EXHIBIT D

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(12) **United States Patent**
Beyer, Jr. et al.

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(54) **METHOD TO PROVIDE AD HOC AND PASSWORD PROTECTED DIGITAL AND VOICE NETWORKS**

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(*) 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 disclaimer.

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Related U.S. Application Data

(63) Continuation of application No. 14/633,804, filed on Feb. 27, 2015, now Pat. No. 9,445,251, which is a
(Continued)

(51) **Int. Cl.**
H04W 4/22   (2009.01)
H04W 4/08   (2009.01)
(Continued)

(52) **U.S. Cl.**
CPC *H04W 4/22* (2013.01); *G01S 19/17* (2013.01); *G06F 3/0482* (2013.01); *H04M 3/56* (2013.01);
(Continued)

(58) **Field of Classification Search**
CPC H04W 4/02
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,555,286 A   9/1996   Tendler
5,898,434 A   4/1999   Small et al.
(Continued)

FOREIGN PATENT DOCUMENTS

JP   H08-5394 A   1/1996
JP   H09-113288 A   5/1997
(Continued)

OTHER PUBLICATIONS

Batista, E., "Your Boss May Know Where You Are," Wired News, May 31, 2002; 2pgs.
(Continued)

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(57)   **ABSTRACT**

A method and system includes the ability for individuals to set up an ad hoc digital and voice network easily and rapidly to allow users to coordinate their activities by eliminating the need for pre-entry of data into a web or identifying others by name, phone numbers or email. This method is especially useful for police, fire fighters, military, first responders or other emergency situations for coordinating different organizations at the scene of a disaster to elevate conventional communication problems either up and down the chain of command or cross communication between different emergency units. The method and system provides that the users are only required to enter a specific Server IP address and an ad hoc event name, a password and perhaps the name of the particular unit.
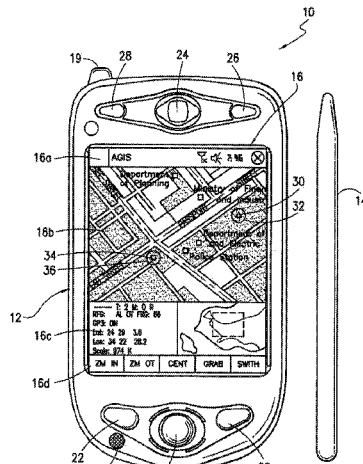
48 Claims, 7 Drawing Sheets

Related U.S. Application Data

continuation of application No. 14/529,978, filed on Oct. 31, 2014, now Pat. No. 9,467,838, which is a continuation-in-part of application No. 14/027,410, filed on Sep. 16, 2013, now Pat. No. 8,880,042, which is a continuation of application No. 13/751,453, filed on Jan. 28, 2013, now Pat. No. 8,538,393, which is a continuation-in-part of application No. 12/761,533, filed on Apr. 16, 2010, now Pat. No. 8,364,129, which is a continuation-in-part of application No. 11/615, 472, filed on Dec. 22, 2006, now Pat. No. 8,126,441, which is a continuation-in-part of application No. 11/308,648, filed on Apr. 17, 2006, now Pat. No. 7,630,724, which is a continuation-in-part of application No. 10/711,490, filed on Sep. 21, 2004, now Pat. No. 7,031,728.

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H04W 4/14	(2009.01)
H04M 7/00	(2006.01)
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G06F 3/0482	(2013.01)
G01S 19/17	(2010.01)
H04W 84/18	(2009.01)

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CPC **H04M 7/006** (2013.01); **H04W 4/08** (2013.01); **H04W 4/14** (2013.01); *H04W 84/18* (2013.01)

(56) **References Cited**

U.S. PATENT DOCUMENTS

6,204,844	B1	3/2001	Fumarolo et al.
6,292,747	B1	9/2001	Amro et al.
6,366,782	B1	4/2002	Fumarolo et al.
6,377,210	B1	4/2002	Moore
6,385,465	B1	5/2002	Yoshioka
6,434,403	B1	8/2002	Ausems et al.
6,490,521	B2	12/2002	Wiener
6,518,957	B1	2/2003	Lehtinen et al.
6,542,475	B1	4/2003	Bala et al.
6,549,768	B1	4/2003	Fraccaroli
6,661,353	B1	12/2003	Gopen
6,662,016	B1	12/2003	Buckham et al.
6,716,101	B1	4/2004	Meadows et al.
6,775,560	B2	8/2004	King et al.
6,868,333	B2	3/2005	Melen
6,868,337	B2	3/2005	Muramatsu
6,882,856	B1	4/2005	Alterman et al.
6,885,874	B2	4/2005	Grube et al.
7,024,207	B2	4/2006	Gorday et al.
7,031,700	B1	4/2006	Weaver et al.
7,031,728	B2	4/2006	Beyer, Jr.
7,158,878	B2	1/2007	Rasmussen et al.
7,292,935	B2	11/2007	Yoon
7,299,075	B2	11/2007	Gottlieb et al.
7,330,112	B1	2/2008	Emigh et al.
7,421,270	B2	9/2008	Serfat et al.
7,486,648	B1	2/2009	Baranowski
7,499,799	B2	3/2009	Park
7,593,740	B2 *	9/2009	Crowley H04M 3/42 455/414.2
7,630,724	B2	12/2009	Beyer, Jr. et al.
8,014,763	B2 *	9/2011	Hymes H04M 1/26 455/414.2
8,126,441	B2	2/2012	Beyer, Jr.
8,139,514	B2	3/2012	Weber et al.
8,364,129	B1	1/2013	Beyer, Jr.
8,538,393	B1	9/2013	Beyer, Jr. et al.

