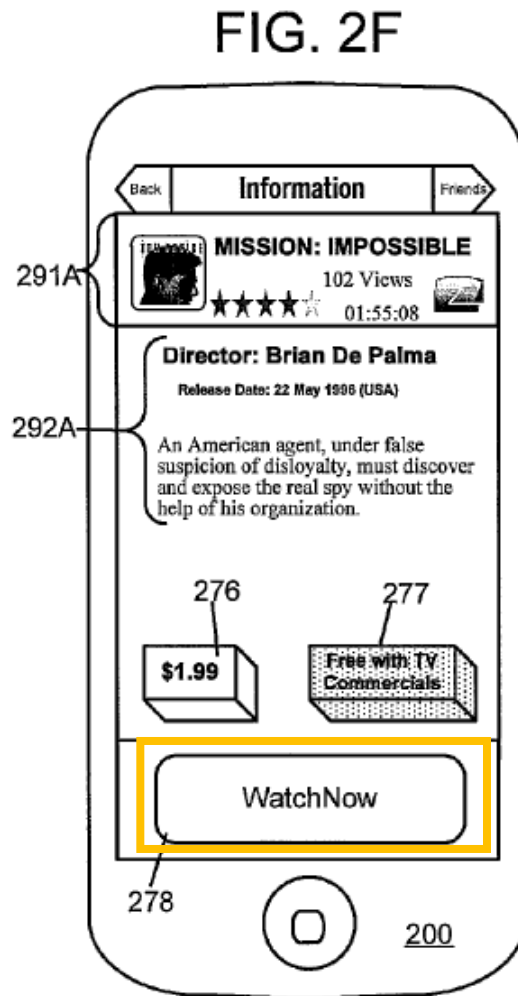
In the proposed combinations with Gonze, as stated in Section VI.A.1.a, computer system 250 receives, from handheld device 200, a playlist specifying a video file and particular media player. Ex. 1006, [0006], [0010], [0034]-[0035], [0040], [0049], [0051], [0058]-[0060]. Ex. 1002, ¶ 212.

The proposed combinations that include Gonze also teach limitation [1E].

- f. **[1F]: “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,”**

Redford describes how computer system 250 receives, from handheld device 200, e.g., a command to play (“universal playback control command”) a video to be displayed on the television 303 associated with the handheld device 200. For

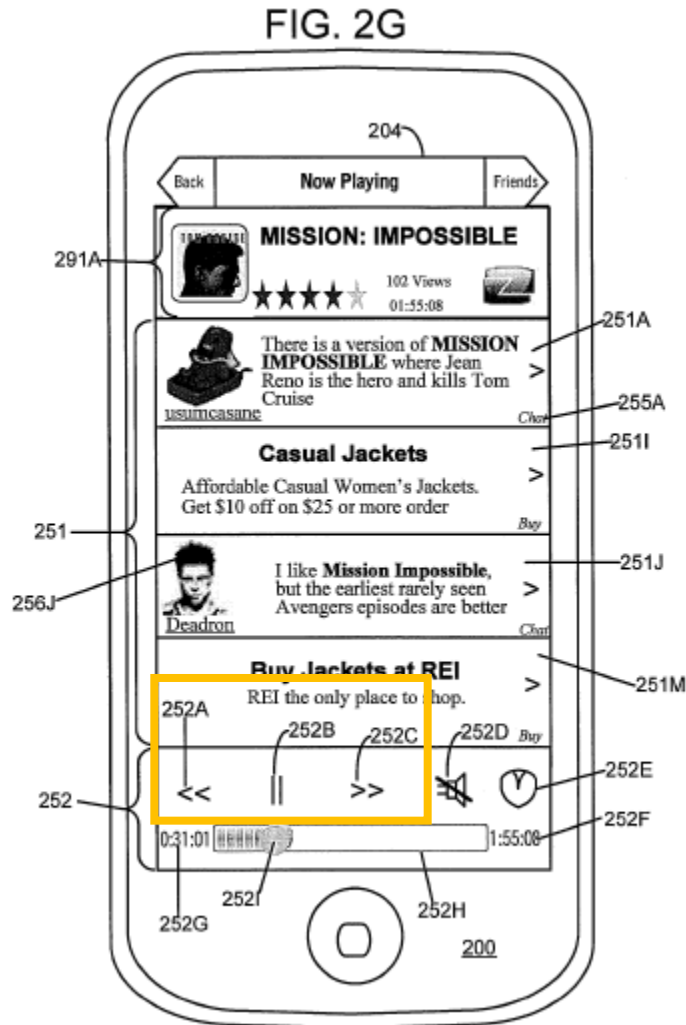
instance, Redford's "WatchNow" input in Fig. 2F serves as a universal playback control command. Ex. 1005, 8:1-2, 26:62-27:3, 36:18-27, 43:36-53, 44:6-18, Figs. 2F, 8A-8B, 11H; Ex. 1002, ¶ 214.



Ex. 1005, Fig. 2F (annotated)

After being requested, the selected video ("video content") plays on the associated television ("display device"). Ex. 1005, 8:3-5. During playback, handheld device 200 displays a control panel including rewind, pause, and fast forward buttons (each also causing "universal playback control command") to control

playback of the selected video. *Id.*, 8:5-12; Ex. 1001, 4:36-5:35, 5:58-62, 6:12-18; Ex. 1002, ¶ 215. The '251 Patent describes how a user of its system uses similar commands. Ex. 1001, 4:29-35, 5:58-62.



Ex. 1005, Fig. 2G (annotated)

Television 303 receives and executes commands (such as those described above) from computer system 250. Ex. 1005, 31:16-23, 44:48-52. Handheld device 200 sends a universal playback control command, such as play, pause, rewind, or

fast forward, to computer system 250, which thereafter sends a corresponding command to television 303. *Id.*, 8:5-12; Ex. 1002, ¶ 216.

The illustrative commands from the handheld device use authority-compatible handheld interface software. On an iPhone, the implementation library for the software is built on top of iPhone SDK which Redford calls the iLook iPhone SDK. Ex. 1005, 38:50-63. The library includes a SetVideoRate command to fast forward and rewind, a PlayVideo command to play video, and a PauseStream and ResumeStream commands to pause and resume video. *Id.*, 39:2-54, 40:56-41:45. Any of these are “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.” Ex. 1002, ¶ 217.

Redford discloses limitation [1F].

In the proposed combinations with Gonze, as stated in Sections VI.A.1.a and VI.A.1.e, computer system 250 receives, from handheld device 200, a playlist including the claimed universal playback control command. Ex. 1006, [0006], [0010], [0034]-[0035], [0040], [0049], [0051], [0058]-[0060]. Interactions with the user interface elements (*e.g.*, “<--’, <-’, ‘Stop’, ‘Play’, ‘||’, ‘->’, ‘-->.’”, *Id.*, [0053]) may be monitored and associated commands may be sent to the loaded media player. *Id.*, [0059]. Ex. 1002, ¶ 218.

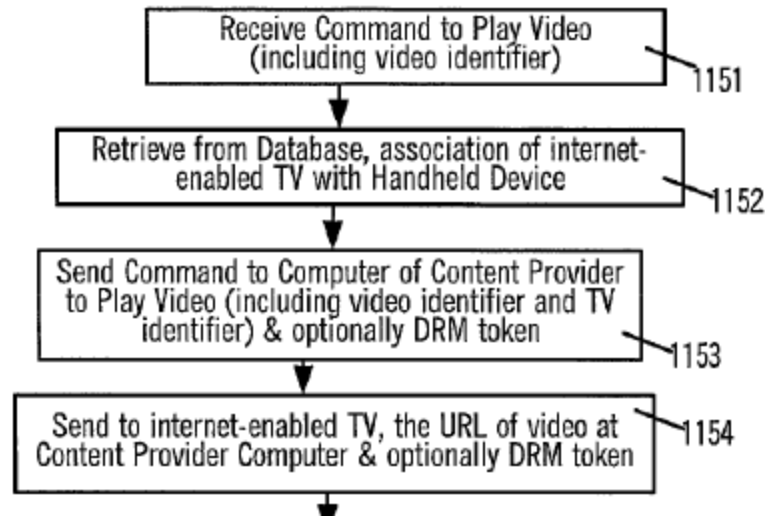
The proposed combinations that include Gonze also teach limitation [1F].

