Case 1:19-cv-11586-FDS Document 265-4 Filed 01/04/22 Page 1 of 22

## **EXHIBIT 4**

**DOCKET A L A R M** Find authenticated court documents without watermarks at <u>docketalarm.com</u>.



US007088233B2

#### (12) United States Patent Menard

## (10) Patent No.: US 7,088,233 B2

#### (45) **Date of Patent:** Aug. 8, 2006

#### (54) PERSONAL MEDICAL DEVICE COMMUNICATION SYSTEM AND METHOD

- (75) Inventor: **Raymond J. Menard**, Hastings, MN (US)
- (73) Assignee: Royal Thoughts, LLC, Minneapolis, MI (US)
- (\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.
- (21) Appl. No.: 10/165,624
- (22) Filed: Jun. 7, 2002

#### (65) **Prior Publication Data**

US 2004/0027244 A9 Feb. 12, 2004

#### **Related U.S. Application Data**

- (63) Continuation-in-part of application No. 09/956,474, filed on Sep. 19, 2001, which is a continuation of application No. 09/384,165, filed on Aug. 27, 1999, now Pat. No. 6,356,192, application No. 10/165,624, which is a continuation-in-part of application No. 10/112,669, filed on Mar. 28, 2002, and a continuation-in-part of application No. PCT/US01/18734, filed on Jun. 8, 2001.
- (60) Provisional application No. 60/135,862, filed on May 25, 1999, provisional application No. 60/105,493, filed on Oct. 23, 1998, and provisional application No. 60/279,401, filed on Mar. 28, 2001.
- (51) Int. Cl. *G08B 1/08* (2006.01)

See application file for complete search history.

#### (56) **References Cited**

#### U.S. PATENT DOCUMENTS

3,843,841 A	10/1974	Rubinstein
3,969,709 A	7/1976	Isaacs et al.
4,237,344 A	12/1980	Moore

(Continued)

#### FOREIGN PATENT DOCUMENTS

DE	19962915 A1	9/2001
WO	WO 01/26335 A3	4/2001
WO	WO 01/47597 A2	7/2001

#### OTHER PUBLICATIONS

Bluetooth Product Design—a natural progression of our existing business;;RTX; 4 pgs.

Your Vision—Our Solution; RTX Telecom; 5 pgs.

Lucent Technologies and Bluetooth; Lucent Technologies, Inc.; Dec., 1999; 2 pgs.

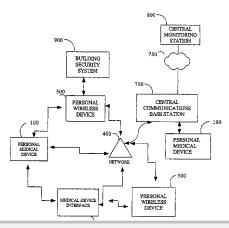
#### (Continued)

Primary Examiner—Daryl Pope (74) Attorney, Agent, or Firm—Gerald E. Helget; Briggs and Morgan, P.A.

#### (57) **ABSTRACT**

A personal and/or institutional health and wellness communications system, which may be used for a variety of emergency and non-emergency situations using two-way communication devices and a bi-directional communication network. In one application two-way pagers are adapted for use in the system. In one application cellular devices are adapted for use in the system. In one application an assisted living response center is established using various embodiments of the present personal and/or institutional communications system. The system provides multiple levels of prioritization, authentication of person (task, step, process or order), and confirmation via interrogation of person, device, or related monitor. One embodiment provides a method for receiving, evaluating and responding to calls received from a subscriber, patient, related party, or health care provider or health care system.

