



US009767195B2

(12) **United States Patent**
Strober

(10) **Patent No.:** **US 9,767,195 B2**
(45) **Date of Patent:** **Sep. 19, 2017**

(54) **VIRTUALIZED HOSTING AND DISPLAYING OF CONTENT USING A SWAPPABLE MEDIA PLAYER**

(56) **References Cited**

U.S. PATENT DOCUMENTS

7,058,356 B2 6/2006 Slotznick
7,330,875 B1 2/2008 Parasnis et al.
(Continued)

FOREIGN PATENT DOCUMENTS

CN 101534449 9/2009
CN 10 1577650 11/2009
(Continued)

OTHER PUBLICATIONS

Hachman, M., "Snapstick's Media Streaming App/Box: Hands on," www.pcmag.com/article2/0,2817,2375455,00.asp, 2 pages, (Jan. 8, 2011).

(Continued)

Primary Examiner — Tadeese Hailu
Assistant Examiner — Darrin Hope
(74) *Attorney, Agent, or Firm* — Shook, Hardy & Bacon L.L.P.

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

(73) Assignee: **TOUCHSTREAM TECHNOLOGIES, INC.**, New York, NY (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 602 days.

(21) Appl. No.: **13/532,546**

(22) Filed: **Jun. 25, 2012**

(65) **Prior Publication Data**
US 2013/0031478 A1 Jan. 31, 2013

Related U.S. Application Data

(63) Continuation-in-part of application No. 13/157,821, filed on Jun. 10, 2011, now Pat. No. 8,904,289.
(Continued)

(51) **Int. Cl.**
G06F 3/01 (2006.01)
G06F 17/30 (2006.01)
G06F 9/44 (2006.01)

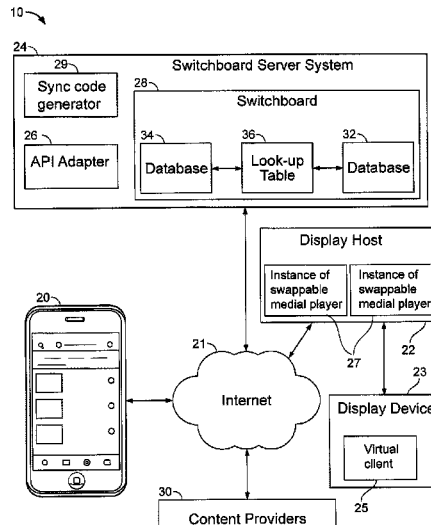
(52) **U.S. Cl.**
CPC **G06F 17/30846** (2013.01); **G06F 9/4445** (2013.01); **G06F 17/30864** (2013.01)

(58) **Field of Classification Search**
CPC G06F 3/01
(Continued)

(57) **ABSTRACT**

A system for presenting content includes a display device storing a virtual client. A display host is operable to execute multiple instances of a browser each of which operates as a swappable media player that is operable to retrieve and load any of a plurality of different media players needed to play specified content. The display host is operable to perform operations including receiving from a switchboard server system a message indicating that a specified media player is to be used to play particular content using a first instance of a swappable media player, retrieving and loading the specified media player from a content provider using the first instance of the swappable media player, playing the particular content in a first session using the specified media player, and causing a presentation of the content to be mirrored onto the virtual client residing on the display device.

20 Claims, 4 Drawing Sheets



Related U.S. Application Data

- (60) Provisional application No. 61/477,998, filed on Apr. 21, 2011.
- (58) **Field of Classification Search**
 USPC 715/716
 See application file for complete search history.