- g. [1G]: “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”**

Redford’s handheld device sends commands utilizing, e.g., the iLook iPhone SDK, including play, pause, rewind, and fast forward. Ex. 1005, 8:1-12, 26:62-27:3, 31:18-23, 36:18-27, 38:50-63, 39:3-54, 40:56-41:45, 43:36-53, 44:6-18, 44:48-52, Figs. 2F, 8A-8B, 11H; Ex. 1002, ¶ 220; Section VI.A.1.f.

Figure 11H shows the response of computer system 250 to a request to play, pause, rewind, etc., a video. Ex. 1005, 36:41-37:40. Upon receipt of a command to play video, computer system 250 retrieves association information, sends a corresponding play command to the content provider specified in the user request, and sends a URL to the television that can fetch and play the requested content from the content provider. *Id.*, 29:4-20, 36:41-52, Figs. 8A-8B, 11H; Ex. 1002, ¶ 221.

FIG. 11H



Ex. 1005, portion of Fig. 11H

As discussed in Section VI.A.1.a, Redford envisions the television loading various media players having different protocols, since particular content providers will use different players. Ex. 1005, 39:22-24, 40:56-41:2; Ex. 1002, ¶ 222. Redford teaches that the playback command from the server to the television will be selected so that it works with the particular media player to be used for particular content. *Id.* A POSITA would have known from reading Redford that computer system 250 converts the “PlayVideo” command, sent from handheld device 200, to a particular “VideoPlay” command, since RTSP has varying implementations depending on the content provider and service and since several implementations of VideoPlay exist to support various these various RTSP players. *Id.*; Ex. 1002, ¶¶ 223-224.

Redford teaches limitation [1G].

In the proposed combinations with Gonze, as stated in Sections VI.A.1.a and VI.A.1.e-VI.A.1.f, interactions with the general user interface elements (*e.g.*, “<--”, ‘<-’, ‘Stop’, ‘Play’, ‘||’, ‘->’, ‘-->.’”), Ex. 1006, [0053]) may be monitored and associated converted commands may be sent to the loaded media player. Ex. 1006, [0059], see also, [0006], [0010], [0034]-[0035], [0040], [0049], [0051], [0058]-[0060]. Ex. 1002, ¶ 225.

The proposed combinations that include Gonze also teach limitation [1G].

- h. [1H]: “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.”**

Upon receipt of a command to play video, computer system 250 retrieves association information, sends a corresponding play command to the content provider specified in the user request, and sends a URL to the television for fetching and playing the requested content. Ex. 1005, 27:56-59, 29:4-20, 36:41-52, Figs. 8A-8B, 11H (step 1154); Section VI.A.1.g. A POSITA would have understood that computer system 250 stores information for transmission to or retrieval by the television 303 where 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 as a URL. Ex. 1005, 27:56-28:3, 29:4-20, 36:41-52, 38:50-57, 43:63, Figs. 8A-8B, 11H. Specifically, Redford describes that television 303 uses the URL to play content. *Id.* Computer system 250 stores the URL, and associated data, in a database associated with the computer system. *Id.*, 43:36-51. A POSITA would have known that it was common to store, in a server associated database, information for transmission to or retrieval by a display device. Ex. 1002, ¶¶ 227-228.

Redford discloses limitation [1H].

In the proposed combinations with Gonze, as stated in Sections VI.A.1.a and VI.A.1.e-VI.A.1.g, Redford stores a URL and Gonze's interactions with the general user interface elements (*e.g.*, “<--”, “<-”, “Stop”, “Play”, “||”, “->”, “-->.”), Ex. 1006, [0053]) may be monitored and associated converted commands for a particular media player are stored prior to sending to or receipt by television 303. Ex. 1005, 27:56-59, 29:4-20, 36:41-52; Ex. 1006, [0059], see also, [0006], [0010], [0034]-[0035], [0040], [0049], [0051], [0058]-[0060]; Ex. 1002, ¶ 229.

The proposed combinations that include Gonze also teach limitation [1H].

2. Dependent Claim 2

a. [2A]: “The method of claim 1 including:”

The proposed combinations each teach limitation [2A]. *See* Section VI.A.1, *supra*; Ex. 1002, ¶ 230.

b. [2B]: “checking, in the server system, the identity of the media player identified in the one or more signals from the personal computing device;”

As noted above in Section VI.A.1.g, *supra*, Redford’s Figure 11H provides the actions by the computer system 250 (“the server system”) following receipt of a video request 301 specific to a request to play a user specified video. Ex. 1005, 36:41-37:40. As shown in Figure 11H, upon receipt of a command to play video, computer system 250 retrieves association information, sends a corresponding play command to the content provider specified in the user request, and sends a URL to the television to allow for fetching and playing of the requested content, from a specific content provider, by the television. Ex. 1005, 29:4-20, 36:41-53, Figs. 8A-8B, 11H; Ex. 1002, ¶ 232.

Redford further discloses a “PlayVideo” command, sent from handheld device 200 to computer system 250, to play video on television 303 (Ex. 1005, 39:22-24) and a “VideoPlay” command sent from computer system 250 and received by television 303 that allows video content to be played using protocols such Real Time Streaming Protocol (RTSP), User Datagram Protocol (UDP) and Hypertext Transfer Protocol (HTTP) Streaming including media player codecs needed for

decoding the content for display (*Id.*, 40:56-58, 41:1-2, 41:53-54), including several implementations of VideoPlay existing to support various RTSP players. *Id.*, 40:56-41:2. A POSITA would have known from reading Redford that, in order for computer system 250 to convert the “PlayVideo” command, sent from handheld device 200, to a particular “VideoPlay” command, since RTSP has varying implementations depending on the content provider and service and since Redford notes that several implementations of VideoPlay exist to support various these various RTSP players, the computer system 250 identifies the particular media player, *e.g.*, particular RTSP player, identified in the video request from the handheld device 200. *Id.*; Ex. 1002, ¶ 233. Specifically, Redford discloses that, in embodiments that support multiple content providers, server 282 also receives “an identifier of the content provider that maintains a repository 834I (FIG. 8B) in which a file containing video 302 is available.” Ex. 1005, 26:64-27:3, *see also*, 36:18-27, 43:36-53, 44:6-18, Figs. 8A-8B. A POSITA would have understood from reading Redford that the computer system 250 checks, in the video request from handheld device 200, the identity of the identified content provider corresponding to the particular media player. Ex. 1002, ¶ 233.

Redford discloses and teaches limitation [2B].

- c. **[2C]: “loading an appropriate set of protocols or application programming interfaces from a library based on the identity of the media player; and”**

Redford describes television 303 includes an SDK shared library 914 that utilizes APIs and allows video content to be played, paused, etc., using video-streaming protocols such Real Time Streaming Protocol (RTSP), User Datagram Protocol (UDP), and Hypertext Transfer Protocol (HTTP) Streaming, including several implementations of VideoPlay existing to support various RTSP players, and media player codecs that decode the content to be displayed. Ex. 1005, 30:46-61, 40:21-39, 40:56-41:26, 41:46-67, Fig. 9B. A “VideoPlay” command is a function that allows specific video content to be played by a specific player (“based on the identity of the media player”). *Id.*; Ex. 1002, ¶¶ 235-239.

A POSITA would have known that television 303 loads the “PlayVideo” command, from library 914, to a particular “VideoPlay” command selecting the applicable “VideoPlay” command for the applicable implementation. *Id.*, ¶ 240.

Redford discloses and teaches limitation [2C].

- d. **[2D]: “converting the command from the personal computing device into corresponding code to control the media player.”**

Per Section VI.A.1.g, *supra*, Redford discloses limitation [2D]. Ex. 1002, ¶¶ 242-247.