9,445,251	B2	9/2016	Beyer, Jr. et al.
9,467,838	B2	10/2016	Beyer, Jr. et al.
2001/0044321	A1	11/2001	Ausems et al.
2003/0013461	A1	1/2003	Mizune et al.
2003/0093405	A1	5/2003	Mayer
2003/0100326	A1	5/2003	Grube et al.
2003/0103088	A1	6/2003	Dresti et al.
2003/0114171	A1 *	6/2003	Miyamoto H04W 4/02 455/456.1
2003/0139150	A1	7/2003	Rodriguez et al.
2003/0149527	A1	8/2003	Sikila et al.
2003/0200259	A1	10/2003	Tsuge
2003/0224762	A1	12/2003	Lau et al.
2004/0054428	A1	3/2004	Sheha et al.
2004/0137884	A1	7/2004	Engstrom et al.
2004/0143391	A1	7/2004	King et al.
2004/0148090	A1 *	7/2004	Melen G01C 21/26 701/482
2004/0192299	A1	9/2004	Wilson et al.
2004/0204070	A1	10/2004	August et al.
2004/0252050	A1 *	12/2004	Tengler G01S 5/0072 342/357.31
2004/0266456	A1	12/2004	Bostrom et al.
2005/0060069	A1	3/2005	Breed et al.
2005/0130634	A1	6/2005	Godfrey
2005/0130666	A1 *	6/2005	Levy H04W 8/24 455/452.2
2005/0227705	A1	10/2005	Rousu et al.
2005/0270311	A1	12/2005	Rasmussen et al.
2006/0030339	A1	2/2006	Zhovnirovsky et al.
2006/0031927	A1	2/2006	Mizuno et al.
2006/0047825	A1 *	3/2006	Steenstra H04W 4/02 709/229
2007/0150444	A1	6/2007	Chesnais et al.
2007/0281689	A1	12/2007	Altman et al.
2008/0132243	A1	6/2008	Spalink et al.
2010/0052945	A1	3/2010	Breed
2015/0264167	A1	9/2015	Beyer, Jr. et al.
2015/0319789	A1	11/2015	Beyer, Jr. et al.
2016/0021522	A1	1/2016	Beyer, Jr. et al.
2016/0057598	A1	2/2016	Beyer, Jr. et al.
2017/0026815	A1	1/2017	Beyer, Jr. et al.
2017/0238158	A1	8/2017	Beyer, Jr. et al.

FOREIGN PATENT DOCUMENTS

JP	2000-357296	A	12/2000
JP	2002-245336	A	8/2002
JP	2002-277256	A	9/2002
WO	WO-03/074973	A2	9/2003

OTHER PUBLICATIONS

Benefon ESC! GSM+GPS Personal Navigation Phone, 1999, Benefon Oyj, Salo, Finland; 4pgs.

Edlund, T. and Ciber, S., "Mobile Services for Truck Drivers," Master Thesis in Mobile Informatics, IT University of Goleborg, Sweden; 2003; 50pgs.

Garmin rino 110 2-way Radio & Personal Navigator; Owner's Manual and Reference Guide; Apr. 2003; 88pgs.

Gate5, "Mobile Community Solution: Context-sensitive Application Suite for Mobile Communities," 2002; 3pgs.

Gate5, "Mobile Guide Solution: Context-sensitive Applications for PDA-based Mobile City and Travel Guides," 2002; 4pgs.

The Gate5 system, which, upon information and belief, was sold and/or publicly used within the U.S. prior to 2004 and at least as early as 2002.

Int'l Preliminary Report on Patentability (IPRP); for Int'l Patent App. No. PCT/JP2004/000250 dated Jul. 5, 2005; 4pgs.

Kim, R. "Find Friends by Cell Phone/Loop! Application's GPS Program Can Beam Map Location," SFGate; Nov. 14, 2006; 2pgs.

Life360's Rule 50(a) Motion for Judgment as a Matter of Law; *AGIS, Inc.* v. *Life360, Inc.* (S.D. Fl.); Mar. 12, 2015; 27pgs.

