EXHIBIT 6

US009749829B2

(12) United States Patent

Beyer, Jr. et al.

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

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U.S.C. 154(b) by 0 days.

This patent is subject to a terminal dis-

claimer.

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Related U.S. Application Data

(63) Continuation of application No. 14/529,978, filed on Oct. 31, 2014, now Pat. No. 9,467,838, which is a (Continued)

(51) Int. Cl. H04W 4/22 (2009.01) H04W 76/00 (2009.01)

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(10) Patent No.: US 9,749,829 B2

(45) **Date of Patent:** *Aug. 29, 2017

(58) Field of Classification Search

CPC H04W 4/02

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(56) References Cited

U.S. PATENT DOCUMENTS

(Continued)

FOREIGN PATENT DOCUMENTS

JP H085394 1/1996 JP H09113288 5/1997 (Continued)

OTHER PUBLICATIONS

Gate5, "Mobile Community Solution: Context-sensitive application suite for mobile communities," published in 2002.

(Continued)

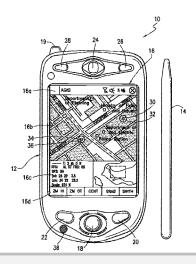
Primary Examiner — Omoniyi Obayanju

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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.

68 Claims, 7 Drawing Sheets





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(56)

Related U.S. Application Data

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 84/04

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CPC H04L 61/605 (2013.01); H04L 63/065 (2013.01); H04L 63/083 (2013.01); H04L 63/104 (2013.01); H04L 67/18 (2013.01); H04M 1/27455 (2013.01); H04M 1/72519 (2013.01); H04M 1/72536 (2013.01); H04M 1/72547 (2013.01); H04M 1/72572 (2013.01); H04M 1/72583 (2013.01); H04W 4/02 (2013.01); H04W 4/021 (2013.01); H04W 4/023 (2013.01); H04W 4/026 (2013.01); H04W 4/027 (2013.01); H04W 4/08 (2013.01); H04W 12/02 (2013.01); H04W 12/06 (2013.01); H04W 12/08 (2013.01); H04W 64/00 (2013.01); H04W 68/00 (2013.01); H04W 68/04 (2013.01); H04W 76/007 (2013.01); H04W 84/18 (2013.01); H04L 61/2007 (2013.01); H04M 1/72525 (2013.01); H04M 7/006 (2013.01); H04M 2250/10 (2013.01); H04M 2250/22 (2013.01); H04M 2250/62 (2013.01); H04W 4/10 (2013.01); H04W 12/04 (2013.01); H04W 76/005 (2013.01); H04W 76/021 (2013.01); H04W 84/042 (2013.01)

(2009.01)