3. Dependent Claim 5

- a. **“The method of claim 1 wherein the universal command represents an instruction to play the video content, to stop playing the video content or to pause playing the video content.”**

Claim 5 depends from claim 1 and the proposed combinations each teach limitations [1A]-[1H]. *See* Section VI.A.1, *supra*. Ex. 1002, ¶ 248.

As discussed in Section VI.A.1.f-VI.A.1.h, *supra*, Redford describes both a command to play the video content and a command to pause the video content. Ex. 1005, 8:1-12, 26:62-27:3, 36:18-27, 36:41-42, 39:22-24, 39:48-49, 43:36-53, 44:6-18, Figs. 2F, 8A-8B, 11H; Ex. 1002, ¶ 249.

Redford discloses claim 5.

4. Dependent Claim 7

- a. **“The method of claim 1 wherein the video content is streaming media.”**

Claim 7 depends from claim 1 and the proposed combinations each teach limitations [1A]-[1H]. *See* Section VI.A.1, *supra*. Ex. 1002, ¶ 251.

Redford discloses that television 303 receives a sequence of frames of video (“streaming media”) from a content provider 281I using any of various protocols such as RTSP (real time streaming protocol), HTTP, UDP, etc. Ex. 1005, 2:31-33, 16:40-47, 21:25-30, 22:47-61, 23:37-41, 26:53-56, 30:56-61, 40:42-46, 40:56-41:2; Ex. 1002, ¶ 252.

Redford discloses claim 7.

5. Dependent Claim 8

- a. **“The method of claim 1 wherein the synchronization code is uniquely associated with the display device on which the video content is to be played.”**

Claim 8 depends from claim 1 and the proposed combinations each teach limitations [1A]-[1H]. *See* Section VI.A.1, *supra*. Ex. 1002, ¶ 254.

As discussed in Section VI.A.1.b, *supra*, Redford discloses that server 282 of computer system 250 receives, from television 303, registration information including an IP address, TV-name, and TV-password (each a “synchronization code”). Ex. 1005, 31:7-14, 44:44-48. A POSITA would have understood that IP address, TV-name, and TV-password are each “uniquely associated with the display device on which the video content is to be played” as each are stored in a record of the computer system unique to the specific television 303 associated with the handheld device 200. Ex. 1002, ¶ 255.

As discussed in Section VI.A.1.b, *supra*, Bartfeld discloses that synchronization code “may be selected by any convenient manner such as random number generation, selection from a list, ... and the like ... Clearly, a never repeating [synchronization code] may be used.” Ex. 1018, [0025]; Ex. 1002, ¶¶ 257-261.

The proposed combinations disclose claim 8.

6. Dependent Claim 9

- a. **“The method of claim 8 wherein the synchronization code is different from an IP address associated with the display device and is different from a MAC address associated with the display device.”**

The proposed combinations each teach limitations [1A]-[1H] and claim 8. *See* Sections VI.A.1, VI.A.5, *supra*. Ex. 1002, ¶ 262.

As discussed in Sections VI.A.1.b and VI.A.5, *supra*, Redford discloses that server 282 of computer system 250 (“server system”) receives, from television 303, registration information including TV-name and TV-password (each a “synchronization code”). Ex. 1005, 31:7-14, 44:44-48. TV-name and TV-password are each “different from an IP address associated with the display device and [] different from a MAC address associated with the display device.” Ex. 1002, ¶ 263.

As discussed in Section VI.A.1.b, *supra*, Bartfeld discloses that synchronization code “may be selected by any convenient manner such as random number generation, selection from a list, ... and the like ... Clearly, a never repeating [synchronization code] may be used.” Ex. 1018, [0025]; Ex. 1002, ¶ 265. Each example is “different from an IP address associated with the display device and is different from a MAC address associated with the display device.” *Id.*

The proposed combinations disclose claim 9.

7. Dependent Claim 10

- a. **“The method of claim 8 wherein assigning a synchronization code includes assigning a randomly generated code to the display device each time the display device connects to the server system.”**

The proposed combinations each teach limitations [1A]-[1H] and claim 8. *See* Sections VI.A.1 and VI.A.5, *supra*. Ex. 1002, ¶ 266.

Claim 9 of the '251 Patent requires that the synchronization code “is different from an IP address associated with the display device.” Ex. 1001, claim 9. By claim differentiation, the synchronization code may be an IP address associated with the display device in claims 1, 8, and 10. Ex. 1002, ¶ 267.

As discussed in Sections VI.A.1.b and VI.A.5, *supra*, Redford discloses that server 282 of computer system 250 receives, from television 303, registration information including an IP address. Ex. 1005, 31:7-14, 44:44-48. A POSITA would have understood that this IP address may be a dynamically generated IP address of the display device (“a randomly generated code to the display device each time the display device connects to the server system”). A POSITA would have understood from reading Redford that there is no limitation on the times in which television 303 connects to computer system 250, nor is there a limitation on the number of times initialization step 921 is performed for each such connection and that a new dynamic IP address would be assigned each time for the television 303. Ex. 1002, ¶ 268.

As discussed in Section VI.A.1.b, *supra*, Bartfeld discloses that synchronization code “may be selected by any convenient manner such as random number generation . . . The [synchronization code] need not be long or complex as its lifespan is considered short—only until activation of the service is accomplished—but may be complex if so desired.” Ex. 1018, [0025]; Ex. 1002, ¶269.

The proposed combinations teach claim 10.

8. Independent Claim 11

- a. [11A]: “A system for controlling playing of video content on a display device that loads any one of a plurality of different media players, the system comprising:”**

As discussed in Section VI.A.1.a, *supra*, the proposed combinations disclose the preamble. Ex. 1002, ¶¶ 271-291.

- b. [11B]: “a server system;”**

As described in Sections VI.A.1.a-VI.A.1.b, *supra*, Redford discloses a computer system 250 illustratively described in Figure 8B as a server system. Ex. 1005, 2:64-67, 4:13-14, Fig. 2B; Ex. 1002, ¶¶ 292-294.

- c. **[11C]: “a first database storing a relationship between a personal computing device and the display device based on a synchronization code assigned by the server system to the display device and received by the server system in a message from the personal computing device, wherein the personal computing device is separate from the server system and separate from the display device; and”**

As described in Sections VI.A.1.b-VI.A.1.d, *supra*, the proposed combinations teach limitation [11C]. Ex. 1005, 36:2-3, 43:15-20. Storage of association information is illustratively shown at 1134 in Redford’s Figure 11D. Ex. 1002, ¶¶ 295-299.

To the extent it is determined that Redford does not expressly disclose that computer system 250 assigns a synchronization code to television 303, it would have been obvious to modify Redford’s computer system 250 to include the claimed capability that computer system 250 generates a synchronization code for television 303 as would have been understood by a POSITA as described above in Section VI.A.1.b. Ex. 1002, ¶¶ 300-302.

To the extent it is determined that Redford does not teach that computer system 250 assigned a synchronization code to television 303, Bartfeld does as described above in Section VI.A.1.b. Ex. 1002, ¶¶ 303-309.

- d. **[11D]: “a second database;”**

Redford discloses that server 282 includes a “database” maintaining “information on each content provider.” Ex. 1005, 27:56-28:3, 36:50-52, 43:36-51,

Figs. 8A-8B, 11H, 11K (1154-URL that is sent is stored, even temporarily, before sending); Ex. 1002, ¶¶ 310-312.

To the extent it is determined that Redford does not expressly disclose that computer system 250 maintains multiple databases for operation and storage, it would have been obvious to modify Redford's computer system 250 to store in a second database of server 282, information for transmission to or retrieval by a display device, and easy to configure computer system 250 to store such information in either a single database or multiple, separate databases, and either would have been an obvious design choice as would have been understood by a POSITA. A POSITA would have known that computer system 250 may distribute various types of data, such as association data compared to URL data, across a plurality of server databases to allow for easy transmission/retrieval. *Id.*

- e. **[11E]: “wherein the server system is configured to receive 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,”**

As described in Sections VI.A.1.e-VI.A.1.f, *supra*, the proposed combinations teach limitation [11E]. Ex. 1002, ¶¶ 313-323.

