



US008745494B2

(12) **United States Patent**
Spivack

(10) **Patent No.:** **US 8,745,494 B2**
(45) **Date of Patent:** **Jun. 3, 2014**

(54) **SYSTEM AND METHOD FOR CONTROL OF A SIMULATED OBJECT THAT IS ASSOCIATED WITH A PHYSICAL LOCATION IN THE REAL WORLD ENVIRONMENT**

6,314,167	B1	11/2001	Johnson
6,549,893	B1	4/2003	Lannert et al.
6,572,380	B1	6/2003	Buckley et al.
6,680,909	B1	1/2004	Bansal et al.
6,983,232	B2	1/2006	Nguyen et al.
7,054,848	B1	5/2006	Lannert et al.
7,065,553	B1	6/2006	Chesley et al.
7,072,919	B2	7/2006	Sexton et al.
7,155,496	B2	12/2006	Froyd et al.
7,353,160	B2	4/2008	Voigt
7,487,177	B2	2/2009	Kilian-Kehr et al.

(75) Inventor: **Nova T. Spivack**, San Francisco, CA (US)

(73) Assignee: **Zambala LLLP**, Henderson, NV (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 707 days.

(21) Appl. No.: **12/473,143**

(22) Filed: **May 27, 2009**

(65) **Prior Publication Data**

US 2010/0302143 A1 Dec. 2, 2010

(51) **Int. Cl.**
G06F 3/048 (2013.01)

(52) **U.S. Cl.**
USPC **715/706; 345/156**

(58) **Field of Classification Search**
USPC 345/156-184; 715/706, 764-862;
703/1-22; 434/11-27
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,519,490	A	5/1985	White
4,829,899	A	5/1989	Wiker et al.
5,600,777	A	2/1997	Wang et al.
5,604,907	A	2/1997	Conner et al.
5,623,657	A	4/1997	Conner et al.
6,023,270	A	2/2000	Brush, II et al.
6,028,593	A	2/2000	Rosenberg et al.
6,080,063	A	6/2000	Khosla
6,302,941	B1	10/2001	Oya et al.

FOREIGN PATENT DOCUMENTS

WO	WO-2006024856	3/2006
WO	WO-2009002879	12/2008

OTHER PUBLICATIONS

International Search Report PCT/US2010/035282 dated Feb. 1, 2001; pp. 1-3.
Written Opinion PCT/US2010/035282 dated Feb. 1, 2011; pp. 1-6.

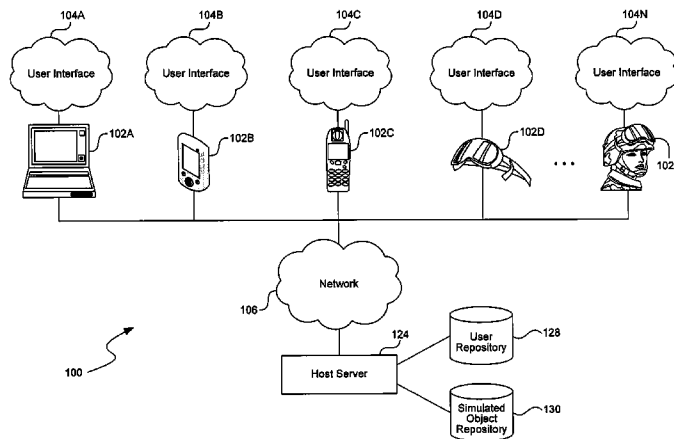
(Continued)

Primary Examiner — Liliana Cerullo
(74) *Attorney, Agent, or Firm* — Perkins Coie LLP

(57) **ABSTRACT**

Systems and methods for control of a simulated object that is associated with a physical location in the real world environment are herein disclosed. In one aspect, embodiments of the present disclosure include a method, which may be implemented on a system, of determining whether a location data and a timing data satisfy a criterion. Responsive to determining that the location data and the timing data satisfy the criterion, the method enables access of the simulated object in a simulated environment by a user via a device. The simulated object generally includes attributes that are perceived by the user via the device. In one embodiment, the location data includes a location of the device and the timing data includes a time when the device is located at the location.