References Cited

- (56) **U.S. PATENT DOCUMENTS**
- 7,424,718 B2 9/2008 Dutton
- 7,440,972 B2 10/2008 Oetzel
- 7,769,827 B2 8/2010 Girouard et al.
- 7,835,505 B2 11/2010 Toyama et al.
- 7,849,485 B2 12/2010 Paik et al.
- 8,402,494 B1* 3/2013 Hu H04N 5/268
709/230
- 2002/0075332 A1 6/2002 Geilfuss et al.
- 2002/0120666 A1 8/2002 Landsman et al.
- 2002/0129102 A1 9/2002 Landsman et al.
- 2002/0133518 A1 9/2002 Landsman et al.
- 2002/0198778 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.
- 2003/0193520 A1 10/2003 Oetzel
- 2004/0088728 A1 5/2004 Shimizu
- 2005/0034151 A1 2/2005 Abramson
- 2005/0144305 A1 6/2005 Fegan et al.
- 2006/0083194 A1 4/2006 Dhrimaj et al.
- 2006/0098624 A1 5/2006 Morgan et al.
- 2006/0101098 A1 5/2006 Morgan et al.
- 2006/0203758 A1 9/2006 Tee et al.
- 2007/0094408 A1 4/2007 Gundla et al.
- 2007/0155506 A1* 7/2007 Malik 463/42
- 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.
- 2008/0077526 A1 3/2008 Arumugam
- 2008/0126943 A1 5/2008 Parasnis et al.
- 2008/0155600 A1 6/2008 Klappert et al.
- 2008/0267369 A1 10/2008 Parlamas et al.
- 2008/0270881 A1 10/2008 Meyer et al.
- 2009/0108057 A1 4/2009 Mu et al.
- 2009/0172780 A1 7/2009 Sukeda et al.
- 2009/0228919 A1 9/2009 Zott et al.
- 2009/0248802 A1* 10/2009 Mahajan G06F 9/4445
709/204
- 2010/0027974 A1 2/2010 Ansari
- 2010/0137028 A1 6/2010 Farris et al.
- 2010/0205628 A1 8/2010 Davis et al.
- 2010/0265939 A1 10/2010 Parlamas et al.
- 2010/0281042 A1 11/2010 Windes et al.
- 2011/0030020 A1 2/2011 Haltunen
- 2011/0060998 A1 3/2011 Schwartz et al.
- 2011/0090898 A1 4/2011 Patel et al.
- 2011/0107227 A1 5/2011 Rempell et al.
- 2011/0131607 A1 6/2011 Thomas et al.
- 2011/0138354 A1 6/2011 Hertenstein et al.
- 2011/0214148 A1 9/2011 Gossweiler et al.
- 2011/0231265 A1 9/2011 Brown et al.
- 2011/0231566 A1 9/2011 Gelter et al.
- 2011/0296465 A1 12/2011 Krishnan et al.
- 2012/0054616 A1* 3/2012 Mittal G06F 17/30899
715/722
- 2012/0059875 A1 3/2012 Clark
- 2012/0102209 A1* 4/2012 Fok Ah Chuen et al. 709/228

FOREIGN PATENT DOCUMENTS

- CN 101778198 7/2010
- CN 101815073 8/2010
- EP 2175607 A1 4/2010
- JP 2004-356695 A 12/2004
- JP 2006-525771 A 11/2006
- WO 2004100500 A2 11/2004

OTHER PUBLICATIONS

- Dolcourt, J., CES: Snapstick takes on Apple TV, Google TV, http://news.cnet.com/8301-17938_105-20025100-1.html, 3 pages, (Dec. 9, 2010).
- Shaivitz, M., “The Web to Your TV, With a Flick of a Wrist? Slapstick Says Yes,” <http://techcocktail.com/the-web-to-our-tv-with-a-flick-of-a-wrist-slapstick-says-yes-2010-12>, 2 pages, (Dec. 10, 2010).
- Snapstick—Home, “Snapstick,” <http://www.snapstick.com/>, 2 pages, printed on Mar. 2, 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-air-play-video-to-a-regular-tv-apple-migh> . . . , 1 page, printed on Jun. 7, 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.
- “Yahoo!7 TV Guide for iPhone, iPod touch and iPad on the iTunes App Store,” <http://itunes.apple.com/au/app/yahoo-7-ty-guide/id42471992?mt=8>, 2 pages, 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).
- Fallakhair, 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 an Mobile Technologies in Education*, 8 pages, 2005.
- Ask Search Internet Search, session identifier random, printed on Nov. 19, 2011.
- Webopedia computer dictionary, session cookie, printed on Nov. 19, 2011.
- Webopedia computer dictionary, web identifier, 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.
- Official communication from the USPTO in U.S. Appl. No. 13/245,001, dated Dec. 8, 2011.
- U.S. Appl. No. 13/245,001, filed Sep. 26, 2011.
- Japanese Patent Office, Examination Report for JP Patent App. No. 2014-506460, dated Jun. 28, 2016 (6 pages) (and English Translation).