- f. **[11F]: “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 to control playing of the video content 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;”**

As described in Sections VI.A.1.a and VI.A.1.g, *supra*, the proposed combinations teach limitation [11F]. Ex. 1002, ¶¶ 324-329.

- g. **[11G]: “the server system being further configured to store in the second database 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.”**

As described in Section VI.A.1.h, *supra*, the proposed combinations teach limitation [11G]. Ex. 1002, ¶¶ 330-332.

9. Dependent Claim 16

- a. **“The system of claim 11 wherein the universal command represents an instruction to play the video content, to stop playing the video content or to pause playing the video content.”**

The proposed combinations each teach limitations [11A]-[11F]. *See* Section VI.A.8, *supra*. Ex. 1002, ¶ 333.

As discussed in Section VI.A.8.e-VI.A.8.g, *supra*, Redford describes both a command to play the video content and a command to pause the video content. Ex. 1005, 8:1-12, 26:62-27:3, 36:18-27, 39:22-24, 43:36-53, 44:6-18, Figs. 2F, 8A-8B, 11H; Ex. 1002, ¶¶ 334-335.

10. Dependent Claim 18

- a. **“The system of claim 11 wherein the video content is streaming media.”**

The proposed combinations each teach limitations [11A]-[11F]. *See* Section VI.A.8, *supra*. Ex. 1002, ¶ 336.

Redford discloses that television 303 receives a sequence of frames of video (“streaming media”) from a content provider server 281I using any of various protocols such as RTSP (real time streaming protocol), HTTP, UDP, etc. Ex. 1005, 2:31-33, 16:40-47, 21:25-30, 22:47-61, 23:37-41, 26:53-56, 30:56-61, 40:42-46, 40:56-41:2; Ex. 1002, ¶¶ 337-338.

11. Dependent Claim 19

- a. **“The system of claim 11 wherein the synchronization code is uniquely associated with the display device on which the video content is to be played.”**

The proposed combinations each teach limitations [11A]-[11F]. *See* Section VI.A.8, *supra*. Ex. 1002, ¶ 339.

Redford discloses that server 282 of computer system 250 (“server system”) receives, from television 303, registration information including an IP address, TV-name, and TV-password. Ex. 1005, 31:7-14, 44:44-48. A POSITA would have understood that IP address, TV-name, and TV-password are each “uniquely associated with the display device on which the video content is to be played” as each are stored in a record of the computer system unique to the specific television 303 associated with the handheld device 200. Ex. 1002, ¶¶ 340-341.

12. Dependent Claim 20

- a. **“The system of claim 19 wherein the synchronization code is different from an IP address associated with the display device and is different from a MAC address associated with the display device.”**

The proposed combinations each teach claims 11 and 19. *See* Sections VI.A.8, VI.A.11, *supra*. Ex. 1002, ¶ 342.

As described in Section VI.A.11, TV-name and TV-password are each “different from an IP address associated with the display device and [] different from

a MAC address associated with the display device.” Ex. 1005, 31:7-14, 44:44-48; Ex. 1002, ¶¶ 343-344.

13. Dependent Claim 21

- a. **“The system of claim 19 wherein the server system is configured to assign as the synchronization code a randomly generated code each time the display device connects to the server system.”**

The proposed combinations each teach claims 11 and 19. *See* Sections VI.A.8, VI.A.11, *supra*. Ex. 1002, ¶ 345.

Claim 20 of the ’251 Patent requires that the synchronization code “is different from an IP address associated with the display device.” Ex. 1001, claim 20. By claim differentiation, the synchronization code may be an IP address associated with the display device in claims 11, 19, and 21. Ex. 1002, ¶ 346.

As described in Section VI.A.11, Redford discloses that server 282 of computer system 250 receives, from television 303, registration information including an IP address. Ex. 1005, 31:7-14, 44:44-48. A POSITA would have understood from reading Redford that there is no limitation on the times in which television 303 connects to computer system 250, nor is there a limitation on the number of times initialization step 921 is performed for each such connection, based on a new dynamic IP address for the television 303. *See* Section VI.A.7, *supra*; Ex. 1002, ¶¶ 347-348.

14. Independent Claim 22

- a. **[22A]: “An automated machine-implemented method of presenting video content on a display device that loads any one of a plurality of different media players, the method comprising:”**

As discussed in Section VI.A.1, *supra*, the proposed combinations disclose the preamble. Ex. 1002, ¶¶ 349-366.

- b. **[22B]: “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;”**

As described in Sections VI.A.1.b-VI.A.1.d, *supra*, the proposed combinations disclose limitation [22B]. Ex. 1002, ¶¶ 367-385.

- c. **[22C]: “retrieving, by the display device from the 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;”**

As described in Sections VI.A.1.e -VI.A.1.f, *supra*, Redford discloses that server 282 of computer system 250 previously receives, from handheld device 200,

one or more signals specifying the first video file, identifying the first media player and including the first playback control command. Ex. 1005, 26:62-27:16, 36:18-27, 43:36-53, 44:6-18, Figs. 8A-8B; Ex. 1002, ¶¶ 386-389.

As described in Section VI.A.1.g, *supra*, Redford describes using commands utilizing the iLook iPhone SDK, including play, pause, rewind, and fast forward. Ex. 1005, 8:1-12, 26:62-27:3, 31:18-23, 36:18-27, 38:50-63, 39:2-54, 40:56-41:45, 43:36-53, 44:6-18, 44:48-52, Figs. 2F, 8A-8B, 11H. Redford's computer system 250 includes non-transitory computer-readable media storing instructions that when executed by the computer system, cause the computer system to perform operations. Ex. 1002, ¶¶ 390-392.

Redford's Figure 11H provides the actions by the computer system 250 following receipt of a video request 301 specific to a request to play (or pause, rewind, or fast forward) a user specified video. Ex. 1005, 36-52, 29:4-20, 36:41-53, Figs. 8A-8B, 11H; Ex. 1002, ¶ 393; *See* Section VI.A.1.g, *supra*.

As noted in Section VI.A.1.a, *supra*, Redford teaches that RTSP has varying implementations depending on the content provider and service, therefore several implementations of VideoPlay exist to support various RTSP players. Ex. 1005, 40:56-41:2; Ex. 1002, ¶¶ 394-395; *see* Section VI.A.1.g, *supra*.

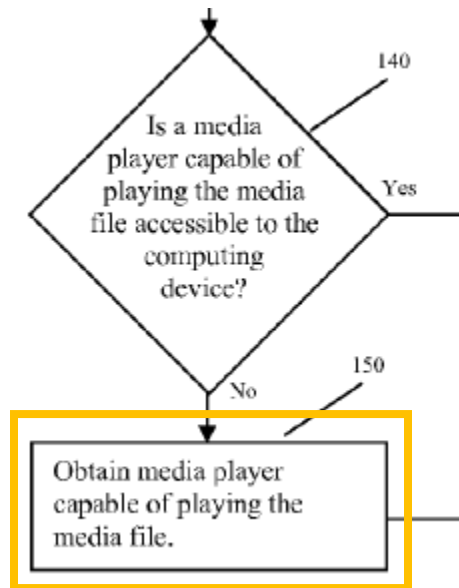
As noted in Section VI.A.1.h, *supra*, upon receipt of a command to play video, computer system 250 retrieves association information, sends a corresponding play

command to the content provider specified in the user request, and sends a URL to the television to allow for fetching and playing of the requested content, from a specific content provider, by the television. Ex. 1005, 27:60-28:3, 29:4-20, 36:41-53, 38:50-56, Figs. 8A-8B, 11H. Computer system 250 stores the URL, and associated data, in a database associated with the computer system. *Id.*, 43:36-51; Ex. 1002, ¶ 396.