References Cited

U.S.	PATENT	DOCUMENTS
0.5.	TAILMI	DOCOMENTS

6 204 944			
	D1	2/2001	Engage 1 at al
6,204,844		3/2001	Fumarolo et al.
6,292,747	Bl	9/2001	Amro et al.
6,366,782	R1	4/2002	Fumarolo et al.
6,377,210	ы	4/2002	Moore
6,385,465	В1	5/2002	Yoshioka
6,434,403		8/2002	Ausems et al.
6,490,521	B2	12/2002	Wiener
6,518,957	R1	2/2003	Lehtinen et al.
, ,			
6,542,475		4/2003	Bala et al.
6,549,768	В1	4/2003	Fraccaroli
6,661,353	R1	12/2003	Gopen
6,662,016	BI	12/2003	Buckham et al.
6,716,101	В1	4/2004	Meadows et al.
6,775,560		8/2004	King et al.
6,868,333		3/2005	Melen
6,868,337	B2	3/2005	Muramatsu
6,882,856		4/2005	Alterman et al.
6,885,874		4/2005	Grube et al.
7,024,207	B2 *	4/2006	Gorday H04W 4/14
			455/456.1
7.021.700	D.I	1/2000	
7,031,700		4/2006	Weaver et al.
7,031,728	B2	4/2006	Beyer, Jr.
			Rasmussen et al.
7,158,878		1/2007	
7,292,935	B2	11/2007	Yoon
7,299,075	B2	11/2007	Gottlieb et al.
7,330,112		2/2008	Emigh et al.
7,421,270	B2 *	9/2008	Serafat H04W 8/22
, ,			455/419
	- ·	0.0000	
7,486,648	BI	2/2009	Baranowski
7,499,799	B2	3/2009	Park
7,593,740		9/2009	Crowley H04L 12/58
7,393,740	DZ.	9/2009	-
			455/414.2
7,630,724	B2	12/2009	Beyer, Jr. et al.
		9/2011	
8,014,763	DZ .	9/2011	,
			455/414.2
8,126,441	R2	2/2012	Beyer, Jr.
8,139,514	B2	3/2012	Weber et al.
8,364,129	B1	1/2013	Beyer, Jr.
8,538,393	R1	9/2013	Beyer, Jr. et al.
8,880,042	BI	11/2014	Beyer, Jr. et al.
9,408,055	B2	8/2016	Beyer, Jr.
			Beyer, Jr. et al.
	B2	9/2016	
9,467,838	B2	10/2016	Beyer, Jr. et al.
2001/0044321	A1	11/2001	Ausems et al.
	Al	1/2003	Mizune et al.
2003/0093405	A1*	5/2003	Mayer 707/1
2003/0100326	A1	5/2003	Grube et al.
2003/0103088		6/2003	Dresti G06F 3/0481
2003/0103088	AI	0/2003	
			715/835
2003/0114171	A1*	C/2002	
		6/2003	
2003/011-11/1		6/2003	Miyamoto H04W 4/02
			Miyamoto H04W 4/02 455/456.1
2003/0139150		7/2003	Miyamoto H04W 4/02
2003/0139150	A1	7/2003	Miyamoto
2003/0139150 2003/0149527	A1 A1	7/2003 8/2003	Miyamoto
2003/0139150 2003/0149527 2003/0200259	A1 A1 A1	7/2003 8/2003 10/2003	Miyamoto
2003/0139150 2003/0149527	A1 A1 A1	7/2003 8/2003	Miyamoto
2003/0139150 2003/0149527 2003/0200259	A1 A1 A1	7/2003 8/2003 10/2003	Miyamoto
2003/0139150 2003/0149527 2003/0200259 2003/0224762	A1 A1 A1 A1*	7/2003 8/2003 10/2003 12/2003	Miyamoto
2003/0139150 2003/0149527 2003/0200259 2003/0224762 2004/0054428	A1 A1 A1 A1*	7/2003 8/2003 10/2003 12/2003 3/2004	Miyamoto
2003/0139150 2003/0149527 2003/0200259 2003/0224762	A1 A1 A1 A1*	7/2003 8/2003 10/2003 12/2003	Miyamoto
2003/0139150 2003/0149527 2003/0200259 2003/0224762 2004/0054428 2004/0137884	A1 A1 A1* A1*	7/2003 8/2003 10/2003 12/2003 3/2004 7/2004	Miyamoto
2003/0139150 2003/0149527 2003/0200259 2003/0224762 2004/0054428 2004/0137884 2004/0143391	A1 A1 A1* A1* A1	7/2003 8/2003 10/2003 12/2003 3/2004 7/2004 7/2004	Miyamoto
2003/0139150 2003/0149527 2003/0200259 2003/0224762 2004/0054428 2004/0137884	A1 A1 A1* A1* A1	7/2003 8/2003 10/2003 12/2003 3/2004 7/2004	Miyamoto
2003/0139150 2003/0149527 2003/0200259 2003/0224762 2004/0054428 2004/0137884 2004/0143391	A1 A1 A1 * A1 * A1 A1	7/2003 8/2003 10/2003 12/2003 3/2004 7/2004 7/2004	Miyamoto
2003/0139150 2003/0149527 2003/0200259 2003/0224762 2004/0054428 2004/0137884 2004/0143391 2004/0148090	A1 A1 A1* A1 A1 A1 A1	7/2003 8/2003 10/2003 12/2003 3/2004 7/2004 7/2004 7/2004	Miyamoto
2003/0139150 2003/0149527 2003/0200259 2003/0224762 2004/0054428 2004/0137884 2004/0143391 2004/0148090 2004/0192299	A1 A1 A1* A1 A1 A1 A1 A1	7/2003 8/2003 10/2003 12/2003 3/2004 7/2004 7/2004 7/2004 9/2004	Miyamoto
2003/0139150 2003/0149527 2003/0200259 2003/0224762 2004/0054428 2004/0137884 2004/0143391 2004/0148090	A1 A1 A1* A1 A1 A1 A1 A1	7/2003 8/2003 10/2003 12/2003 3/2004 7/2004 7/2004 7/2004	Miyamoto
2003/0139150 2003/0149527 2003/0200259 2003/0224762 2004/0054428 2004/0137884 2004/0143391 2004/0148090 2004/0192299 2004/0204070	A1 A1 A1* A1 A1 A1 A1 A1 A1	7/2003 8/2003 10/2003 12/2003 3/2004 7/2004 7/2004 7/2004 9/2004 10/2004	Miyamoto