* cited by examiner

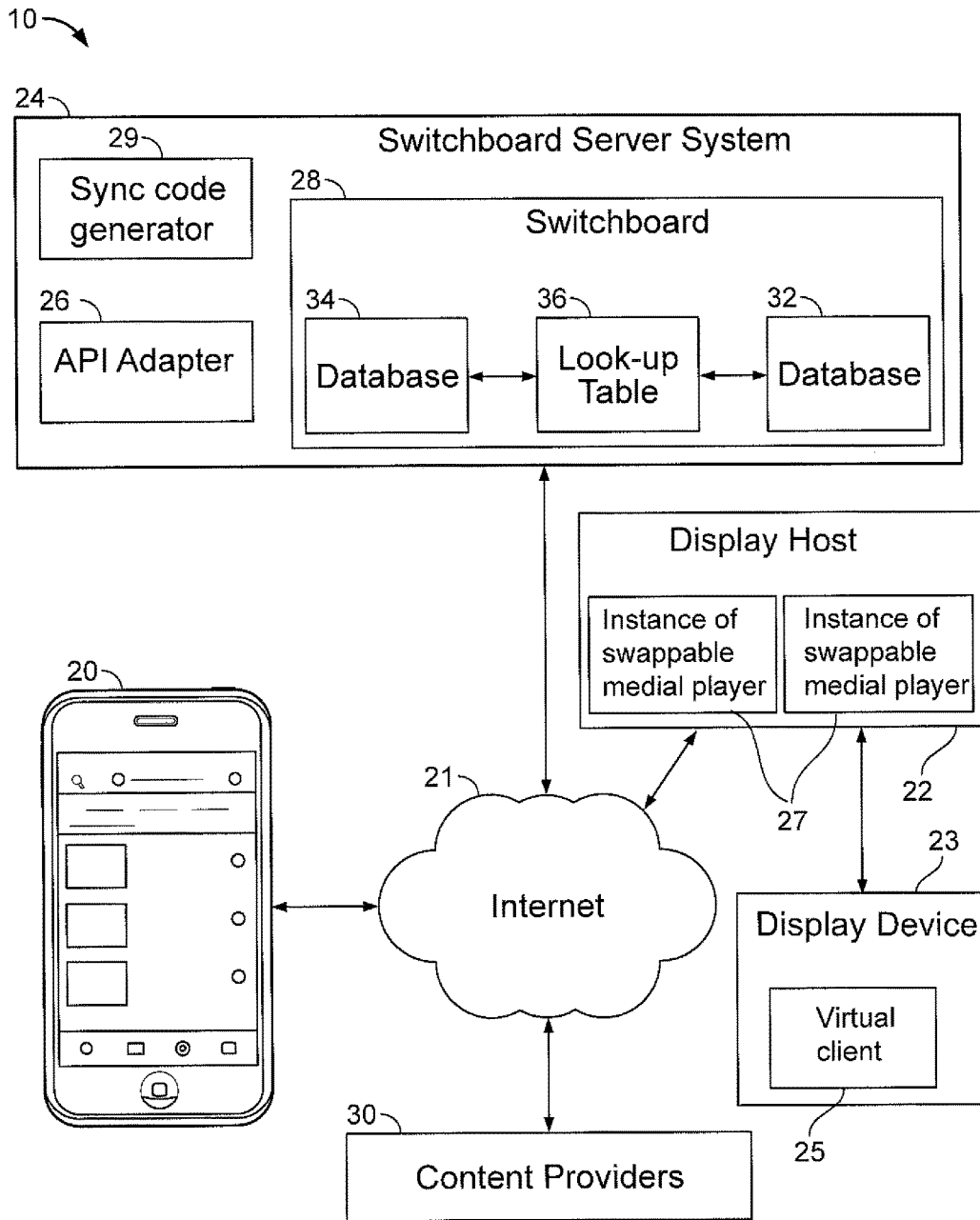


FIG. 1

