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Strober

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(54) **PLAY CONTROL OF CONTENT ON A DISPLAY DEVICE**

(56) **References Cited**

U.S. PATENT DOCUMENTS

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Valhalla, NY (US)

5,613,137 A 3/1997 Bertram et al.
5,878,311 A 3/1999 Ichinokawa
(Continued)

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FOREIGN PATENT DOCUMENTS

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CN 101534119 A 9/2009
CN 101577650 A 11/2009
(Continued)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

OTHER PUBLICATIONS

This patent is subject to a terminal disclaimer.

Ask Search Internet Search, session identifier random, printed on Nov. 19, 2011.

(Continued)

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Primary Examiner — Tadesse Hailu

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Assistant Examiner — Darrin Hope

(65) **Prior Publication Data**

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Related U.S. Application Data

(63) Continuation of application No. 13/532,546, filed on Jun. 25, 2012, now Pat. No. 9,767,195, which is a (Continued)

(57) **ABSTRACT**

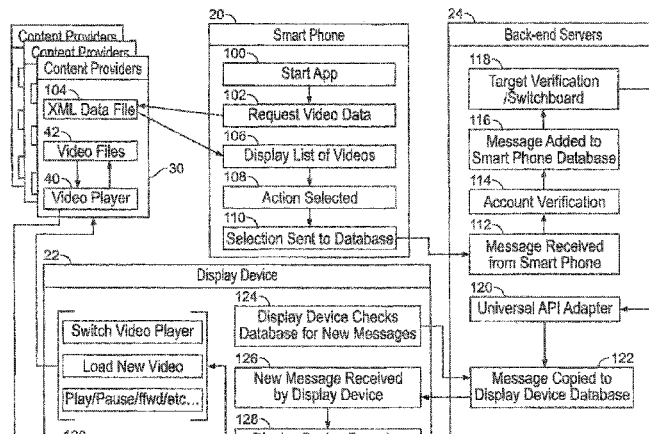
A system for presenting and controlling content on a display device includes a network, a server system coupled to the network and comprising one or more servers, a display device coupled to the network and having a display, and a personal computing device operable to transmit a first message according to a specified format over the network to the server system. The server system stores an association between the personal computing device and the display device. The first message identifies user-selected content and a media player to play the content. The server system is operable, in response to receiving the first message from the personal computing device, to provide to the display device a second message identifying the user-selected content and the media player to play the content. In response to receiving the second message, the display device is operable to obtain a first media player needed to play the content, to load the media player and to present the content on the display.

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G06F 9/44 (2018.01)
(Continued)

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CPC **G06F 16/74** (2019.01); **G06F 9/452** (2018.02); **G06F 16/951** (2019.01)

(58) **Field of Classification Search**
USPC 715/716
See application file for complete search history.