2003/0139150 2003/0149527 2003/0200259 2003/0224762 2004/0054428 2004/0137884 2004/0143391 2004/0148090 2004/0192299 2004/0204070 2004/0252050	A1 A1 A1* A1 A1 A1 A1 A1 A1 A1	7/2003 8/2003 10/2003 12/2003 3/2004 7/2004 7/2004 9/2004 10/2004 12/2004	Miyamoto
2003/0139150 2003/0149527 2003/0200259 2003/0224762 2004/0054428 2004/0137884 2004/0143391 2004/0192299 2004/0192299 2004/0204070 2004/0252050 2004/0266456	A1 A1 A1* A1 A1 A1 A1 A1 A1 A1 A1 A1	7/2003 8/2003 10/2003 12/2003 3/2004 7/2004 7/2004 9/2004 10/2004 12/2004	Miyamoto
2003/0139150 2003/0149527 2003/0200259 2003/0224762 2004/0054428 2004/0137884 2004/0143391 2004/0148090 2004/0192299 2004/0204070 2004/0252050	A1 A1 A1* A1 A1 A1 A1 A1 A1 A1 A1 A1	7/2003 8/2003 10/2003 12/2003 3/2004 7/2004 7/2004 9/2004 10/2004 12/2004	Miyamoto
2003/0139150 2003/0149527 2003/0200259 2003/0224762 2004/0054428 2004/0143391 2004/0148090 2004/0192299 2004/0252050 2004/0252050 2004/0266456 2005/0060069	A1 A1 A1* A1 A1 A1 A1 A1 A1 A1 A1 A1 A1	7/2003 8/2003 10/2003 12/2003 3/2004 7/2004 7/2004 9/2004 10/2004 12/2004 12/2004 3/2005	Miyamoto
2003/0139150 2003/0149527 2003/0200259 2003/0224762 2004/0054428 2004/0137884 2004/0148391 2004/0148090 2004/0204070 2004/0250250 2004/0250250 2005/0060069 2005/0130634	A1 A1 A1* A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1	7/2003 8/2003 10/2003 12/2003 3/2004 7/2004 7/2004 7/2004 9/2004 10/2004 12/2004 12/2004 3/2005 6/2005	Miyamoto
2003/0139150 2003/0149527 2003/0200259 2003/0224762 2004/0054428 2004/0143391 2004/0148090 2004/0192299 2004/0252050 2004/0252050 2004/0266456 2005/0060069	A1 A1 A1* A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1	7/2003 8/2003 10/2003 12/2003 3/2004 7/2004 7/2004 9/2004 10/2004 12/2004 12/2004 3/2005	Miyamoto
2003/0139150 2003/0149527 2003/0200259 2003/0224762 2004/0054428 2004/0137884 2004/0148391 2004/0148090 2004/0204070 2004/0250250 2004/0250250 2005/0060069 2005/0130634	A1 A1 A1* A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1	7/2003 8/2003 10/2003 12/2003 3/2004 7/2004 7/2004 7/2004 9/2004 10/2004 12/2004 12/2004 3/2005 6/2005	Miyamoto
2003/0139150 2003/0149527 2003/0200259 2003/0224762 2004/0054428 2004/0137884 2004/0143391 2004/0148090 2004/0192299 2004/0204070 2004/0252050 2004/0266456 2005/0130666	A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A	7/2003 8/2003 10/2003 12/2003 3/2004 7/2004 7/2004 9/2004 10/2004 12/2004 3/2005 6/2005	Miyamoto
2003/0139150 2003/0149527 2003/0200259 2003/0224762 2004/0054428 2004/0137884 2004/0148391 2004/0148090 2004/0204070 2004/0250250 2004/0250250 2005/0060069 2005/0130634	A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A	7/2003 8/2003 10/2003 12/2003 3/2004 7/2004 7/2004 7/2004 9/2004 10/2004 12/2004 12/2004 3/2005 6/2005	Miyamoto
2003/0139150 2003/0149527 2003/0200259 2003/0224762 2004/0054428 2004/0137884 2004/0143391 2004/0148090 2004/0192299 2004/0204070 2004/0252050 2004/0266456 2005/0130666	A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A	7/2003 8/2003 10/2003 12/2003 3/2004 7/2004 7/2004 9/2004 10/2004 12/2004 3/2005 6/2005	Miyamoto
2003/0139150 2003/0149527 2003/0200259 2003/0224762 2004/0054428 2004/0137884 2004/0143391 2004/0148090 2004/0192299 2004/0204070 2004/0252050 2004/0266456 2005/0130666 2005/0130666	A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A	7/2003 8/2003 10/2003 12/2003 3/2004 7/2004 7/2004 7/2004 10/2004 12/2004 12/2004 12/2004 3/2005 6/2005 10/2005	Miyamoto
2003/0139150 2003/0149527 2003/0200259 2003/0224762 2004/0054428 2004/0137884 2004/0143391 2004/0148090 2004/0192299 2004/0204070 2004/0252050 2004/0266456 2005/0130666 2005/0130666	A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A	7/2003 8/2003 10/2003 12/2003 3/2004 7/2004 7/2004 9/2004 10/2004 12/2004 3/2005 6/2005	Miyamoto