Redford discloses limitation [22C].

d. [22D]: “obtaining, by the display device, over the Internet the first media player for playing the first video file;”

As described in Section VI.A.14.a, *supra*, Gonze describes selecting from a plurality of media players based on information in a browser interpretable document playlist. Ex. 1006, [0034]. Gonze describes determining “whether a media player capable of playing a media file in the playlist has been installed on the computing device on which the instant method is implemented,” and, “[i]f no such media player has been installed, the device may be provided with a link through which an appropriate media player can be obtained.” *Id.*, [0058], Fig. 1. Gonze describes that this link may be an Internet connection. *Id.*, [0013]. Gonze describes that the link may obtain the media player. *Id.*, Fig. 1, 150; Ex. 1002, ¶¶ 398-400.



Ex. 1006, Fig. 1 (cropped, annotated)

The proposed combinations disclose limitation [22D].

e. [22E]: “loading the first media player in the display device;”

As described in Section VI.A.14.a, *supra*, Redford’s television includes “[a]uthority-compatible set-top interface software provides a common set-top API (called iLook set-top SDK API) for any chip vendor implementation of set top functionality.” Ex. 1005, 40:24-29. Redford teaches that RTSP has varying implementations depending on the content provider and service, therefore several implementations of VideoPlay exist to support various RTSP players. *Id.*, 40:56-41:2. With this teaching of multiple, different RTSP players being supported, a POSITA would have understood that Redford teaches that television 303 was configured to load any of the plurality of different RTSP application software for

playing back the video content for a particular VideoPlay implementation. Ex. 1002, ¶¶ 401-403.

Redford discloses limitation [22E].

As described in Section VI.A.14.d, *supra*, Gonze describes that if an appropriate media player has not been installed, a device may receive a link through which the appropriate media player can be obtained. Ex. 1006, [0058], Fig. 1. “Once an appropriate media player has been identified and its installation status confirmed, the browser in which the instant method is implemented can cause the computing device to load the appropriate media player.” *Id.*, [0059], Fig. 1; Ex. 1002, ¶¶ 404-405.

The proposed combinations disclose limitation [22E].

- f. **[22F]: “executing the first playback control command with respect to the first video file using the first media player;”**

Television 303 executes predetermined software to display video 302 retrieved from a specific service provider, via the Internet, in response to user request 301. Ex. 1005, 12:5-12, 30:23-61, Figs. 9A-9B; Ex. 1002, ¶¶ 406-408.

- g. [22G]: “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;”**

Limitation [22G] is no different from limitation [22C] but for a second video file, second media player different from the first media player, and second playback control command. Television 303 and computer system 250 operate in the same manner as described in Section VI.A.14.c for a subsequent command entered by a user of handheld device to computer system 250 and converted to a second playback control command. *See* Section VI.A.14.c, *supra*; Ex. 1002, ¶ 410.

In describing Figure 9C, Redford discloses that television 303 plays a user requested video without interruption in act 925 (Ex. 1005, 31:24-35) and thereafter the process returns to act 922 to wait for a command (*Id.*, 31:41-42), which includes a command, among others, for pause, rewind, fast forward, or playing a new video file. *Id.*, 8:3-5, 39:22-24. A POSITA would have understood that Redford describes a system that lets a user request and play first and second video files, utilizing

different media players, and respective first and second playback control commands.

Id., 30:23-61, 40:24-29, 40:56-41:2; Ex. 1002, ¶¶ 411-412.

h. [22H]: obtaining, by the display device, over the Internet the second media player for playing the second video file;”

As described in Section VI.A.14.d, *supra*, Gonze describes selecting from a plurality of media players based on information in a browser interpretable document playlist. Ex. 1006, [0034]. Gonze describes determining “whether a media player capable of playing a media file in the playlist has been installed on the computing device on which the instant method is implemented,” and, “[i]f no such media player has been installed, the device may be provided with a link through which an appropriate media player can be obtained.” *Id.*, [0058], Fig. 1. Gonze describes that this link may be an Internet connection. *Id.*, [0013]. Gonze describes that the link may be used to obtain the media player. *Id.*, Fig. 1, 150; Ex. 1002, ¶¶ 413-415.

The proposed combinations disclose limitation [22H].

i. [22I]: “loading the second media player in the display device; and”

Limitation [22I] is no different from limitation [22E] but for a second media player. Television 303 and computer system 250 operate in the same manner as described in Section VI.A.14.e for a subsequent command entered by a user of handheld device to computer system 250 and converted to a second playback control command. *See* Section VI.A.14.e, *supra*; Ex. 1002, ¶¶ 416-420.

The proposed combinations disclose limitation [22I].

- j. **[22J]: “executing the second playback control command with respect to the second video file using the second media player.”**

As described in Section VI.A.14.f, *supra*, television 303 executes predetermined software, called authority-compatible set-top interface software, to display video 302 retrieved from a specific service provider, via the Internet, in response to user request 301. Ex. 1005, 12:5-12, 30:23-61, Figs. 9A-9B; Ex. 1002, ¶¶ 421-423.

15. Dependent Claim 23

- a. **“The method of claim 22 wherein the display device comprises a television set with a display screen.”**

Claim 23 depends from claim 22 and the proposed combinations each teach limitations [22A]-[22J]. *See* Section VI.A.14, *supra*. Redford’s television 303 is a television set with display screen 307. Ex. 1005, Fig. 9A; Ex. 1002, ¶¶ 424-426.

16. Dependent Claim 24

- a. **“The method of claim 22 wherein the display device comprises a laptop or personal computer.”**

Claim 24 depends from claim 22 and the proposed combinations each teach limitations [22A]-[22J]. *See* Section VI.A.14, *supra*. Ex. 1002, ¶ 427.

Redford describes that the display device may be an internet-enabled television 303. Ex. 1005, Fig. 9A. Redford further notes that “[n]umerous modifications and adaptations of the embodiments described herein will become

apparent to the skilled artisan in view of this disclosure.” *Id.*, 48:16-18. As discussed above in Section IV.B, Gonze discloses a system for making content available from multiple providers such that a playback device can request, receive, and present the content using a playlist. Ex. 1006, Abstract, [0010], [0034], [0035], [0040], [0049], [0051]. The content in Gonze may be in a variety of media formats (*e.g.*, RealMedia, QuickTime, Windows Media) which may require different media player applications (*e.g.*, RealPlayer, QuickTime player, Microsoft Media Player) to properly output the content. Ex. 1006, [0006], [0060]. Gonze specifically notes that “[m]any devices, including, **without limitation, personal computers (“PC’s”), laptops**, personal digital assistants (“PDA’s”), cellular telephones, gaming consoles, and portable media players (“PMP’s”) are now capable of playing content.” *Id.*, [0010] (emphasis added). Ex. 1002, ¶ 428.

As discussed in Section VI.A.14.a, *supra*, a POSITA would have understood television 303 of Redford is just another type of media playback device. *Id.* Based upon the teachings of Redford, it would have been obvious to a POSITA that Internet-enabled television 303 could have been a personal computer or laptop as described by Gonze because a television, personal computer, and laptop were known as different types of media playback devices. Modifying Redford’s internet-enabled television to be a personal computer or laptop device, as taught by Gonze, would be merely using known techniques (supporting multiple media players for presenting

content in a playback device) to improve similar devices (the server-based video systems taught in Redford and Gonze) in the same way (utilizing the teachings of Redford's television 303 in Gonze's personal computer or laptop device). Ex. 1002, ¶ 429.

Additionally, a POSITA would have had the skills to implement Gonze's personal computer or laptop in Redford's system by incorporating into Gonze's personal computer or laptop the capabilities of Redford's Internet-enabled television. *Id.* Thus, a POSITA would have expected success in applying Gonze's teaching of a personal computer or laptop as a playback device to the similar Redford system that utilizes a television as playback device because adding Gonze's device to Redford's system would have required just minor hardware, software, and/or firmware modifications, which would have been well within the skill set of a POSITA. *Id.*

The proposed combinations disclose claim 24.