20 Claims, 9 Drawing Sheets



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- (60) Provisional application No. 61/477,998, filed on Apr. 21, 2011.
- (51) **Int. Cl.**
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8,875,180	B2	10/2014	Demchenko et al.
8,880,491	B2	11/2014	Morris
9,071,792	B2	6/2015	Alsina et al.
9,148,756	B2	9/2015	Filipov
9,185,171	B2*	11/2015	Pahlavan H01L 63/08
9,420,025	B2	8/2016	Park
9,720,887	B2	8/2017	Pappu et al.
2002/0021289	A1	2/2002	Combs et al.
2002/0034193	A1	3/2002	Patki et al.
2002/0075332	A1	6/2002	Geilfuss, Jr. et al.
2002/0083147	A1	6/2002	Ripperger
2002/0120666	A1	8/2002	Landsman et al.
2002/0129102	A1	9/2002	Landsman et al.
2002/0133518	A1	9/2002	Landsman et al.
2002/0146122	A1	10/2002	Vestergaard et al.
2002/0198778	A1	12/2002	Landsman et al.
2003/0004804	A1	1/2003	Landsman et al.
2003/0005000	A1	1/2003	Landsman et al.
2003/0018885	A1	1/2003	Landsman et al.
2003/0023488	A1	1/2003	Landsman et al.
2003/0028565	A1	2/2003	Landsman et al.
2003/0071792	A1	4/2003	Safadi
2003/0112268	A1	6/2003	Wettach
2003/0131251	A1	7/2003	Fetkovich
2003/0142127	A1	7/2003	Markel
2003/0182663	A1	9/2003	Gudorf et al.
2003/0193520	A1	10/2003	Oetzel
2003/0208765	A1	11/2003	Urdang et al.
2004/0008972	A1	1/2004	Haken
2004/0049743	A1	3/2004	Bogward
2004/0056837	A1	3/2004	Koga et al.
2004/0088728	A1	5/2004	Shimizu
2004/0268224	A1	12/2004	Balkus et al.
2004/0268451	A1	12/2004	Robbin et al.
2005/0012723	A1	1/2005	Pallakoff
2005/0034151	A1	2/2005	Abramson
2005/0055716	A1	3/2005	Louie et al.
2005/0144305	A1	6/2005	Fegan et al.
2005/0149970	A1	7/2005	Fairhurst et al.
2005/0192096	A1	9/2005	Maehiro
2006/0062544	A1	3/2006	Southwood et al.
2006/0083194	A1	4/2006	Dhirmaj et al.
2006/0098624	A1	5/2006	Morgan et al.
2006/0101098	A1	5/2006	Morgan et al.
2006/0200832	A1	9/2006	Dutton
2006/0203758	A1	9/2006	Tee et al.
2006/0263038	A1	11/2006	Gilley
2006/0265657	A1	11/2006	Gilley
2007/0050054	A1	3/2007	Sambandam Guruparan et al.
2007/0052868	A1	3/2007	Chou et al.
2007/0055986	A1	3/2007	Gilley et al.
2007/0083540	A1	4/2007	Gundla et al.
2007/0089147	A1	4/2007	Urdang et al.
2007/0094408	A1	4/2007	Gundla et al.
2007/0112785	A1	5/2007	Murphy et al.
2007/0136778	A1	6/2007	Birger et al.
2007/0150963	A1	6/2007	Lee et al.
2007/0152978	A1	7/2007	Kocienda et al.
2007/0152980	A1	7/2007	Kocienda et al.
2007/0155506	A1	7/2007	Malik
2007/0156855	A1	7/2007	Johnson
2007/0157089	A1	7/2007	Van Os et al.
2007/0202923	A1	8/2007	Jung et al.
2007/0288715	A1	12/2007	Boswell et al.
2008/0008439	A1	1/2008	Liu et al.
2008/0028037	A1	1/2008	Moyer et al.
2008/0034394	A1	2/2008	Jacobs et al.
2008/0040758	A1	2/2008	Beetcher et al.
2008/0077526	A1	3/2008	Arumugam
2008/0104267	A1	5/2008	Dawson
2008/0126943	A1	5/2008	Parasnis et al.
2008/0140849	A1	6/2008	Collazo
2008/0155600	A1	6/2008	Klappert et al.
2008/0178198	A1	7/2008	Gaub
2008/0187279	A1	8/2008	Gilley et al.
2008/0189617	A1	8/2008	Covell et al.
2008/0216001	A1	9/2008	Ording et al.

