



US011048751B2

(12) **United States Patent**
Strober

(10) **Patent No.:** **US 11,048,751 B2**

(45) **Date of Patent:** ***Jun. 29, 2021**

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

(56) **References Cited**

U.S. PATENT DOCUMENTS

(71) Applicant: **Touchstream Technologies, Inc.**,
Valhalla, NY (US)

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

(72) Inventor: **David Strober**, Rye, NY (US)

FOREIGN PATENT DOCUMENTS

(73) Assignee: **Touchstream Technologies, Inc.**,
Valhalla, NY (US)

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.

This patent is subject to a terminal dis-
claimer.

OTHER PUBLICATIONS

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

(Continued)

(21) Appl. No.: **15/687,249**

Primary Examiner — Tadesse Hailu

(22) Filed: **Aug. 25, 2017**

Assistant Examiner — Darrin Hope

(74) *Attorney, Agent, or Firm* — Shook, Hardy & Bacon
LLP

(65) **Prior Publication Data**
US 2017/0351757 A1 Dec. 7, 2017

(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.

Related U.S. Application Data

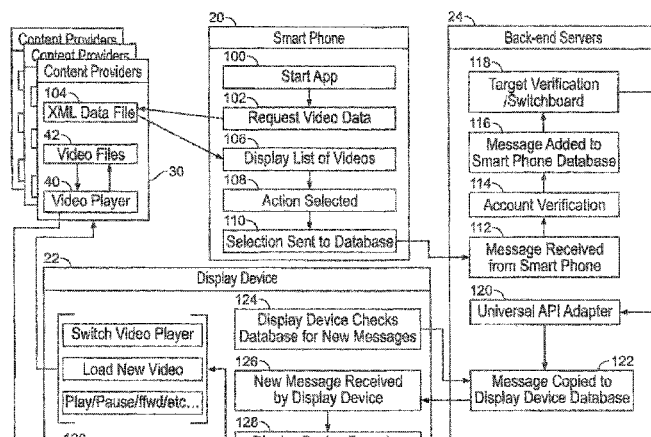
(63) Continuation of application No. 13/532,546, filed on
Jun. 25, 2012, now Pat. No. 9,767,195, which is a
(Continued)

(51) **Int. Cl.**
G06F 17/30 (2006.01)
G06F 9/44 (2018.01)
(Continued)

(52) **U.S. Cl.**
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



Related U.S. Application Data

continuation-in-part of application No. 13/157,821,
filed on Jun. 10, 2011, now Pat. No. 8,904,289.

- (60) Provisional application No. 61/477,998, filed on Apr. 21, 2011.

(51) **Int. Cl.**

G06F 16/74 (2019.01)

G06F 16/951 (2019.01)

G06F 9/451 (2018.01)

