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

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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.
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.

(Continued)

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)

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(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
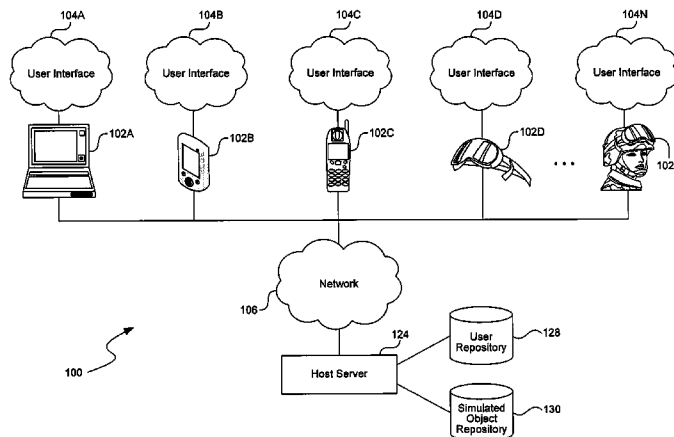
(56) **References Cited**

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	Klinger 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.
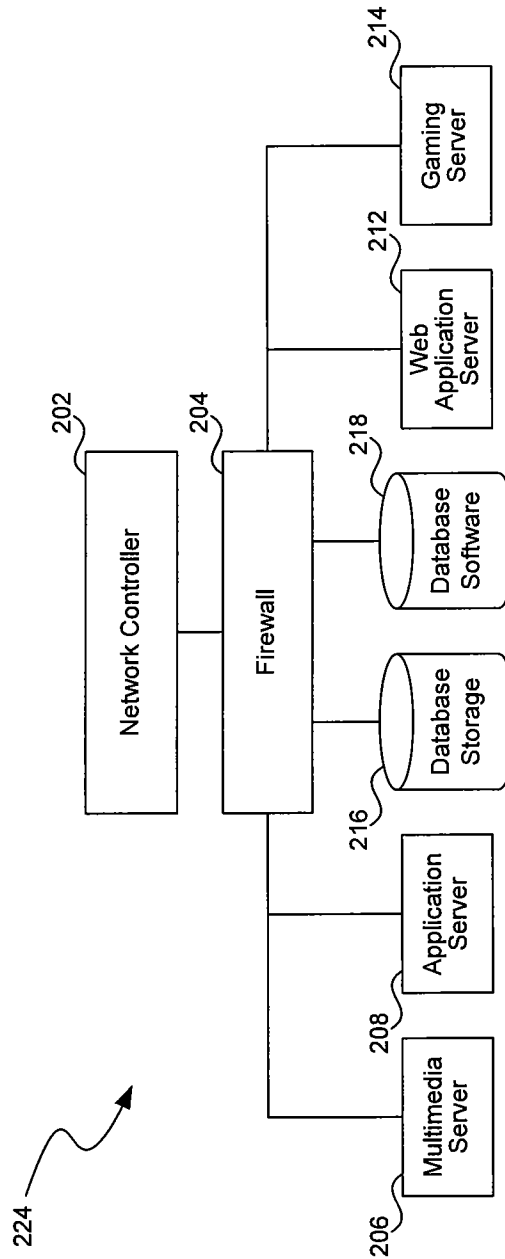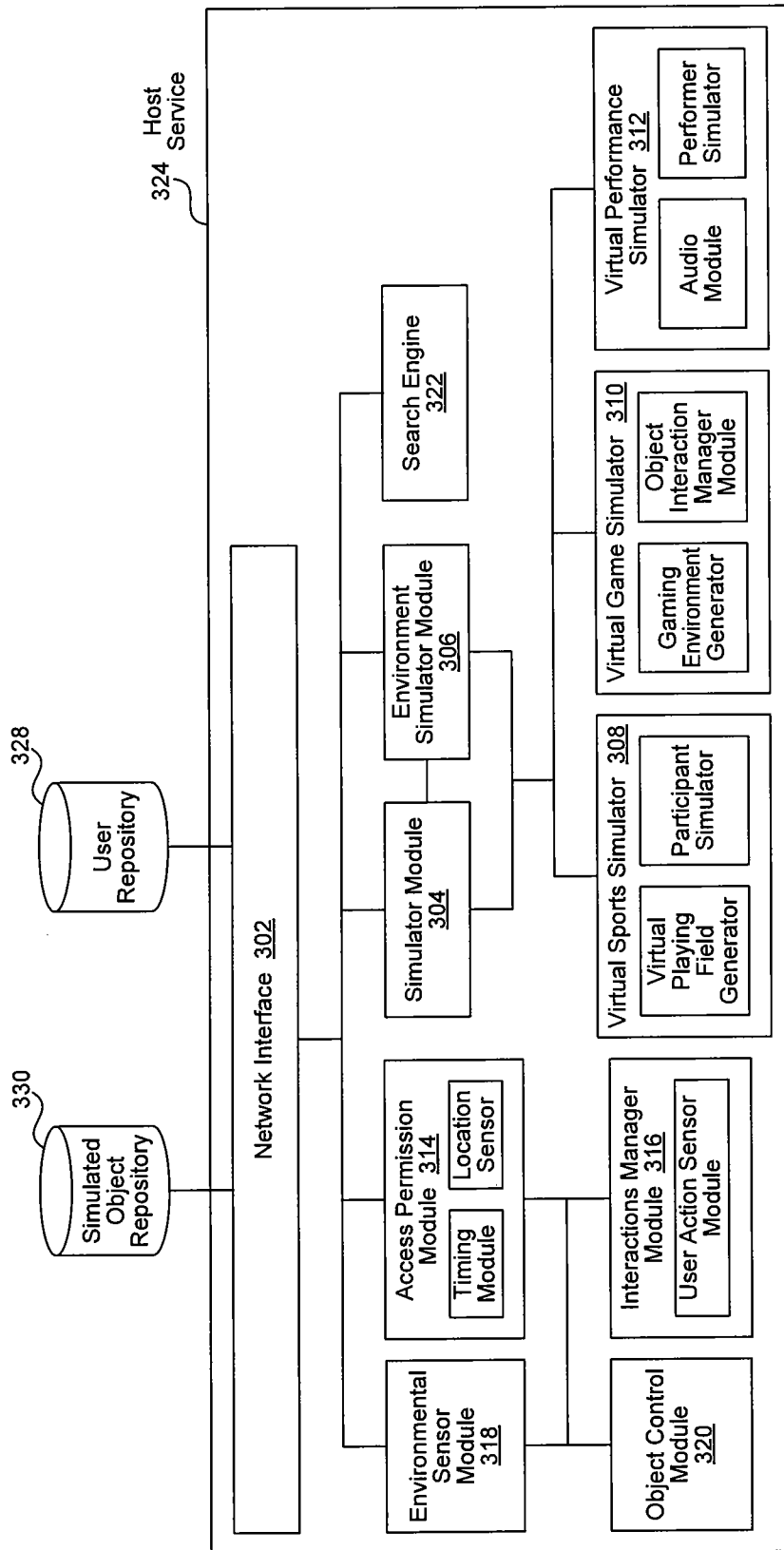
* cited by examiner
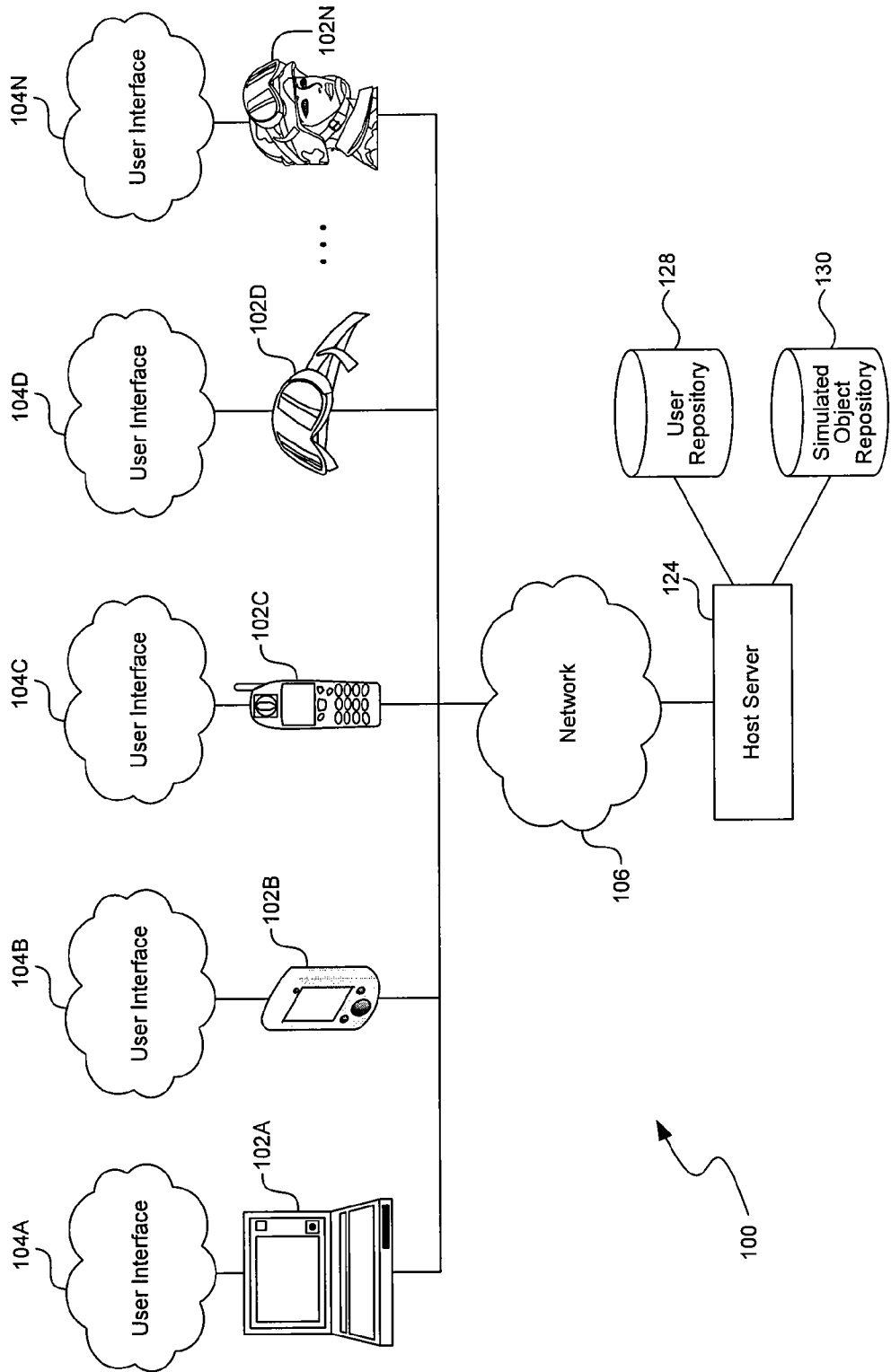
FIG. 1

FIG. 2

FIG. 3A

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