17. Dependent Claim 25

- a. “The method of claim 22 wherein each of the first and second commands represents an instruction to play the respective video file, to stop playing the respective video file or to pause playing the respective video file.”**

Claim 25 depends from claim 22 and the proposed combinations each teach limitations [22A]-[22J]. *See* Section VI.A.14, *supra*. Ex. 1002, ¶ 431.

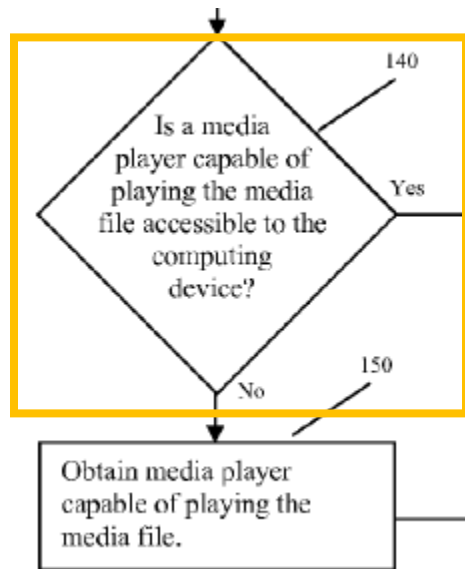
As discussed in Section VI.A.14, *supra*, Redford describes both a command to play the video content (“PlayVideo” command) and a command to pause the video content. Ex. 1005, 8:1-12, 26:62-27:3, 36:18-27, 39:22-24, 43:36-53, 44:6-18, Figs. 2F, 8A-8B, 11H. Ex. 1002, ¶¶ 432-433.

18. Dependent Claim 26

- a. “The method of claim 22 wherein the display device checks whether the respective media player needed to play the particular one of the video files already is loaded in the display device before obtaining a copy of the media player over the Internet.”**

Claim 26 depends from claim 22 and the proposed combinations each teach limitations [22A]-[22J]. *See* Section VI.A.14, *supra*. Ex. 1002, ¶ 434.

As described in Section VI.A.14.a, *supra*, Gonze describes selecting from a plurality of media players based on information in a browser interpretable document playlist. Ex. 1006, [0034]. Gonze describes determining “whether a media player capable of playing a media file in the playlist has been installed on the computing device on which the instant method is implemented,” and, if the media player has been installed (Yes output from block 140), the process proceeds to block 160 without, and before, obtaining a copy of the media player over the Internet. *Id.*, [0058], Fig. 1; Ex. 1002, ¶¶ 435-436.



Ex. 1006, Fig. 1 (annotated and excerpted)

The proposed combinations disclose claim 26.

B. Grounds E-H: Grounds A-D in view of Chilvers Render Claims 2-4 and 12-15 Obvious

1. Dependent Claim 2

a. [2A]: “The method of claim 1 including:”

The proposed combinations each teach limitation [2A]. *See* Section VI.A.1, *supra*; Ex. 1002, ¶¶ 437-438.

b. [2B]: “checking, in the server system, the identity of the media player identified in the one or more signals from the personal computing device;”

As noted above in Sections VI.A.1.g and VI.A.2.b, *supra*, Redford discloses limitation [2B]. Ex. 1002, ¶¶ 439-441.

To the extent it is determined that Redford does not teach limitation [2B], Chilvers does.

Chilvers discloses a system for remotely accessing user equipment to, e.g., watch video content, that receives identification information. The information may be a vendor, model, or other identifier of the equipment, e.g., that the equipment includes “a 180-hr TiVo Series2 digital video recorder vended by TiVo, Inc.” Ex. 1007, 18:24-33, 27:36-46; Ex. 1002, ¶¶ 443-444.

The system also receives from a user device a generically-formatted request indicating instructions for the equipment, and then cross-references the user request with an action request selected from a lookup table to be in a format compatible with the equipment. The user request is cross-referenced with the corresponding action request via a lookup table. Ex. 1007, 28:19-28, 28:64-29:46. To select an appropriately formatted action request, the system checks the user equipment identification information which can include the identity of the media player the equipment will use (the claimed “checking...the identity of the media player identified”). *Id.*, Title, Abstract, 1:50-52, 2:6-15, 28:9-47, 28:64-29:46 Figs. 4, 13A-13B; Ex. 1002, ¶ 445. The action request is then transmitted to the equipment, which can execute the properly-formatted instructions. Ex. 1007, Title, Abstract, 1:50-52, 2:6-15, 3:37-4327:24-26, 28:9-47, 28:64-29:46 Figs. 4, 13A-13B; Ex. 1002, ¶ 445.

A POSITA would have understood that a server system, such as computer system 250 of Redford, that supports different media players, would check the identity of a particular media player in a user request to provide an appropriately-

formatted instruction. Even assuming this was not clear from Redford, Chilvers teaches this concept. Ex. 1002, ¶¶ 446-447.

A POSITA would have been motivated to implement the proposed Redford systems in view of Chilvers to check the media player information that Redford's system already provides to the server from the handheld device, before the Redford system does its conversion, to ensure the conversion is done properly. Ex. 1002, ¶ 447. Redford already describes video on demand movies where the content is streamed from a server to the user's television, thus recognizing the desirability to users of obtaining content of their choosing at a time of their choosing. Ex. 1005, 4:57-5:4, 5:34-36, 7:22-26, 7:33-35, 11:37-42, 12:8-12, 27:4-16; Ex. 1002, ¶ 447. Redford also provides the capability of executing additional applications thus enabling the easy addition of additional functionality to Redford's system. Ex. 1005, 41:56-67; Ex. 1002, ¶ 447. A POSITA would have been motivated by the teachings of Chilvers to have computer system 250 check for the user equipment identification information in order to cross-reference, as taught by Chilvers, the needed format for the action request from the handheld device 200 to ensure proper operation. *Id.*, ¶ 448.

Combining Chilvers with Redford would be merely using known techniques (checking the identity of a particular media player in a received signal) to improve similar devices (the server-based video systems taught in Redford and Chilvers) in

the same way (ensuring proper signals are used for Redford's conversion). Ex. 1002, ¶ 449. Chilvers teaches a system like Redford where information is received indicating what content is available, a user selects from that content, and a server informs the playback device regarding how to access and output the content. *Id.*

Additionally, a POSITA would have had the skill to check the identity of a particular media player by incorporating into Redford's computer system 250 the ability to check the identity of a particular media player as taught by Chilvers, among the plurality of media players that Redford supports to ensure proper conversion by Redford. A POSITA would have expected success because adding Chilvers' checking the identity of the media player to Redford's computer system 250 would have required just minor hardware, software, and/or firmware modifications, which would have been well within the skill set of a POSITA. *Id.*, ¶ 450.

The proposed combinations render obvious limitation [2B].

c. [2C]: “loading an appropriate set of protocols or application programming interfaces from a library based on the identity of the media player; and”

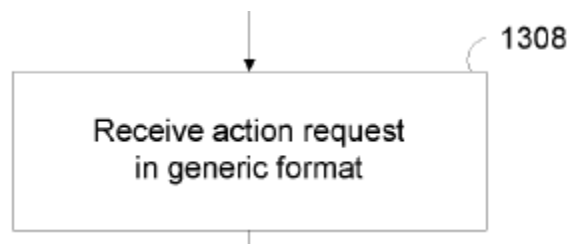
As discussed above in Section VI.B.1.b, Chilvers teaches that a user request for ordering content is cross-referenced, via a look-up table, with an action request in a user equipment format indicated by the received user equipment identification information. Ex. 1007, 28:19-28, 28:64-29:46. Chilvers describes that “[p]rocessing circuitry 464 of remote access server 460 may perform the cross-referencing and

may retrieve information from storage 470, which may store the lookup table in any suitable format such as, in Structured Query Language (SQL) format.” *Id.*, 29:12-16. Chilvers describes that storage 470 stores application program interface (API) 462, which is run by processing circuitry 464. *Id.*, 15:45-48, Figs. 4-5. Thus, Chilvers teaches that API 462 (“an appropriate set of protocols or application programming interfaces”) is loaded, by the server 460, from storage 470 (“library”) based on the received user equipment identification information (“identity of the media player”). Ex. 1002, ¶¶ 452-453.