US 9,749,829 B2

Page 3

(56) References Cited

U.S. PATENT DOCUMENTS

3/2006	Steenstra et al 709/229
6/2007	Chesnais et al.
12/2007	Altman et al.
6/2008	Spalink et al.
3/2010	Breed
9/2015	Beyer, Jr. et al.
11/2015	Beyer, Jr. et al.
2/2016	Beyer, Jr. et al.
1/2017	Beyer, Jr. et al.
	6/2007 12/2007 6/2008 3/2010 9/2015 11/2015 2/2016

FOREIGN PATENT DOCUMENTS

JР	2000-357296 A	12/2000
JР	2002245336	8/2002
JР	2002-277256 A	9/2002
WO	03074973 A2	9/2003

OTHER PUBLICATIONS

Gate5, "Mobile Guide Solution: Context-sensitive applications for PDA based mobile city and travel guides," published in 2002.

Batista, "Your Boss May Know Where You Are," Wired News, published May 31, 2002.

Edlund, Therese et al., "Mobile Services for truck drivers," Master thesis in Mobile Informatics, IT University of Goteborg, Sweden, 2003.

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.

Kim, Ryan, "Find Friends by cell phone/Loopt application's GPS program can beam map location," published Nov. 14, 2006 by SFGate.

LocatioNet Press Release: "LocatioNet Releases Ground Breaking Mass Market LBS Application Suite—LocatioNet MyMap," published May 6, 2003.