(56) **References Cited**

U.S. PATENT DOCUMENTS

6,181,713	B1	1/2001	Patki et al.
6,252,889	B1	6/2001	Patki et al.
6,756,965	B2	6/2004	Combs et al.
6,978,424	B2	12/2005	Safadi
7,058,356	B2	6/2006	Slotznick
7,114,173	B2	9/2006	Urdang et al.
7,330,875	B1	2/2008	Parasnis et al.
7,424,718	B2	9/2008	Dutton
7,433,922	B2	10/2008	Engstrom
7,440,972	B2	10/2008	Oetzel
7,453,454	B2	11/2008	Allen et al.
7,509,588	B2	3/2009	Van Os et al.
7,614,070	B2	11/2009	Urdang et al.
7,689,931	B2	3/2010	Koga et al.
7,769,827	B2	8/2010	Girouard et al.
7,774,708	B2	8/2010	Bell et al.
7,814,144	B2	10/2010	Koyama et al.
7,835,505	B2	11/2010	Toyama et al.
7,849,485	B2	12/2010	Paik et al.
7,878,904	B2	2/2011	Maehiro
7,949,606	B1	5/2011	Sweet
7,956,846	B2	6/2011	Ording et al.
8,060,631	B2	11/2011	Collart et al.
8,086,679	B2	12/2011	Nobori et al.
8,171,507	B2	5/2012	Hironaka et al.
8,230,360	B2	7/2012	Ma et al.
8,238,887	B2	8/2012	Filipov
8,250,608	B2	8/2012	Hayes et al.
8,255,968	B2	8/2012	Louie et al.
8,316,308	B2	11/2012	Sherman et al.
8,344,870	B2	1/2013	Evans et al.
8,356,251	B2	1/2013	Strober
8,373,660	B2	2/2013	Pallakoff
8,402,494	B1	3/2013	Hu et al.
8,418,084	B1	4/2013	Tischer
8,572,488	B2	10/2013	Phillips et al.
8,614,625	B2	12/2013	Alsina et al.
8,620,284	B2	12/2013	Filipov
8,659,553	B1	2/2014	Chan et al.
8,671,440	B2	3/2014	Damola et al.
8,738,536	B2	5/2014	Strom et al.
8,738,737	B2	5/2014	Baldini et al.
8,739,074	B2	5/2014	Kinoshita
8,743,284	B2	6/2014	Russell et al.
8,744,434	B2	6/2014	Funderburk et al.
8,745,228	B2	6/2014	Beckert et al.
8,745,388	B2	6/2014	Kanungo
8,751,159	B2	6/2014	Hall
8,751,520	B1	6/2014	Bhattacharjee et al.
8,751,793	B2	6/2014	Ginter et al.
8,752,016	B2	6/2014	Hernandez Porras et al.
8,755,919	B2	6/2014	Pyle
8,756,333	B2	6/2014	Jannink et al.
8,756,505	B2	6/2014	Gonze et al.
8,761,351	B1	6/2014	Daly et al.
8,761,792	B2	6/2014	Sennett et al.
8,762,240	B2	6/2014	Sogo et al.
8,762,548	B1	6/2014	Kessel et al.
8,763,081	B2	6/2014	Bogdanovic et al.

(56)

References Cited

U.S. PATENT DOCUMENTS

2008/0270881 A1 10/2008 Meyer et al.
 2008/0301737 A1 12/2008 Hjelmeland Almas et al.
 2009/0049373 A1 2/2009 Sharma et al.
 2009/0077467 A1 3/2009 Adappa et al.
 2009/0094331 A1 4/2009 Nobori et al.
 2009/0100477 A1 4/2009 Jeffs
 2009/0108057 A1 4/2009 Mu et al.
 2009/0150553 A1 6/2009 Collart et al.
 2009/0164641 A1 6/2009 Rogers et al.
 2009/0172780 A1 7/2009 Sukeda et al.
 2009/0177989 A1 7/2009 Ma et al.
 2009/0193466 A1 7/2009 Ehreth et al.
 2009/0228919 A1 9/2009 Loft et al.
 2009/0248802 A1* 10/2009 Mahajan G06F 9/541
 709/204
 2009/0254827 A1 10/2009 Gonze et al.
 2009/0259944 A1 10/2009 Wu
 2009/0259969 A1 10/2009 Pallakoff
 2009/0282470 A1 11/2009 Yang et al.
 2010/0027974 A1 2/2010 Ansari
 2010/0081375 A1 4/2010 Rosenblatt et al.
 2010/0094728 A1 4/2010 Denning et al.
 2010/0094900 A1 4/2010 Hughes, Jr.
 2010/0127847 A1 5/2010 Evans et al.
 2010/0137028 A1 6/2010 Farris et al.
 2010/0138746 A1 6/2010 Zarom
 2010/0138780 A1 6/2010 Marano et al.
 2010/0174993 A1 7/2010 Pennington et al.
 2010/0180307 A1 7/2010 Hayes et al.
 2010/0198860 A1 8/2010 Burnett et al.
 2010/0205628 A1 8/2010 Davis et al.
 2010/0208136 A1 8/2010 Castano
 2010/0241699 A1 9/2010 Muthukumarasamy et al.
 2010/0265939 A1 10/2010 Parlamas et al.
 2010/0281042 A1 11/2010 Windes et al.
 2010/0283586 A1 11/2010 Ikeda et al.
 2010/0313135 A1 12/2010 Johnson et al.
 2010/0325552 A1 12/2010 Sloo et al.
 2011/0007901 A1 1/2011 Ikeda et al.
 2011/0014972 A1 1/2011 Herrmann et al.
 2011/0030020 A1 2/2011 Halttunen
 2011/0032870 A1 2/2011 Kumar
 2011/0035692 A1 2/2011 Sandone et al.
 2011/0060998 A1 3/2011 Schwartz et al.
 2011/0084900 A1 4/2011 Jacobsen et al.
 2011/0090898 A1 4/2011 Patel et al.
 2011/0107227 A1 5/2011 Rempell et al.
 2011/0125594 A1 5/2011 Brown et al.
 2011/0131607 A1 6/2011 Thomas et al.
 2011/0137729 A1 6/2011 Weisman et al.
 2011/0138354 A1 6/2011 Hertenstein et al.
 2011/0156879 A1 6/2011 Matsushita et al.
 2011/0161396 A1 6/2011 Filbrich et al.
 2011/0202466 A1 8/2011 Carter
 2011/0214148 A1 9/2011 Gossweiler, III et al.
 2011/0228768 A1 9/2011 Gelter et al.
 2011/0231265 A1 9/2011 Brown et al.
 2011/0231565 A1 9/2011 Gelter et al.
 2011/0231566 A1 9/2011 Gelter et al.
 2011/0239119 A1 9/2011 Phillips et al.
 2011/0267981 A1 11/2011 Davies
 2011/0289419 A1 11/2011 Yu et al.
 2011/0296454 A1 12/2011 Xiong et al.
 2011/0296465 A1 12/2011 Krishnan et al.
 2011/0314386 A1 12/2011 Jeong et al.
 2012/0054616 A1 3/2012 Mittal
 2012/0059876 A1 3/2012 Chinta et al.
 2012/0072846 A1 3/2012 Curtis
 2012/0102209 A1 4/2012 Fok Ah Chuen et al.
 2012/0110074 A1 5/2012 Getchius
 2012/0110464 A1 5/2012 Chen et al.
 2012/0114313 A1 5/2012 Phillips et al.
 2012/0130971 A1* 5/2012 Morris H04N 21/234309