The proposed combinations render obvious limitation [2C].

d. [2D]: “converting the command from the personal computing device into corresponding code to control the media player.”

Chilvers describes, in step 1308, that a user request is received, by a server, in a generic format for a function offered by an interactive media guidance application, such as order or record. Ex. 1007, Abstract, 28:9-47, Fig. 13A; Ex. 1002, ¶ 455.



Ex. 1007, Portion of Fig. 13A

The generic requests are shown in an “illustrative lookup table 1350 for cross-referencing user requests with action requests in a plurality of formats.” Ex. 1007,

29:17-46, Fig. 13B. Depending on the particular user equipment identification information, the user's request in generic format ("command from the personal computing device") is converted, utilizing the look-up table to corresponding command ("code") to control the media player, such as "837068X" for a DirectTV XR2 HD-DVR command. *Id.*, Fig. 13B; Ex. 1002, ¶ 456.

Ex. 1007, Fig. 13B

The proposed combinations render obvious limitation [2D].

2. Dependent Claim 3

- a. “The method of claim 1 wherein converting the command into corresponding programming code to control the media player includes using information in a look-up table.”**

The proposed combinations each teach Claim 1. *See* Section VI.A.1, *supra*.
Ex. 1002, ¶ 460.

As discussed in Section VI.B.1, *supra*, the proposed combinations teach utilizing look-up table 1350 for converting the generic command from a user, shown in column 1352, to a specific equipment command, shown in cells below column 1354. Ex. 1007, 29:17-46, Fig. 13B; Ex. 1002, ¶¶ 461-462.

The proposed combinations render obvious claim 3.

3. Dependent Claim 4

- a. “The method of claim 3 wherein the look-up table stores a plurality of specific commands, each of which represents, respectively, a corresponding command for a different media player.”**

The proposed combinations each teach claims 1 and 3. *See* Sections VI.A.1, VI.B.2, *supra*. Ex. 1002, ¶ 463.

As discussed in Section VI.B.2, *supra*, the proposed combinations teach utilizing look-up table 1350 for converting the generic command from a user, shown in column 1352, to a specific equipment command, shown in cells below column 1354. Ex. 1007, 29:17-46, Fig. 13B; Ex. 1002, ¶ 464.

Look-up table 1350 stores a plurality of specific commands, *e.g.*, “REC,” “RC1,” and “837068X,” each of which represents, respectively, a corresponding command for a different specific user equipment, *e.g.*, “TiVO Series2 DVR Cmd,” “Comcast CVC8 DVR Cmd,” and “DirecTV XR2 HD-DVR Cmd” applicable to Redford’s software media players. *Id.*, 29:17-46, Fig. 13B; Ex. 1002, ¶ 464.

The proposed combinations render obvious claim 4.

4. Dependent Claim 12

a. [12A]: “The system of claim 11 including:”

The proposed combinations each teach limitation [12A]. *See* Section VI.A.8, *supra*. Ex. 1002, ¶¶ 466-467.

b. [12B]: “a library storing protocols or application programming interfaces,”

[12C]: “wherein the server system is configured to check the identity of the media player identified in the one or more signals from the personal computing device, load an appropriate set of protocols or application programming interfaces from the library based on the identity of the media player, and convert the command from the personal computing device into a corresponding programming code to control the media player.”

As described in Section VI.B.1, the proposed combinations render obvious limitations [12B] and [12C]. Ex. 1002, ¶¶ 468-485.

5. Dependent Claim 13

a. [13A]: “The system of claim 11 including:”

The proposed combinations each teach claim 11. *See* Section VI.A.8, *supra*; Ex. 1002, ¶¶ 486-487.

b. [13B]: “a look-up table storing a plurality of commands each of which is for a particular type of media player,”

[13C]: “wherein the server system is configured to convert the command into corresponding programming code to control the media player based on information in the look-up table.”

As described in Sections VI.B.1-VI.B.2, *supra*, the proposed combinations render obvious limitations [13B] and [13C]. Ex. 1002, ¶ 488.

6. Dependent Claim 14

a. “The system of claim 11 wherein the look-up table stores a correspondence between the universal command and a plurality of specific commands, each of which is for a different media player.”

The proposed combinations each teach claim 11. *See* Section VI.A.8, *supra*. Ex. 1002, ¶ 490.

As discussed in Sections VI.B.2-VI.B.3, *supra*, Chilvers teaches utilizing look-up table 1350 for converting the generic command from a user, shown in column 1352, to a specific equipment command, shown in cells below column 1354. Ex. 1007, 29:17-46, Fig. 13B; Ex. 1002, ¶ 491.

Look-up table 1350 stores a plurality of specific commands, *e.g.*, “REC,” “RC1,” and “837068X,” each of which represents, respectively, a corresponding command for a different specific user equipment, *e.g.*, “TiVO Series2 DVR Cmd,” “Comcast CVC8 DVR Cmd,” and “DirecTV XR2 HD-DVR Cmd” applicable to Redford’s software media players. *Id.*, 29:17-46, Fig. 13B; Ex. 1002, ¶ 491.

7. Dependent Claim 15

- a. “The system of claim 14 the server system is configured to convert the universal command by selecting from among the plurality of specific commands stored in the look-up table.”**

The proposed each teach claim 14. *See* Section VI.B.6, *supra*; Ex. 1002, ¶ 493.

As discussed in Sections VI.B.6, *supra*, Redford-Chilvers teaches utilizing look-up table 1350 for converting the generic command, shown in column 1352, from a user to a specific user equipment command, shown in cells below column 1354. Ex. 1007, 29:17-46, Fig. 13B; Ex. 1002, ¶ 494.

Look-up table 1350 stores a plurality of specific commands, *e.g.*, “REC,” “RC1,” and “837068X,” each of which represents, respectively, a corresponding command for a different specific user equipment, *e.g.*, “TiVO Series2 DVR Cmd,” “Comcast CVC8 DVR Cmd,” and “DirecTV XR2 HD-DVR Cmd” applicable to Redford’s software media players. *Id.*, 29:17-46, Fig. 13B; Ex. 1002, ¶ 494.

C. Grounds I-L: Grounds A-D in view of Malik Render Claims 6 and 17 Obvious

1. Dependent Claim 6

a. “The method of claim 1 wherein the video content is an interactive video game.”

The proposed combinations each teach claim 1. *See* Section VI.A.1, *supra*; Ex. 1002, ¶ 496.

Redford’s system lets a user stream video content for output to television 303. Ex. 1005, 6:40-52, 11:37-12:12, 21:20-30, 22:5-23, Figs. 2B, 3A-3C, 6A-6B, 8A-8B, 11A. Video content includes on demand and live broadcast (Ex. 1005, Abstract, 2:24-37, 2:53-58, 4:66-5:4, 5:28-41, 6:3-5, 7:22-26) and originates from various sources and platforms. *Id.*, 7:28-43; Ex. 1002, ¶ 497.

Malik discloses a game server 110 that, responsive to a request via a separate remote wireless device 170, adds the device to an interactive video game. The device is a data controller used by participants that join the game while the interactive video game is outputted on a display 134. Ex. 1008, [0022], [0029]. Like use of URL addressing in Redford, Malik’s device 170 implements the request to join the game by entering a hypertext transfer protocol or other address associated with the interactive video game 112 on game server 110. Ex. 1005, 29:4-20, 36:41-53; Ex. 1008, [0035]; Ex. 1002, ¶ 498.

Consistent with Section VI.A.1.a, it would have been obvious for Redford’s television to display, and allow the remote control of, not just videos but also

interactive video games, as taught by Malik. Ex. 1005, 7:28-43; Ex. 1002, ¶ 499. Redford already describes a system allowing for different types of video content providers, and does not exclude interactive video game content. Ex. 1002, ¶ 500.

A POSITA would have been motivated to modify Redford's system in view of Malik to let a user request and control video content that is an interactive video game to provide more options for playing back content and providing a more varied user experience. *Id.*, ¶ 501.