65 Claims, 20 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

7,516,052 B2 4/2009 Hatcherson et al.
 7,546,225 B2 6/2009 Nguyen et al.
 7,555,725 B2 6/2009 Abramson et al.
 7,570,261 B1 8/2009 Edecker et al.
 7,685,508 B2 3/2010 Froyd et al.
 7,739,479 B2 6/2010 Bordes et al.
 7,797,168 B2 9/2010 Kusumoto et al.
 7,859,551 B2 12/2010 Bulman et al.
 7,991,706 B2* 8/2011 Mattern 705/401
 7,996,264 B2 8/2011 Kusumoto et al.
 8,046,338 B2 10/2011 Basso et al.
 8,117,281 B2 2/2012 Robinson et al.
 8,181,152 B2 5/2012 Choi et al.
 8,191,121 B2 5/2012 Ruppert et al.
 8,192,283 B2 6/2012 Ruppert et al.
 8,201,229 B2 6/2012 Ruppert et al.
 8,246,467 B2 8/2012 Huang et al.
 8,255,961 B2 8/2012 Ellis
 8,279,862 B2 10/2012 Sbisa et al.
 8,287,383 B1 10/2012 Etter et al.
 8,307,273 B2 11/2012 Pea et al.
 8,566,786 B2 10/2013 Choi et al.
 2002/0010734 A1 1/2002 Ebersole et al.
 2002/0029298 A1 3/2002 Wilson
 2002/0042921 A1 4/2002 Ellis
 2002/0057340 A1 5/2002 Fernandez et al.
 2002/0133325 A1 9/2002 Hoare et al.
 2002/0184516 A1 12/2002 Hale et al.
 2003/0064712 A1 4/2003 Gaston et al.
 2003/0217122 A1 11/2003 Roese et al.
 2003/0221022 A1 11/2003 Sexton et al.
 2004/0002843 A1 1/2004 Robarts et al.
 2004/0027258 A1 2/2004 Pechatnikov et al.
 2004/0053686 A1 3/2004 Pacey et al.
 2004/0095311 A1 5/2004 Tarlton et al.
 2004/0158455 A1 8/2004 Spivack et al.
 2005/0009608 A1 1/2005 Robarts et al.
 2005/0172018 A1 8/2005 Devine et al.
 2005/0267731 A1 12/2005 Hatcherson et al.
 2005/0268254 A1 12/2005 Abramson et al.
 2005/0286421 A1* 12/2005 Janacek 370/231
 2006/0092170 A1* 5/2006 Bathiche et al. 345/589
 2006/0189386 A1* 8/2006 Rosenberg 463/37
 2006/0192852 A1 8/2006 Rosenthal et al.
 2006/0223635 A1 10/2006 Rosenberg
 2006/0230073 A1 10/2006 Gopalakrishnan