(56) **References Cited**

U.S. PATENT DOCUMENTS

6,181,713 B1	1/2001	Patki et al.	8,875,180 B2	10/2014	Demchenko et al.
6,252,889 B1	6/2001	Patki et al.	8,880,491 B2	11/2014	Morris
6,756,965 B2	6/2004	Combs et al.	9,071,792 B2	6/2015	Alsina et al.
6,978,424 B2	12/2005	Safadi	9,148,756 B2	9/2015	Filipov
7,058,356 B2	6/2006	Slotznick	9,185,171 B2 *	11/2015	Pahlavan H01L 63/08
7,114,173 B2	9/2006	Urdang et al.	9,420,025 B2	8/2016	Park
7,330,875 B1	2/2008	Parasnis et al.	9,720,887 B2	8/2017	Pappu et al.
7,424,718 B2	9/2008	Dutton	2002/0021289 A1	2/2002	Combs et al.
7,433,922 B2	10/2008	Engstrom	2002/0034193 A1	3/2002	Patki et al.
7,440,972 B2	10/2008	Oetzel	2002/0075332 A1	6/2002	Geilfuss, Jr. et al.
7,453,454 B2	11/2008	Allen et al.	2002/0083147 A1	6/2002	Ripperger
7,509,588 B2	3/2009	Van Os et al.	2002/0120666 A1	8/2002	Landsman et al.
7,614,070 B2	11/2009	Urdang et al.	2002/0129102 A1	9/2002	Landsman et al.
7,689,931 B2	3/2010	Koga et al.	2002/0133518 A1	9/2002	Landsman et al.
7,769,827 B2	8/2010	Girouard et al.	2002/0146122 A1	10/2002	Vestergaard et al.
7,774,708 B2	8/2010	Bell et al.	2002/0198778 A1	12/2002	Landsman et al.
7,814,144 B2	10/2010	Koyama et al.	2003/0004804 A1	1/2003	Landsman et al.
7,835,505 B2	11/2010	Toyama et al.	2003/0005000 A1	1/2003	Landsman et al.
7,849,485 B2	12/2010	Paik et al.	2003/0018885 A1	1/2003	Landsman et al.
7,878,904 B2	2/2011	Maehiro	2003/0023488 A1	1/2003	Landsman et al.
7,949,606 B1	5/2011	Sweet	2003/0028565 A1	2/2003	Landsman et al.
7,956,846 B2	6/2011	Ording et al.	2003/0071792 A1	4/2003	Safadi
8,060,631 B2	11/2011	Collart et al.	2003/0112268 A1	6/2003	Wettach
8,086,679 B2	12/2011	Nobori et al.	2003/0131251 A1	7/2003	Fetkovich
8,171,507 B2	5/2012	Hironaka et al.	2003/0142127 A1	7/2003	Markel
8,230,360 B2	7/2012	Ma et al.	2003/0182663 A1	9/2003	Gudorf et al.
8,238,887 B2	8/2012	Filipov	2003/0193520 A1	10/2003	Oetzel
8,250,608 B2	8/2012	Hayes et al.	2003/0208765 A1	11/2003	Urdang et al.
8,255,968 B2	8/2012	Louie et al.	2004/0008972 A1	1/2004	Haken
8,316,308 B2	11/2012	Sherman et al.	2004/0049743 A1	3/2004	Bogward
8,344,870 B2	1/2013	Evans et al.	2004/0056837 A1	3/2004	Koga et al.
8,356,251 B2	1/2013	Strober	2004/0088728 A1	5/2004	Shimizu
8,373,660 B2	2/2013	Pallakoff	2004/0268224 A1	12/2004	Balkus et al.
8,402,494 B1	3/2013	Hu et al.	2004/0268451 A1	12/2004	Robbin et al.
8,418,084 B1	4/2013	Tischer	2005/0012723 A1	1/2005	Pallakoff
8,572,488 B2	10/2013	Phillips et al.	2005/0034151 A1	2/2005	Abramson
8,614,625 B2	12/2013	Alsina et al.	2005/0055716 A1	3/2005	Louie et al.
8,620,284 B2	12/2013	Filipov	2005/0144305 A1	6/2005	Fegan et al.
8,659,553 B1	2/2014	Chan et al.	2005/0149970 A1	7/2005	Fairhurst et al.
8,671,440 B2	3/2014	Damola et al.	2005/0192096 A1	9/2005	Maehiro
8,738,536 B2	5/2014	Strom et al.	2006/0062544 A1	3/2006	Southwood et al.
8,738,737 B2	5/2014	Baldini et al.	2006/0083194 A1	4/2006	Dhirmaj et al.
8,739,074 B2	5/2014	Kinoshita	2006/0098624 A1	5/2006	Morgan et al.
8,743,284 B2	6/2014	Russell et al.	2006/0101098 A1	5/2006	Morgan et al.
8,744,434 B2	6/2014	Funderburk et al.	2006/0200832 A1	9/2006	Dutton
8,745,228 B2	6/2014	Beckert et al.	2006/0203758 A1	9/2006	Tee et al.
8,745,388 B2	6/2014	Kanungo	2006/0263038 A1	11/2006	Gilley
8,751,159 B2	6/2014	Hall	2006/0265657 A1	11/2006	Gilley
8,751,520 B1	6/2014	Bhattacharjee et al.	2007/0050054 A1	3/2007	Sambandam Guruparan et al.
8,751,793 B2	6/2014	Ginter et al.	2007/0052868 A1	3/2007	Chou et al.
8,752,016 B2	6/2014	Hernandez Porras et al.	2007/0055986 A1	3/2007	Gilley et al.
8,755,919 B2	6/2014	Pyle	2007/0083540 A1	4/2007	Gundla et al.
8,756,333 B2	6/2014	Jannink et al.	2007/0089147 A1	4/2007	Urdang et al.
8,756,505 B2	6/2014	Gonze et al.	2007/0094408 A1	4/2007	Gundla et al.
8,761,351 B1	6/2014	Daly et al.	2007/0112785 A1	5/2007	Murphy et al.
8,761,792 B2	6/2014	Sennett et al.	2007/0136778 A1	6/2007	Birger et al.
8,762,240 B2	6/2014	Sogo et al.	2007/0150963 A1	6/2007	Lee et al.
8,762,548 B1	6/2014	Kessel et al.	2007/0152978 A1	7/2007	Kocienda et al.
8,763,081 B2	6/2014	Bogdanovic 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	Gauba
			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