LocatioNet Press Release: "LocatioNet Releases Ground Breaking

(56)   **References Cited**

OTHER PUBLICATIONS

LocatioNet LBS Applications: MyMap description web page, published before 2004 upon information and belief; 13pgs.
The LocatioNet system which, upon information and belief, was sold and/or publically used within the U.S. prior to 2004 and at least as early as 2003; 6pgs.
Luna, L., "This Man Knows You Live . . . and Work and Play," Wireless Review; Sep. 1, 2002; pp. 24-32.
Meggers, J. and Sang-Bum Parl, A, "A Multimedia Communication Architecture for Handheld Devices," IEEE Paper 0-7803-4872-9/98, Sep. 8-11, 1998; pp. 1245-1249.
Memory Map Remote Tracking, available on the Internet at https://web.archive.org/web/20060202161013/hltp:I/memory-map.com/; 2pgs.
Plaintiff Advanced Ground Information Systems, Inc.'s Motions in Limine; *AGIS, Inc.* v. *Life360, Inc.* (S.D. FI); Feb. 19, 2015; 54pgs.
Östman, L., "A Study of Location-Based Services Including a Design and Implementation of an Enhanced Friend Finder Client with Mapping Capabilities," Lulea Tekniska Univeritet; Aug. 31, 2001; 63pgs.
PRNewswire, "Trimble GPS Technology Enables Seiko Epson, Communication Device and Wireless Data Service," accessed on the internet at: http://www.printthis.clickability.com/pt/cpt?expire=&title=Trimble+GPS+Technology+Enables+Seiko+Epson+Communication+Device+and+Wireless+Data+S . . . ; downloaded Jun. 16, 2016; 4pgs.
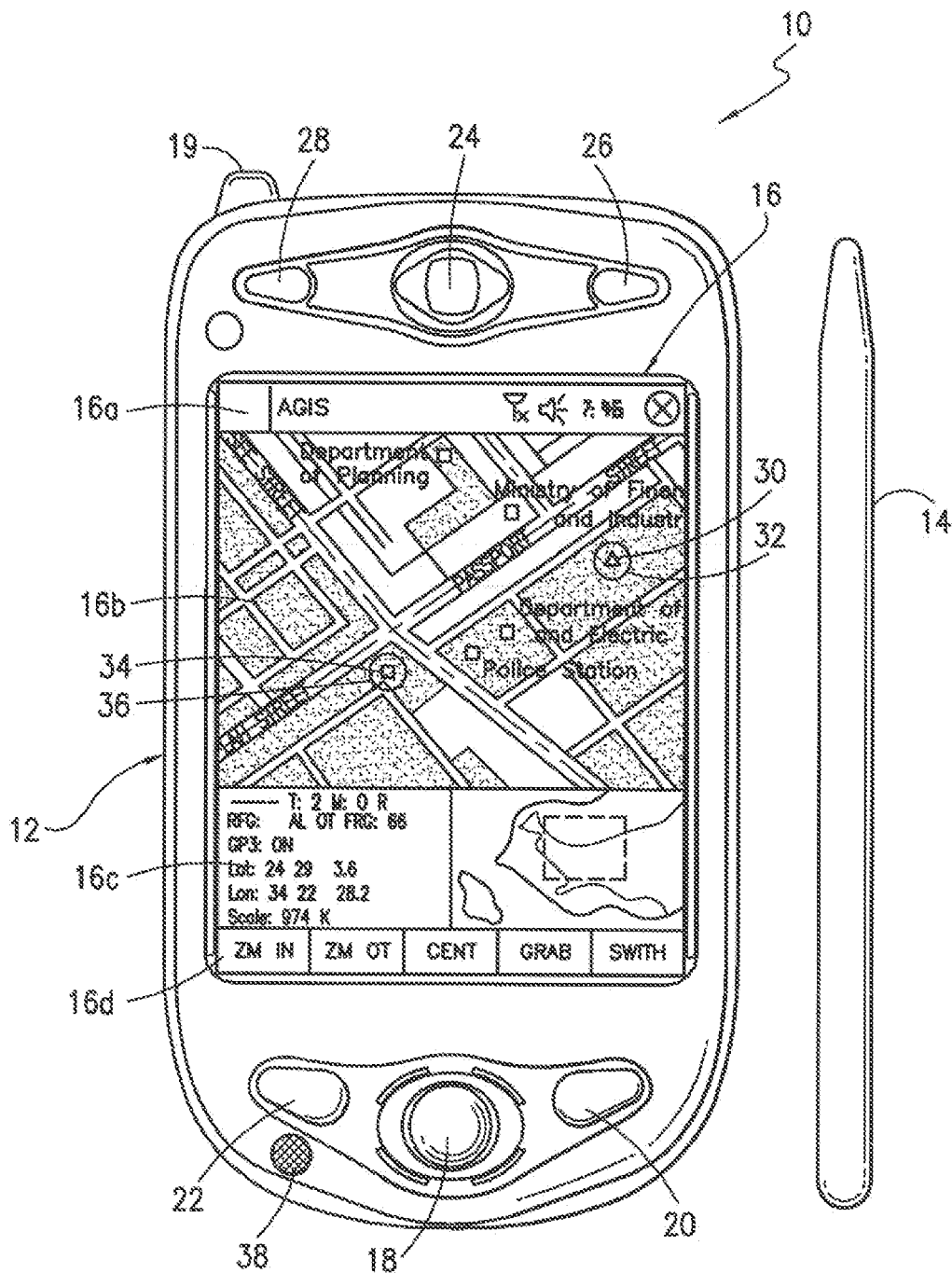

* cited by examiner

FIG. 1

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