2006/0235674 A1 10/2006 Voigt
 2006/0287815 A1* 12/2006 Gluck 701/208
 2007/0024644 A1 2/2007 Bailey
 2007/0117576 A1 5/2007 Huston
 2007/0203903 A1 8/2007 Attaran Rezaei et al.
 2007/0214449 A1 9/2007 Choi et al.
 2007/0223675 A1* 9/2007 Surin et al. 379/202.01
 2007/0265089 A1 11/2007 Robarts et al.
 2007/0279494 A1 12/2007 Aman et al.
 2007/0299559 A1 12/2007 Janssen et al.
 2008/0026838 A1 1/2008 Dunstan et al.
 2008/0031234 A1 2/2008 Sbisa et al.
 2008/0036653 A1 2/2008 Huston
 2008/0133189 A1 6/2008 Criswell et al.
 2008/0162707 A1 7/2008 Beck et al.
 2008/0189360 A1* 8/2008 Kiley et al. 709/203
 2008/0220397 A1* 9/2008 Capone et al. 434/20
 2008/0222295 A1 9/2008 Robinson et al.
 2008/0247636 A1 10/2008 Davis et al.
 2008/0261564 A1 10/2008 Logan
 2008/0294663 A1 11/2008 Heinley et al.
 2008/0320419 A1 12/2008 Matas et al.
 2009/0005018 A1* 1/2009 Forstall et al. 455/414.1
 2009/0005140 A1 1/2009 Rose et al.
 2009/0036186 A1 2/2009 Benco et al.
 2009/0069033 A1* 3/2009 Karstens et al. 455/456.3
 2009/0089825 A1 4/2009 Coldwell
 2009/0102616 A1 4/2009 Stone et al.
 2009/0125823 A1 5/2009 Moll et al.
 2009/0265257 A1* 10/2009 Klingner et al. 705/27
 2009/0293011 A1 11/2009 Nassar
 2010/0017820 A1 1/2010 Thevathasan et al.
 2010/0217573 A1 8/2010 Hatcherson et al.
 2010/0228776 A1 9/2010 Melkote et al.
 2011/0161861 A1 6/2011 Abramson et al.
 2011/0161872 A1 6/2011 Abramson et al.
 2011/0225069 A1 9/2011 Cramer et al.
 2012/0059720 A1 3/2012 Musabji et al.
 2012/0174062 A1 7/2012 Choi et al.
 2013/0174268 A1 7/2013 Wang et al.
 2013/0179272 A1 7/2013 Bonev et al.
 2013/0328933 A1 12/2013 Abramson et al.

OTHER PUBLICATIONS

“Object-Oriented Programming,” as shown in http://en.wikipedia.org/wiki/Object-oriented_programming, dated Apr. 22, 2009, last accessed Nov. 4, 2013, pp. 1-9.