#### 57 Claims, 9 Drawing Sheets



#### US 7,088,233 B2

Page 2

#### U.S. PATENT DOCUMENTS

	0.5.1	ALENI	DOCUMENTS
4,284,849	Α	8/1981	Anderson et al.
4,303,801	Α	12/1981	Anderson et al.
4,531,527	Α	7/1985	Reinhold, Jr.
4,772,876	Α	9/1988	Laud
4,843,377	A	6/1989	Fuller et al.
4,856,047	Α	8/1989	Saunders
4,908,600	A	3/1990	Martinez
4,993,059	A	2/1991	Smith et al.
4,994,787	A	2/1991	Kratt et al.
5,016,172	A	5/1991	Dessertine
5,025,374	A	6/1991	Roizen et al.
5,062,147	A	10/1991	Pickett
5,081,667	A	1/1992	Drori et al.
5,128,979	Ā	7/1992	Reich et al.
5,179,571	A	1/1993	Schilling
5,195,126	Ā	3/1993	Carrier et al.
5,223,844	A	6/1993	Mansell et al.
5,228,449	Ā	7/1993	Christ et al.
5,276,728	A	1/1994	Pagliaroli et al.
5,278,539	A	1/1994	Lauterbach et al.
5,319,355	A	6/1994	Russek et al.
5,319,698	A	6/1994	Glidewell
5,333,173	A	7/1994	Seazholtz et al.
5,351,235	Ā	9/1994	Lahtinen
5,390,238	A	2/1995	Kirk et al.
5,398,782	A	3/1995	Talbot
5,402,466	A	3/1995	Delahanty
5,404,577	A	4/1995	Zuckerman et al.
5,412,372	A	5/1995	Parkhurst et al.
5,416,695	A	5/1995	Stutman et al.
5,432,841	A	7/1995	Rimer
5,451,839	A	9/1995	
5,485,504	A	1/1996	Rappaport et al.
5,513,111	A	4/1996	Ohnsorge Wortham
5,568,535	A	10/1996	Sheffer et al.
	A		
5,570,083	A	10/1996 12/1996	Johnson Churchill et al.
5,583,831	A		Hess
5,587,701 5,630,207	A	12/1996 5/1997	Gitlin et al.
5,640,147	A	6/1997	Chek et al.
	A		Winbush
5,652,564	A	7/1997	
5,652,570	A	7/1997 11/1997	Lepkofker Timm et al.
5,687,215	A	1/1997	Simkin
5,712,619	A		Flick
5,719,551	A	2/1998 4/1998	Bulfer et al.
5,736,932	A	4/1998	Flick
5,739,748	A	4/1998	Hoffman et al.
5,742,233	A		Duffin et al.
5,752,976 5,754,111	A	5/1998 5/1998	Garcia
5,777,551	A		Hess
	A	7/1998	Stanford et al.
5,784,685	A A	7/1998	Lombardo et al.
5,786,746		7/1998	
5,793,283	A	8/1998	Davis Mandualu
5,812,536	A	9/1998	Manduely Orrest al
5,815,417	A	9/1998	Orr et al.
5,821,854	A	10/1998	Dorinski et al.
5,825,283	A	10/1998	Camhi
5,845,203	A	12/1998	LaDue
5,850,180	A	12/1998	Hess
5,850,344	A	12/1998	Conkright
5,852,408	A	12/1998	Christiansen et al.
5,870,020	A	2/1999	Harrison, Jr.
5,873,043	A	2/1999	Comer Uiadan at al
5,874,889	A	2/1999	Higdon et al.
5,892,442	A	4/1999	Ozery
5,894,591	A	4/1999	Tamayo Jaffarias et al
5.898.391	A	4/1999	Jefferies et al.

5,907,279 A	A	5/1999	Bruins et al.
5,917,405 A	4	6/1999	Joao
5,933,080 A	4	8/1999	Nojima
5,959,529 A	4	9/1999	Kail, IV
6,023,223 A	4	2/2000	Baxter, Jr.
6,023,241 A	4	2/2000	Clapper
6,028,514 A	A	2/2000	Lemelson et al.
6,035,021 A	4	3/2000	Katz
6,044,257 A	A	3/2000	Boling et al.
6,057,758 A	4	5/2000	Dempsey et al.
6,087,952 A	A	7/2000	Prabhakaran
6,118,866 A	4	9/2000	Shtivelman
6,288,641 E	31	9/2001	Casais
6,295,346 E	31	9/2001	Markowitz et al.
6,340,928 E	31	1/2002	McCurdy
6,388,612 E	31	5/2002	Neher

#### OTHER PUBLICATIONS

Houston, Jerry; Socket Teams with Cambridge Silicon Radio for Bluetooth Cordless Networking on Windows CE; Socket Communications, Inc., 1999; 2 pgs.

Technology Solutions for Bluetooth; Ericsson Microelectronics; Nov., 1999; 2 pgs.

The Secret of Success, Signal Newletter No. 3—The Official Newsletter of the Bluetooth Special Interest Group; Nov., 1999; 8 pgs.

Unleash the World—Core Technology for Bluetooth applications; Ericsson Mobile Communications AB, 1999; 7 pgs. Wireless Connections Made Easy; Bluetooth; 19 pgs.

Get a better vantage point and outmaneuver the competition; Cadence Design Systems, Inc.; 1999; 2 pgs.

Empowering the mobile enterprise; Puma Technology, Inc.; 1996–1999; 2 pgs.

Designing Solutions for the Internet Economy, Intel Developer Forum Spring 2000; Feb. 15–17, 2000; 2 pgs.

Socket's Bluetooth Cordless Communications Card; Socket Communications, Inc.; Dec., 1999; 2 pgs.

Nobel, Carmen; Microsoft jumps on Bluetooth bandwagon; PC Week; Dec. 6, 1999; 1 pg.

CreataLink; Motorola, Inc., 1999; 2 pgs.

Bluetooth White Paper; AU–System AB; 1999; entire pamphlet.

Object GEODE—The Most Advanced Integrated Environment for the Development of Distributed Real-time Systems; VERIOLOG S.A.; 1998; entire brochure.

Bluetooth—solutions for personal area networking; TDK Systems, Inc.; 4 pgs.