LocatioNet LBS Applications: MyMap description web page, published before 2004 upon information and belief.

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.

Luna, Lynnette, "This Man Knows You Live . . . and Work and Play," Wireless Review, Sep. 2002; pp. 24-32.

Meggers, Jens et al., "A Multimedia Communication Architecture for Handheld Devices," IEEE Paper 0-7803-4872-9/98, published 1998

Memory Map Remote Tracking, available at https://web.archive.org/web/20060202161013/http://memory-map.com/.

Ostman, Lennart, "A Study of Location-Based Services Including a Design and Implementation of an Enhanced Friend Finder Client with Mapping Capabilities," Lulea Tekniska Univeritet, 2001.

Benefon ESCI GSM + GPS Personal Navigation Phone, 1999, Benefon Oyj, Salo, Finland.

Elisa Batista, Your Boss May Know Where You Are, May 31, 2002, http://archive.wired.com/gadgets/wireless/news/2002/05/52852?currentPage=all.

U.S. Appl. No. 14/529,978, filed Oct. 31, 2014, Method to Provide Ad Hoc and Password Protected Digital and Voice Networks, Malcolm K. Beyer, et al.

U.S. Appl. No. 14/695,233, filed Apr. 24, 2015, Method to Provide Ad Hoc and Password Protected Digital and Voice Networks, Malcolm K. Beyer.

U.S. Appl. No. 14/633,804, filed Feb. 27, 2015, Method to Provide Ad Hoc and Password Protected Digital and Voice Networks, Malcolm K. Beyer, et al.

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

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

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

Plaintiff Advanced Ground Information Systems, Inc.'s Motions in Limine; AGIS, Inc. v. Life360, Inc. (S.D. FI.); Feb. 19, 2015; 54pgs. PRNewswire, "Trimble GPS Technology Enables Seiko Epson Communication Device and Wireless Data Service," Nov. 8, 1999, accessed on the internet at: http://www.prnewswire.com/news-releases/trimble-gps-technology-enables-seiko-epson-communication-device-and-wireless-data-service-77056402.html; downloaded Jun. 16, 2016; 4pgs.

U.S. Appl. No. 15/287,638, Method to Provide Ad Hoc and Passwork Protected Digital and Voice Networks, filed Oct. 6, 2016. U.S. Appl. No. 15/255,046, Method to Provide Ad Hoc and Password Protected Digital and Voice Networks, filed Sep. 1, 2016.

* cited by examiner



U.S. Patent

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Sheet 1 of 7

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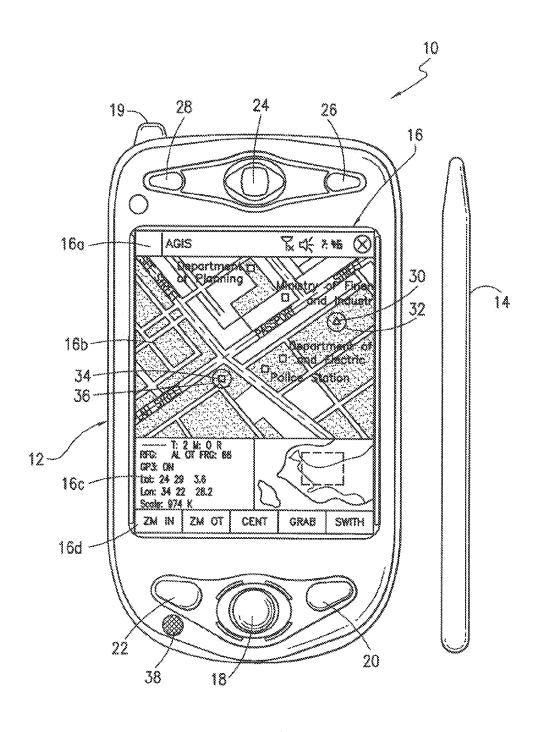


FIG. 1

DOCKET

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