* cited by examiner

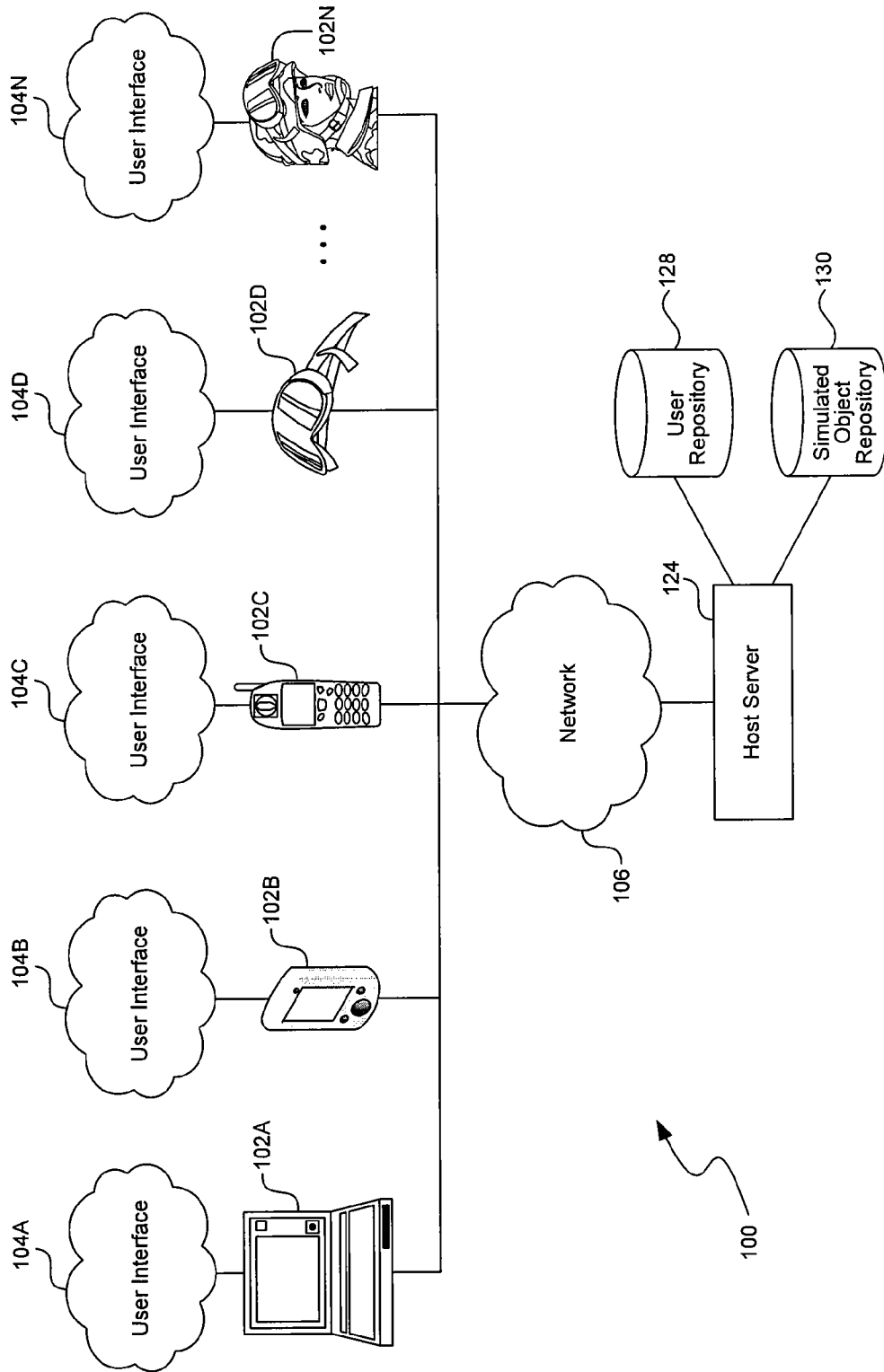


FIG. 1

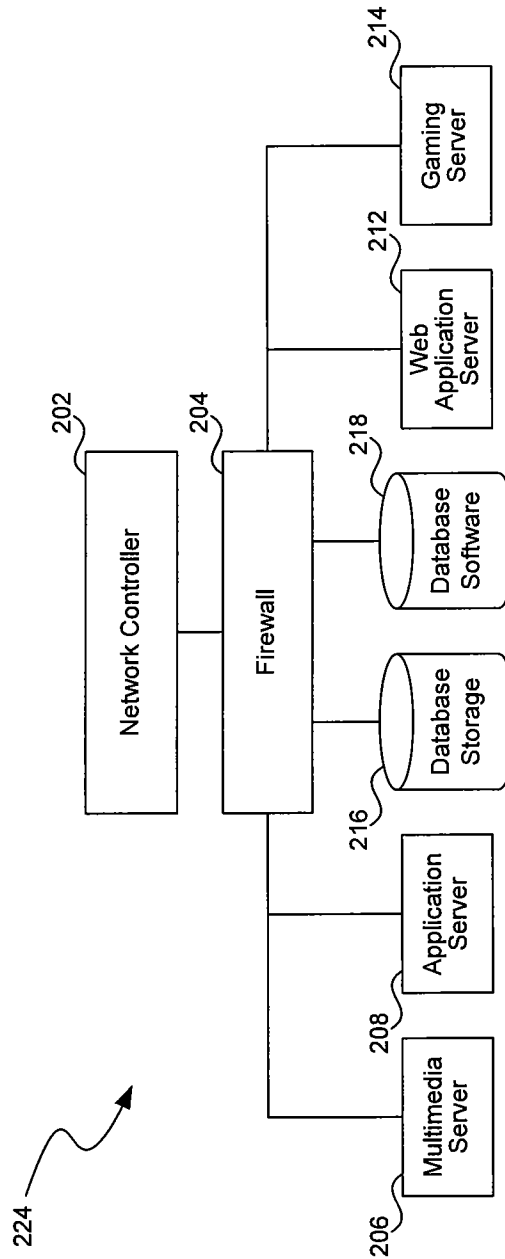