Digianswer Bluetooth—Development and Demonstration Tools Product Sheet; DIGIANSWER A/S; 6 pgs.

The Ericsson Bluetooth Development Kit, Ericsson Mobile Communications, AB; 1999; 2 pgs.

Bluetooth Blue–Share Product Brief; ACER NeWeb Corporation; 1 pg.

Blue–Connect Product Brief; ACER NeWeb Corporation; 1 pg.

Bluetooth Development using SDL, MSC and TTCN; Telelogic AB; 13 pgs.

Emlation System Speeds Development of CDMA Satcom Handsets; Penton Publishing, Inc.; 1997; 4 pgs.

DIGIANSWER/Bluetooth Technology; Digainswer (lrl) Ltd.; 8 pgs.

UMTS W–CDMA Technology Development Using the Aptix System Explorer MP4 for Algorithm Verification; Aptix Corporation; 1999; 4 pgs.

#### US 7,088,233 B2

Page 3

Arm7 Thumb Family; Arm Powered; 4 pgs.

IVT—Bluetooth Protocol Stack SDL/C Source Code; Bluetooth; 2 pgs.

Spontaneous Connections; CommVerge; May, 2000; 6 pgs. OSE—the new generation realtime operating system; ENA OSE Systems; 1999; entire booklet.

Alarmnet-M Mobitex System; ArlamNet; 2000; 1 pg/.

AlarmNet-C Control Channel Cellular; AlarmNet; 2000; 2 pgs.

Samsung Electronics Joins Home Radio Frequency Group in Development of Wireless Network for the Home; Samsung Electronics, 1998; pp. 1–2.

Tachless Remote Engine Starters; ALMEX, 2000; pp. 1–3. Introduction to the HomeRF Technical Specification; HomeRF; 2000; pp. 1–17.

Posti, J.; Motorola Introduces CreataLink 2 XT two-way data transceiver; Motorola Press Release; Mar., 1999; 2 pgs. CreataLink 2XT; Motorola Messaging Products; Mar., 1999; 1 pg.

CreataLink 2XT; Motorola; Nov., 2000; 1 pg.

DOCKE.

Skyroute Wireless Communications; 1974; pp. 1-4.

21<sup>st</sup> Century Emergency Safety Communications Policy; ComCARE Alliance; 2000; pp. 1–3. AllNetDevices:—Geoworks, Openwave End Patent Fight; allNetDevices; 2000; 1 pg.

Automatic Crash Notification, ComCARE Alliance; 2000; 2 pgs.

Connect 24 Data Communications; Connect 24; 2001; 1 pg. Emergency 911 Cellular Phone and Cellular Phone Accessories; AAA Communications; 2001; 7 pgs.

Glossary; ComCARE Alliance; 2000; 3 pgs.

PSAP Updates and Third–Party Call Centers; ComCARE Alliance; 2000; 2 pgs.

Will the push—not pull—of Internet information dramatically alter our Web interactions?; Sunworld; 2000; 6 pgs.

ORA Electronics Introduces Rescue Mate, a Complete Cellular Telephone Safety Package; Hands–Free Operation, Instant Emergency 911 Access, Roadside Assistance Services; Business Wire; 1998; 2 pgs.

AllNetDevices:—The Device-Centric Home in 2000: Close, But No Cigar; Dec. 26, 2000; 3 pgs.

AlarmNet-A Original AlarmNet; Dec. 27, 2000; 2 pgs.

Bluetooth; Wireless Connections Made Easy; 20 pgs.

U.S. Patent

Aug. 8, 2006

US 7,088,233 B2

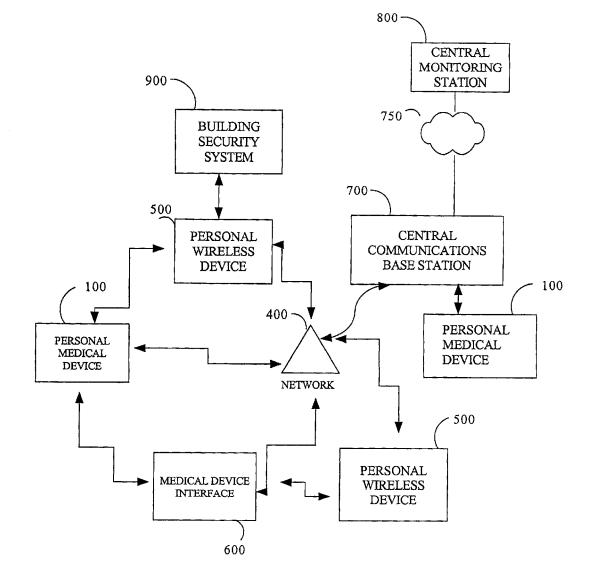


FIG. 1

## DOCKET A L A R M



# 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.