2012/0166560 A1 6/2012 Nobori et al.
 2012/0182994 A1 7/2012 Dec et al.
 2012/0185887 A1 7/2012 Newell
 2012/0192225 A1 7/2012 Harwell et al.
 2012/0239218 A1 9/2012 Forbes, Jr.
 2012/0254931 A1 10/2012 Oztaskent et al.
 2012/0272148 A1 10/2012 Strober
 2013/0014142 A1 1/2013 Newell
 2013/0124759 A1 5/2013 Strober
 2013/0250181 A1 9/2013 Zhang
 2014/0033198 A1 1/2014 Umopathy et al.
 2016/0241912 A1 8/2016 McCarthy et al.

FOREIGN PATENT DOCUMENTS

CN 101778198 A 7/2010
 CN 101815073 A 8/2010
 EP 2175607 A1 4/2010
 JP 2004356695 A 12/2004
 WO 2004100500 A2 11/2004
 WO 2007078745 A1 7/2007
 WO 2008070050 A2 6/2008
 WO 2008108718 A1 9/2008

OTHER PUBLICATIONS

Webopedia computer dictionary, session cookie, printed on Nov. 19, 2011.
 Webopedia computer dictionary, user session, printed on Nov. 19, 2011.
 www.vbulletin.com, Best way to generate Random, Unique ID's, printed on Nov. 19, 2011.
 www.vbulletin.com, Best way to generate Random, Unique ID's, Internet Archive Wayback Machine, Jan. 16, 2009.
 Hachman, M. "Snapstick's Media Streaming App/Box: Hands on," www.pcmag.com/article2/0,2817,2375455,00.asp, 2 pages (Jan. 8, 2011).
 Dolcourt, J., CES: Snapstick takes on Apple TV, Google TV, http://news.cnet.com/8301-17938105-20025100-1.html, 3 pages. (Dec. 9, 2010).
 Snapstick-Home, "Snapstick," http://www.snapstick.com, 2 pages, printed on Mar. 12, 2011.
 Paul, I., Hands On: YouTube Leanback, PCWORLD http://www.pcworld.com/article/200769/hands_on_youtube_leanback.html, 3 pages. (Jul. 9, 2010).
 Using AirPlay, Article HT4437, http://support.apple.com/kb/HT4437, 3 pages, (Apr. 18, 2011).
 Cheng, J., "Stream AirPlay video to regular TV? Apple might make it happen," http://arstechnica.com/apple/news/2011/03/stream-airplay-video-to-a-regular-tv-apple-might, 5 pages, Mar. 23, 2011.
 "Using the Play to feature to stream media", http://windows.microsoft.com/en-US/windows7/using-the-play-to-feature-to-stream-media, 3 pages, printed on Jun. 7, 2011.
 "YouTube—Leanback", http://www.youtube.com/t/leanback, 1 page, printed on Jun. 7, 2011.
 Hu, C., et al., "Mobile Media Content Sharing in UPnP-Based Home Network Environment," Journal of Information Science and Engineering 24, 1753-1769. (2008).
 Fallahkhair, S., et al., "Dual Device User interface Design for Ubiquitous Language Learning: Mobile Phone and Interactive Television (iTV)," Proceedings of the 2005 IEEE Int'l Workshop on Wireless and Mobile Technologies in Education, 8 pages, 2005.
 Bing search q=mobile+server+television+control&q Jun. 26, 2014.
 Bing search q=phone+server+television+control&q Jun. 26, 2014.
 Bing search q=phone+server+television+control+me Jun. 26, 2014.
 Bing search q=mobile+server+television+control+m Jun. 26, 2014.
 Webopedia computer dictionary, web identifier, printed on Nov. 19, 2011.
 Preinterview First Office Action dated Sep. 3, 2020, in U.S. Appl. No. 16/917,095, 24 pages.
 First Action Interview Office Action dated Dec. 10, 2020 in U.S. Appl. No. 16/917,095, 25 pages.