FIG. 2

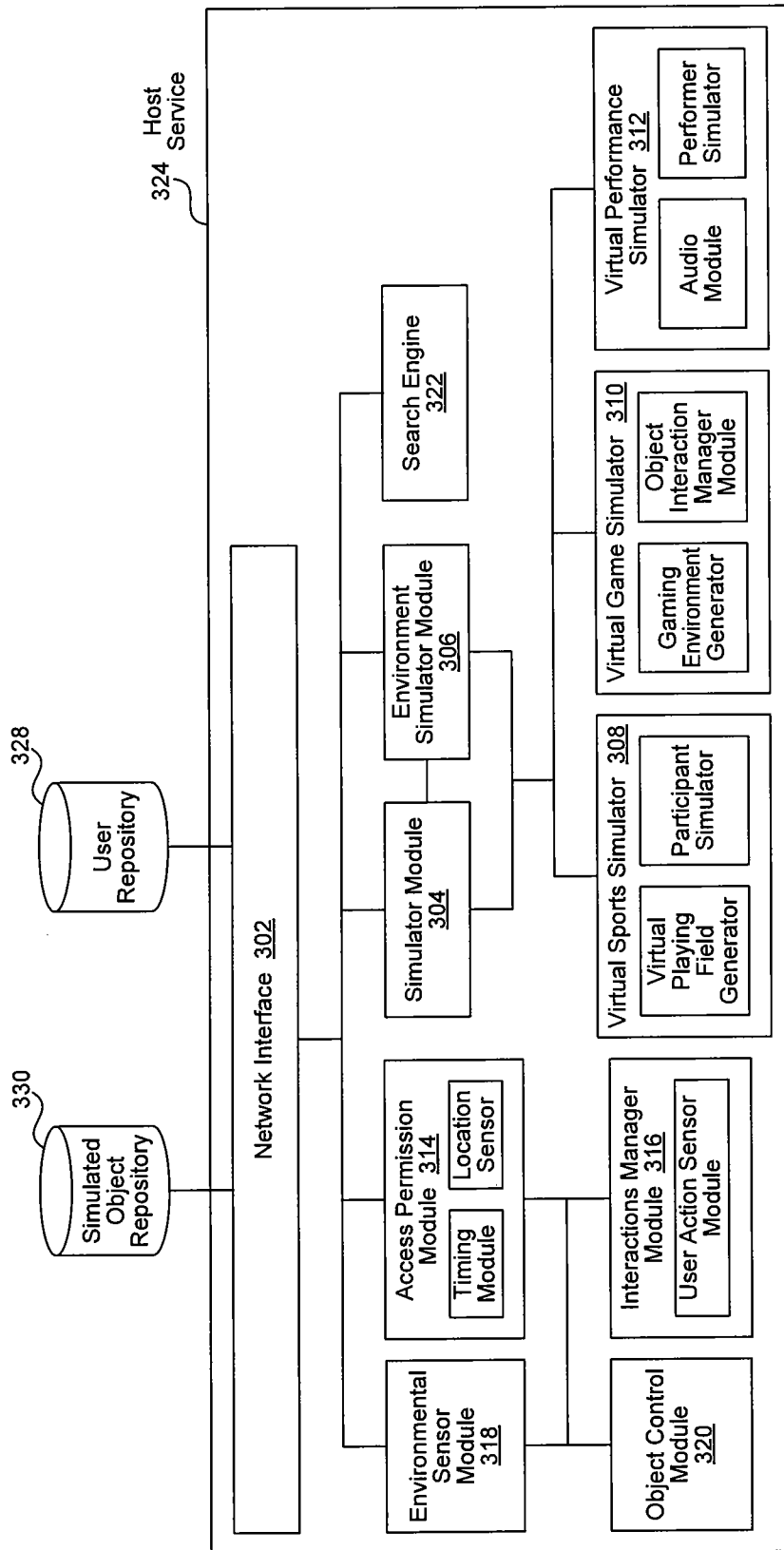


FIG. 3A

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.