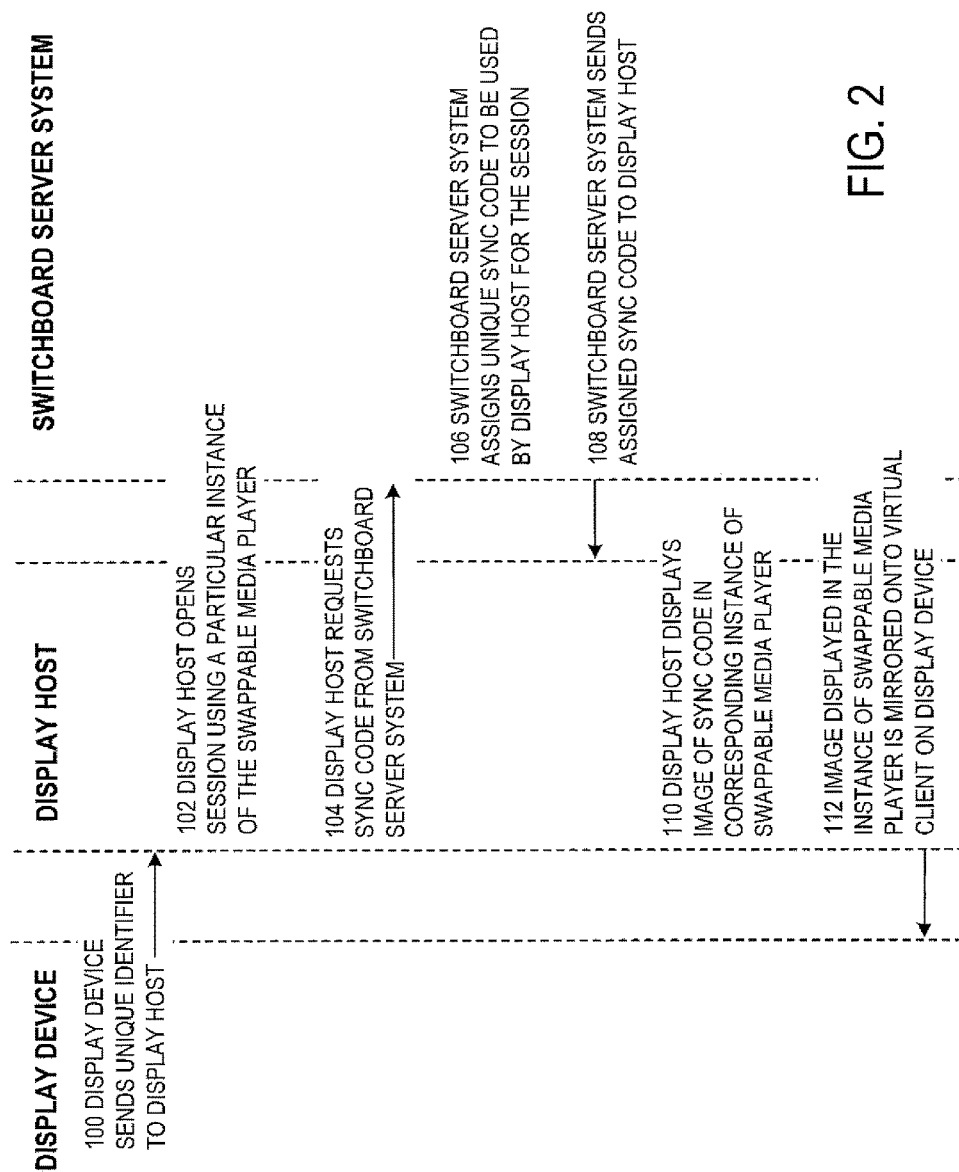


FIG. 2

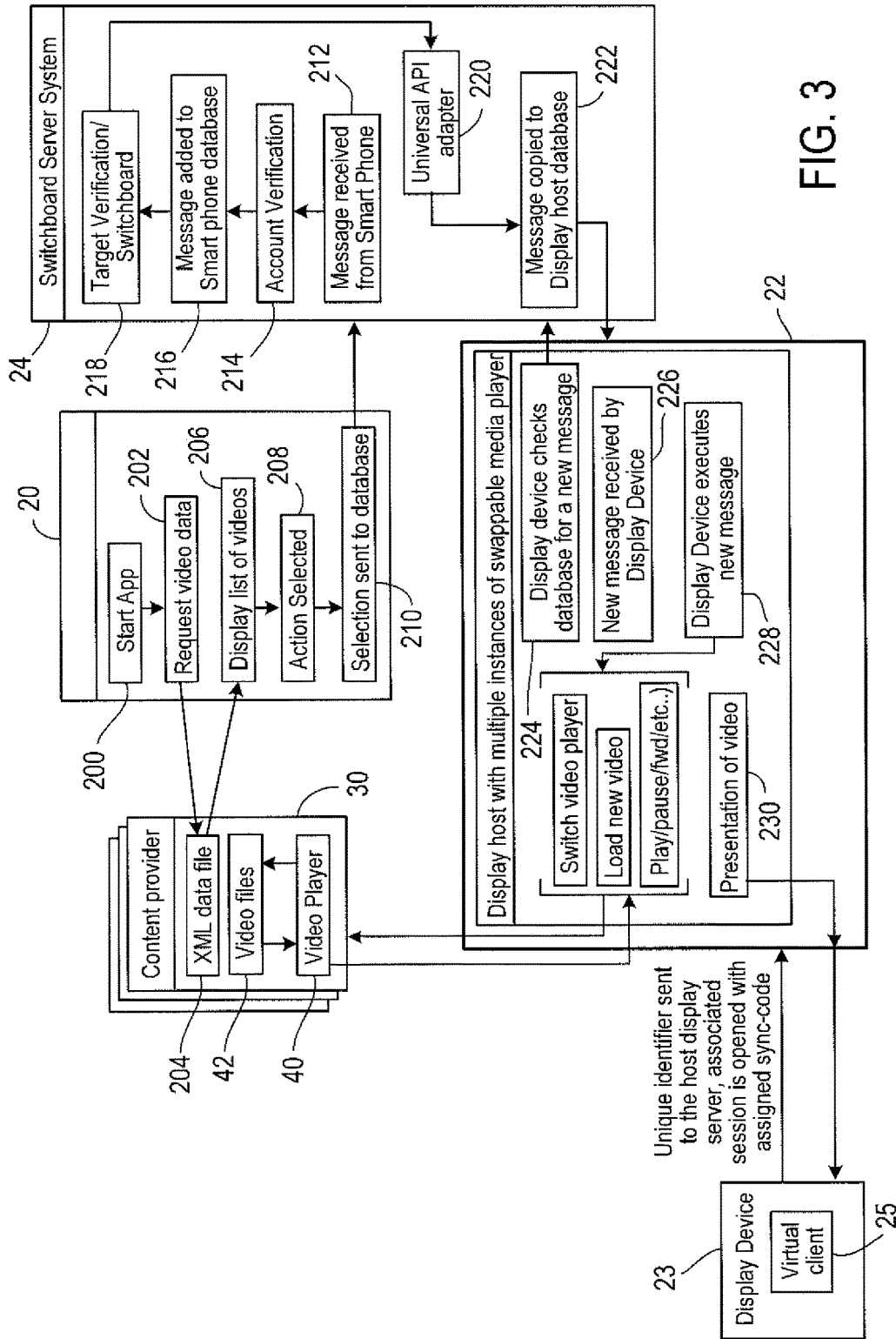


FIG. 3

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.