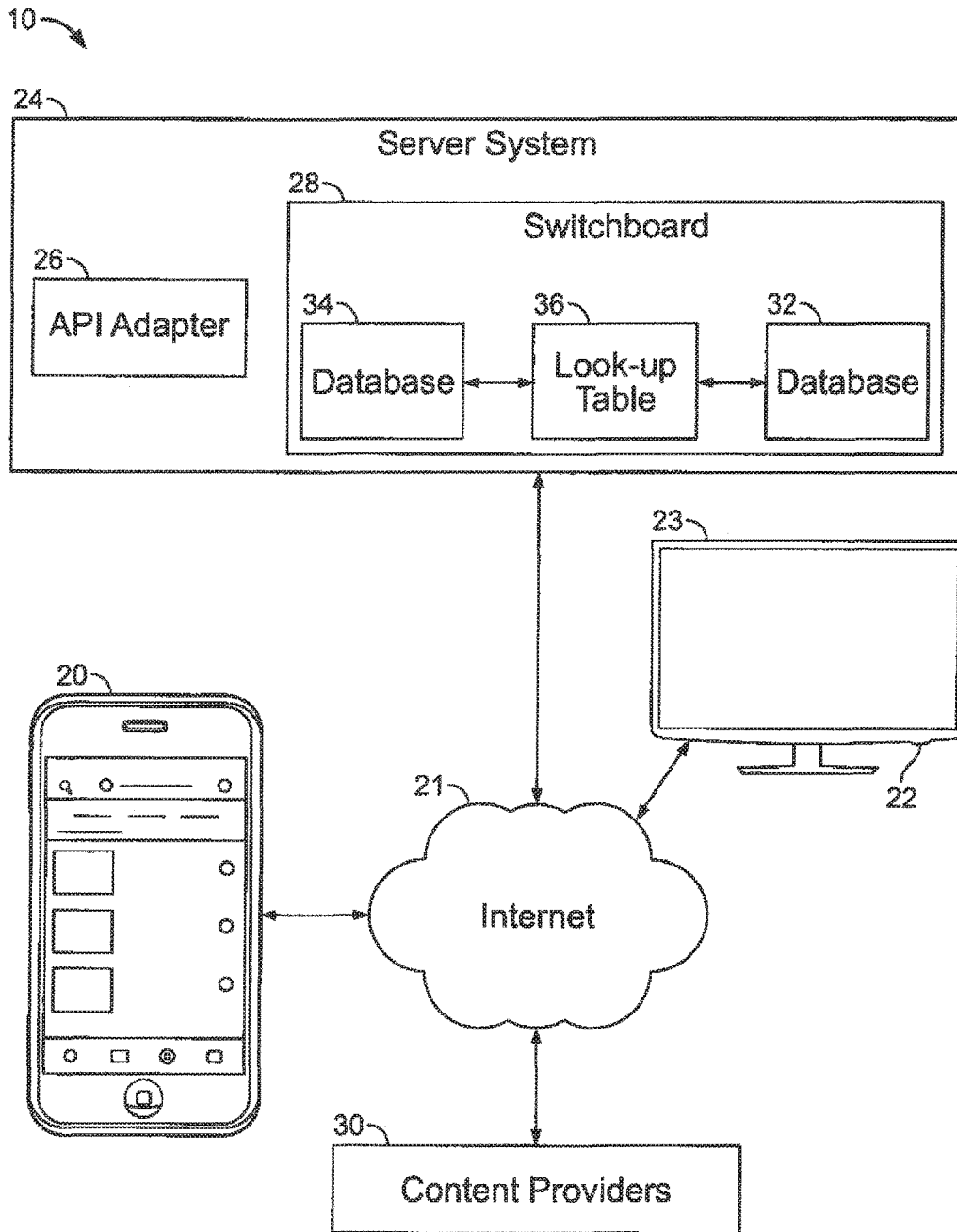


FIG. 1

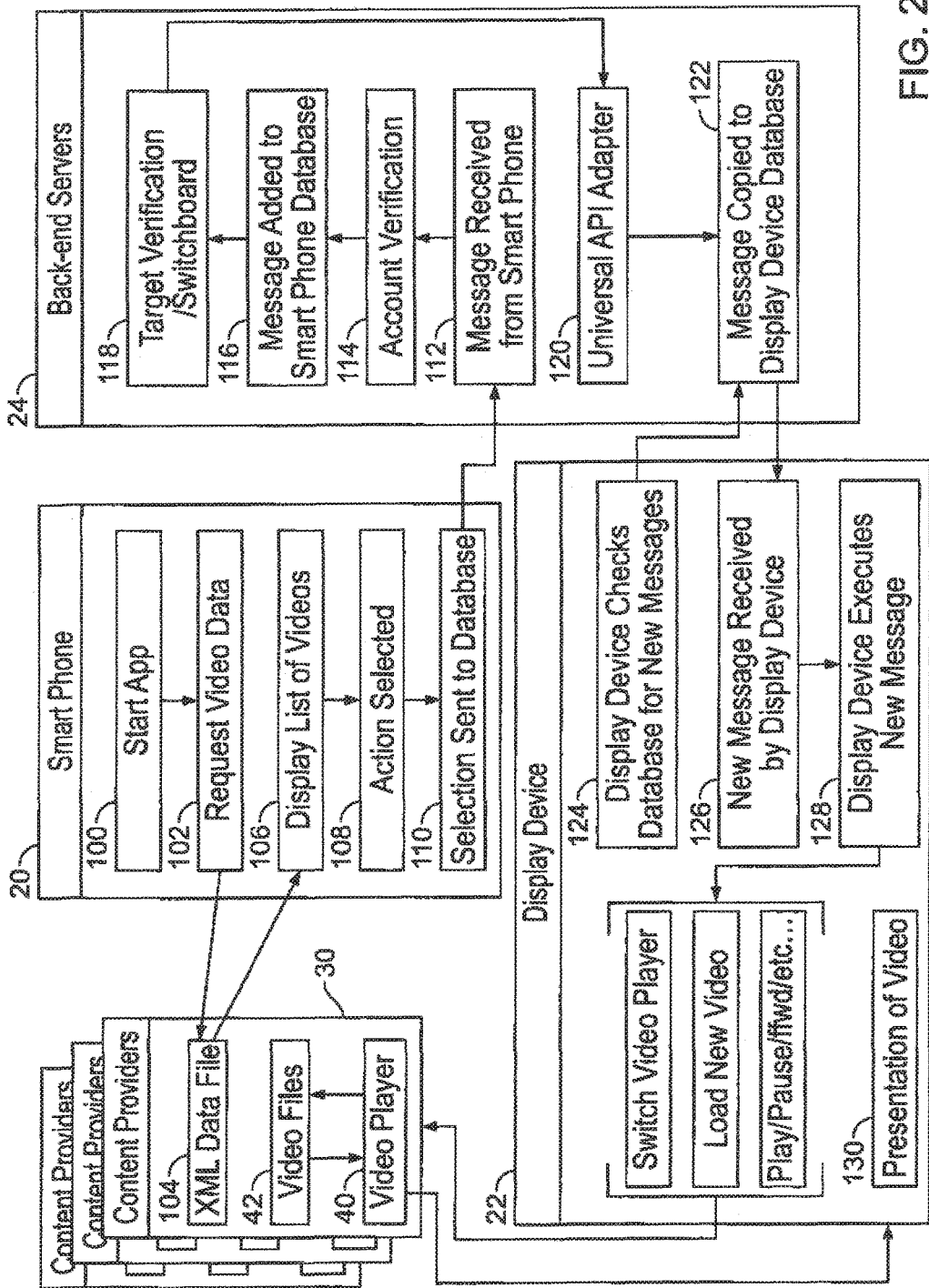


FIG. 2

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