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	Haltunen	
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	Oztascent 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	Umapathy 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.

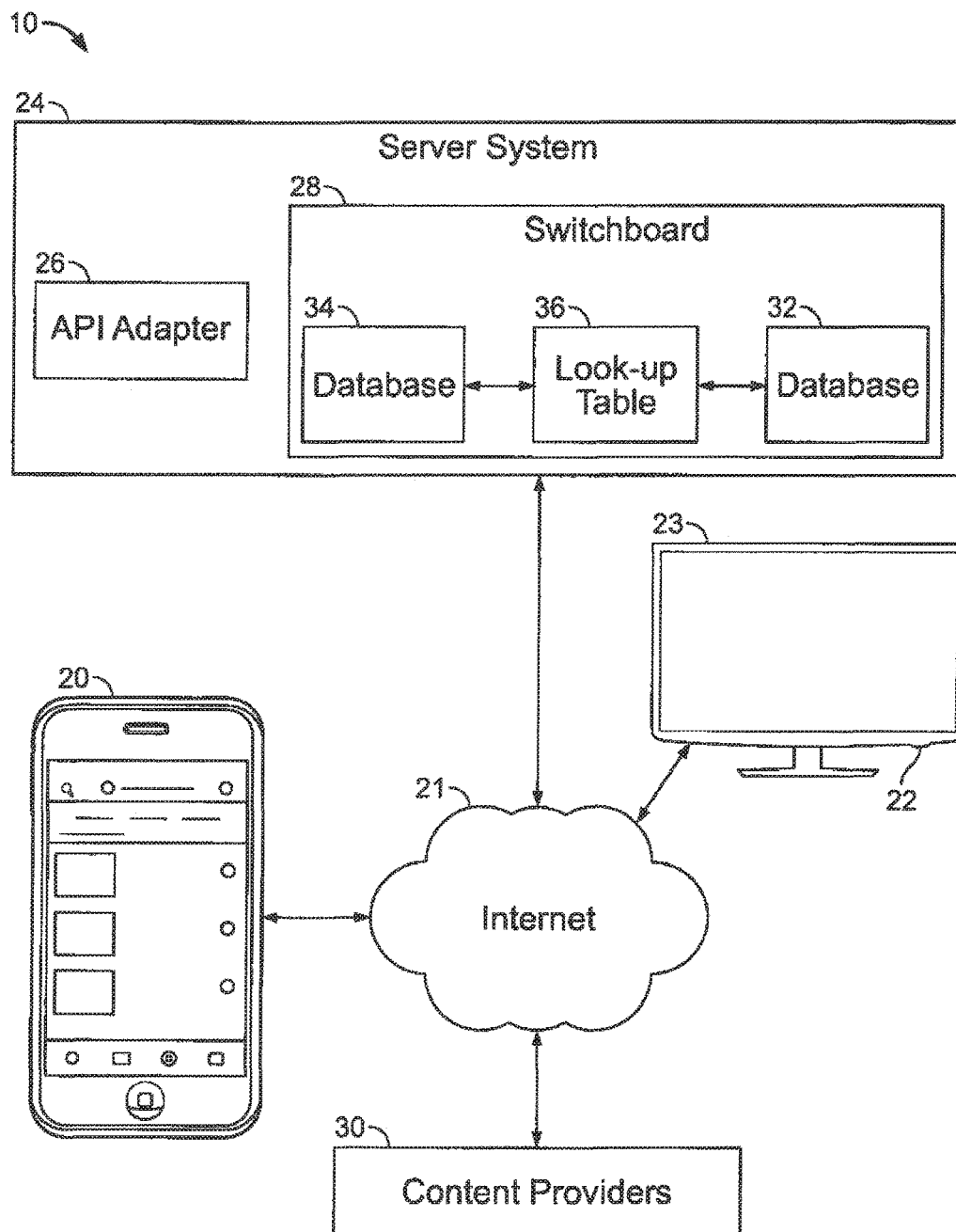


FIG. 1

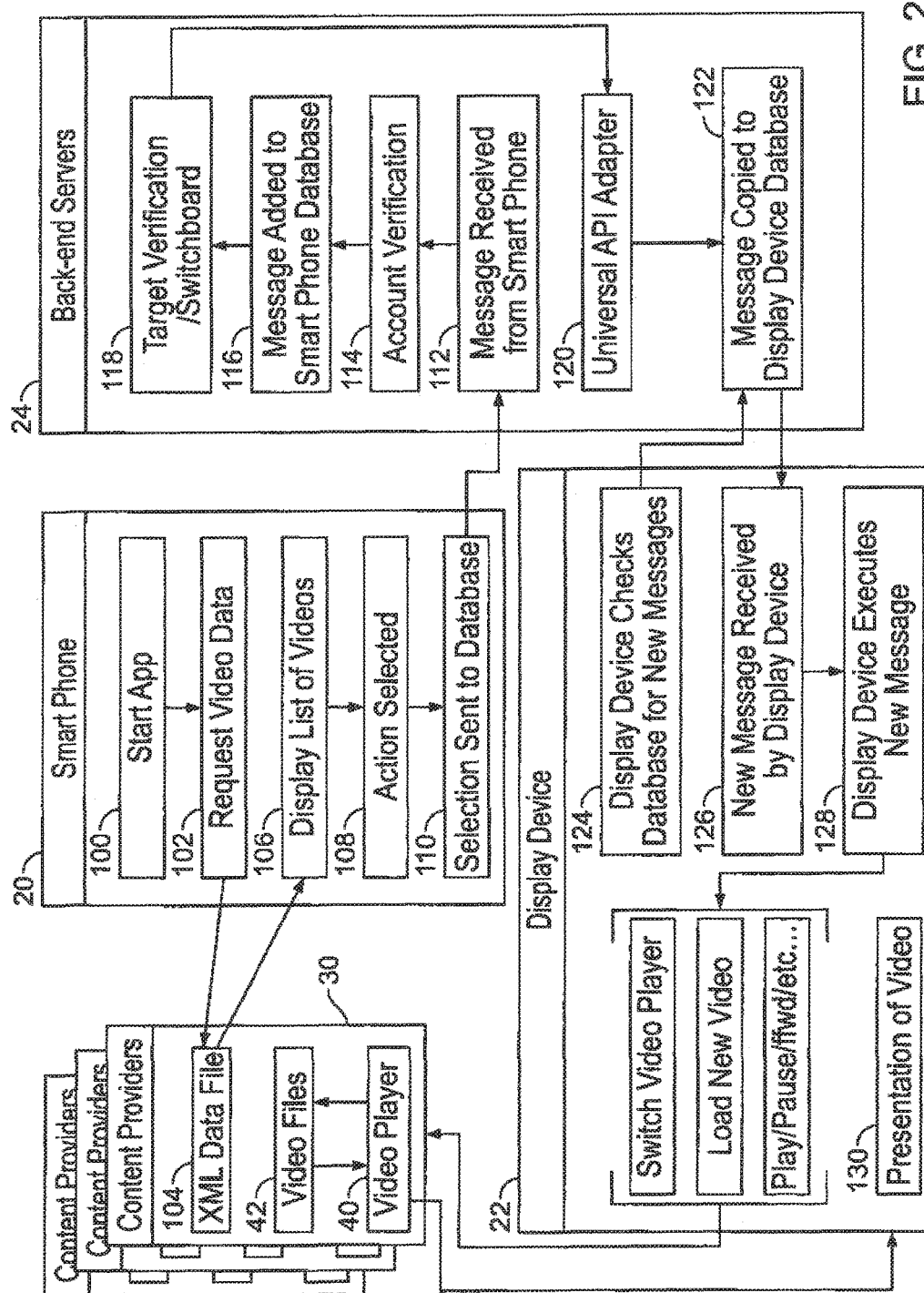


FIG. 2

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.