Combining Malik with Redford would be merely using known techniques (allowing remote control and display of interactive video games) to improve similar devices (the server-based video systems taught in Redford and Malik) in the same way (the user may remotely issue commands for various interactive video game). Ex. 1002, ¶ 502.

A POSITA would have had the skill to implement support for interactive video game content providers in Redford's system and expected success in doing so, because it would have required just minor hardware, software, and/or firmware modifications to accommodate a different type of content provider (interactive video game provider) and/or implementing certain commands, such as pause, to be a converted pause command for pausing video game content, which would have been well within the skill set of a POSITA. Ex. 1002, ¶¶ 503-504.

The proposed combinations render obvious claim 6.

2. Dependent Claim 17

- a. “The system of claim 11 wherein the video content is an interactive video game.”**

The proposed combinations each teach claim 11. *See* Section VI.A.8, *supra*.
Ex. 1002, ¶ 505.

As described in Section VI.C.1, *supra*, the proposed combinations render obvious claim 17. Ex. 1002, ¶¶ 506-513.

VII. GROUNDS FOR STANDING & FEE PAYMENT

Petitioner certifies that the '251 Patent is available for, and Petitioner is not barred or estopped from requesting, *inter partes* review challenging claims 1-26.

Under 37 C.F.R. § 42.103, the undersigned authorizes the charge of any required fees to Deposit Account No. 19-0733.

VIII. CONCLUSION

Inter partes review should be instituted and claims 1-26 canceled.

Dated: December 27, 2023

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CERTIFICATION UNDER 37 CFR § 42.24(d)

Under the provisions of 37 CFR § 42.24(d), the undersigned hereby certifies that the word count for the foregoing Petition for Inter Partes Review totals 13,996, which is less than the 14,000 allowed under 37 CFR § 42.24(a)(1)(i). This total includes 13,996 words as counted by the Word Count feature of Microsoft Word and 0 words used in annotations.

Pursuant to 37 C.F.R. § 42.24(a)(1), this count does not include the table of contents, the table of authorities, mandatory notices under § 42.8, the certificate of service, this certification of word count, the claims listing appendix, or appendix of exhibits.

BANNER & WITCOFF, LTD

Dated: December 27, 2023

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CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.105, I hereby certify that I caused a true and correct copy of this Petition for *Inter Partes* Review in connection with U.S. Patent No. 8,356,251 and supporting evidence to be served via FedEx Priority Overnight on December 27, 2023, on the following:

SHOOK, HARDY & BACON LLP
Touchstream Technologies (149550)
INTELLECTUAL PROPERTY DEPARTMENT
2555 Grand Blvd.
Kansas City, MO 64108

Dated: December 27, 2023

By: /Frederic M. Meeker/

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CLAIM LISTING APPENDIX

U.S. Pat. No. 8,356,251

Designation	Claim Language
Claim 1	
[1A]	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 players, the method comprising:
[1B]	assigning, by a server system, a synchronization code to the display device;
[1C]	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;
[1D]	storing, by the server system, a record establishing an association between the personal computing device and the display device based on the synchronization code;
[1E]	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,
[1F]	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,
[1G]	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
[1H]	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

Designation	Claim Language
	the display device by the particular media player in accordance with the universal playback control command.
Claim 2	
[2A]	2. The method of claim 1 including:
[2B]	checking, in the server system, the identity of the media player identified in the one or more signals from the personal computing device;
[2C]	loading an appropriate set of protocols or application programming interfaces from a library based on the identity of the media player; and
[2D]	converting the command from the personal computing device into corresponding code to control the media player.
Claim 3	
3	3. The method of claim 1 wherein converting the command into corresponding programming code to control the media player includes using information in a look-up table.
Claim 4	
4	4. The method of claim 3 wherein the look-up table stores a plurality of specific commands, each of which represents, respectively, a corresponding command for a different media player.
Claim 5	
5	5. The method of claim 1 wherein the universal command represents an instruction to play the video content, to stop playing the video content or to pause playing the video content.
Claim 6	
6	6. The method of claim 1 wherein the video content is an interactive video game.
Claim 7	
7	7. The method of claim 1 wherein the video content is streaming media.
Claim 8	
8	8. The method of claim 1 wherein the synchronization code is uniquely associated with the display device on which the video content is to be played.
Claim 9	
9	9. The method of claim 8 wherein the synchronization code is different from an IP address associated with the display

Designation	Claim Language
	device and is different from a MAC address associated with the display device.
Claim 10	
10	10. The method of claim 8 wherein assigning a synchronization code includes assigning a randomly generated code to the display device each time the display device connects to the server system.
Claim 11	
[11A]	11. A system for controlling playing of video content on a display device that loads any one of a plurality of different media players, the system comprising:
[11B]	a server system;
[11C]	a first database storing a relationship between a personal computing device and the display device based on a synchronization code assigned by the server system to the display device and received by the server system in a message from the personal computing device, wherein the personal computing device is separate from the server system and separate from the display device; and
[11D]	a second database;
[11E]	wherein the server system is configured to receive 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,
[11F]	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 to control playing of the video content 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;

Designation	Claim Language
[11G]	the server system being further configured to store in the second database 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.
Claim 12	
[12A]	12. The system of claim 11 including:
[12B]	a library storing protocols or application programming interfaces,
[12C]	wherein the server system is configured to check the identity of the media player identified in the one or more signals from the personal computing device, load an appropriate set of protocols or application programming interfaces from the library based on the identity of the media player, and convert the command from the personal computing device into a corresponding programming code to control the media player.
Claim 13	
[13A]	13. The system of claim 11 including:
[13B]	a look-up table storing a plurality of commands each of which is for a particular type of media player,
[13C]	wherein the server system is configured to convert the command into corresponding programming code to control the media player based on information in the look-up table.
Claim 14	
14	14. The system of claim 11 wherein the look-up table stores a correspondence between the universal command and a plurality of specific commands, each of which is for a different media player.
Claim 15	
15	15. The system of claim 14 the server system is configured to convert the universal command by selecting from among the plurality of specific commands stored in the look-up table.
Claim 16	

Designation	Claim Language
16	16. The system of claim 11 wherein the universal command represents an instruction to play the video content, to stop playing the video content or to pause playing the video content.
Claim 17	
17	17. The system of claim 11 wherein the video content is an interactive video game.
Claim 18	
18	18. The system of claim 11 wherein the video content is streaming media.
Claim 19	
19	19. The system of claim 11 wherein the synchronization code is uniquely associated with the display device on which the video content is to be played.
Claim 20	
20	20. The system of claim 19 wherein the synchronization code is different from an IP address associated with the display device and is different from a MAC address associated with the display device.
Claim 21	
21	21. The system of claim 19 wherein the server system is configured to assign as the synchronization code a randomly generated code each time the display device connects to the server system.
Claim 22	
[22A]	22. An automated machine-implemented method of presenting video content on a display device that loads any one of a plurality of different media players, the method comprising:
[22B]	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;
[22C]	retrieving, by the display device from the server system, first information that specifies a first video file to be acted upon,

Designation	Claim Language
	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;
[22D]	obtaining, by the display device, over the Internet the first media player for playing the first video file;
[22E]	loading the first media player in the display device;
[22F]	executing the first playback control command with respect to the first video file using the first media player;
[22G]	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;
[22H]	obtaining, by the display device, over the Internet the second media player for playing the second video file;
[22I]	loading the second media player in the display device; and
[22J]	executing the second playback control command with respect to the second video file using the second media player.
Claim 23	
23	23. The method of claim 22 wherein the display device comprises a television set with a display screen.
Claim 24	
24	24. The method of claim 22 wherein the display device comprises a laptop or personal computer.
Claim 25	

Designation	Claim Language
25	25. The method of claim 22 wherein each of the first and second commands represents an instruction to play the respective video file, to stop playing the respective video file or to pause playing the respective video file.
Claim 26	
26	26. The method of claim 22 wherein the display device checks whether the respective media player needed to play the particular one of the video files already is loaded in the display device before obtaining a copy of the media player over the Internet.