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Rosenberg(10) **Patent No.:** **US 7,577,522 B2**
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REMINDER SYSTEM AND METHOD**4,337,529 A 6/1982 Morokawa
4,360,345 A 11/1982 Hon
4,403,208 A 9/1983 Hodgson et al.(75) Inventor: **Louis B. Rosenberg**, Pismo Beach, CA
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(Continued)

FOREIGN PATENT DOCUMENTS

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(Continued)

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OTHER PUBLICATIONS

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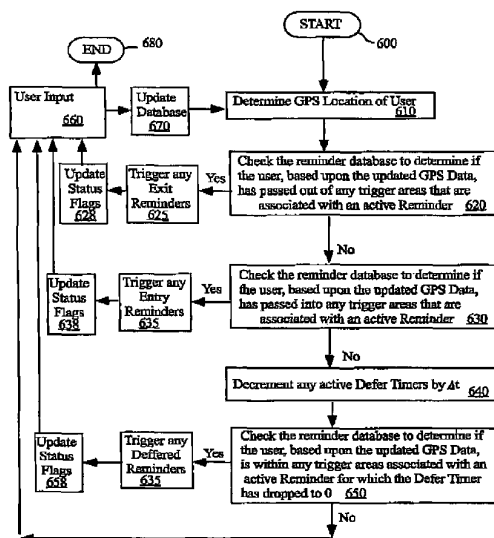
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Sinsheimer Juhnke Lebens & McIvor, LLP**Related U.S. Application Data**(60) Provisional application No. 60/742,625, filed on Dec.
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G01C 21/00 (2006.01)(52) **U.S. Cl.** **701/213; 701/207; 342/357.17;**
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See application file for complete search history.

(56) **References Cited****U.S. PATENT DOCUMENTS**4,018,121 A 4/1977 Chower
4,050,171 A 9/1977 Teach
4,054,749 A 10/1977 Suzuki
4,091,302 A 5/1978 Yamashita(57) **ABSTRACT**

Spatially associated reminder systems and methods enable users to create reminders and associate those reminders with entering/exiting particular trigger areas. A user's portable computing device triggers an alert/displays a reminder based upon a user entering and/or exiting a trigger area. A user interface supported by the portable computing device allows a user to terminate the reminder so it will not trigger again, to defer the reminder so it triggers again after an elapsed time, to reset the reminder so that it triggers again only if a user leaves the area and then returns, to request a last chance, causing the portable computing device to remind the user again upon exiting the area to ensure the user did not forget to act upon the reminder, or to edit the reminder. The user interface also enables users to graphically define trigger areas within the physical world to be associated with personal digital reminders using geospatial imagery.

27 Claims, 8 Drawing Sheets

U.S. PATENT DOCUMENTS

4,430,595 A	2/1984	Nakasone	5,821,920 A	10/1998	Rosenberg
4,490,810 A	12/1984	Hon	5,825,308 A	10/1998	Rosenberg
4,712,101 A	12/1987	Culver	5,828,197 A	10/1998	Martin
4,788,983 A	12/1988	Brink	5,839,901 A	11/1998	Karkanen
4,823,634 A	4/1989	Culver	5,857,939 A	1/1999	Kaufman
4,868,549 A	9/1989	Affinito	5,870,740 A	2/1999	Rose et al.
4,907,973 A	3/1990	Hon	5,882,206 A	3/1999	Gillio
4,919,418 A	4/1990	Miller	5,889,670 A	3/1999	Schuler
4,934,694 A	6/1990	McIntosh	5,889,672 A	3/1999	Schuler
4,949,089 A	8/1990	Ruszkowski, Jr.	5,890,116 A	3/1999	Itoh et al.
4,983,901 A	1/1991	Lehmer	5,890,128 A	3/1999	Diaz et al.
5,047,918 A	9/1991	Schwartz et al.	5,890,995 A	4/1999	Bobick et al.
5,047,952 A	9/1991	Kramer et al.	5,890,997 A	4/1999	Roth
5,149,084 A	9/1992	Dalebout et al.	5,897,437 A	4/1999	Nishiumi
5,154,677 A	10/1992	Ito	5,916,063 A	6/1999	Alessandri
5,164,530 A	11/1992	Iwase	5,928,248 A	7/1999	Acker
5,179,792 A	1/1993	Brantingham	5,931,763 A	8/1999	Alessandri
5,185,561 A	2/1993	Good	5,941,837 A	8/1999	Amano et al.
5,186,629 A	2/1993	Rohen	5,944,633 A	8/1999	Wittrock
5,189,355 A	2/1993	Larkins	5,952,596 A	9/1999	Kondo
5,215,468 A	6/1993	Lauffer	5,953,693 A	9/1999	Sakiyama et al.
5,220,260 A	6/1993	Schuler	5,959,613 A	9/1999	Rosenberg
5,267,942 A	12/1993	Saperston	5,989,188 A	11/1999	Birkhoelzer et al.
5,273,038 A	12/1993	Beavin	6,013,007 A	1/2000	Root
5,290,205 A	3/1994	Densmore et al.	6,024,576 A	2/2000	Moore
5,296,846 A	3/1994	Ledley	6,088,017 A	7/2000	Tremblay
5,296,871 A	3/1994	Paley	6,096,004 A	8/2000	Megland
5,308,300 A	5/1994	Chino et al.	6,106,301 A	8/2000	Merril
5,335,188 A	8/1994	Brisson	6,111,577 A	8/2000	Zilles
5,359,527 A	10/1994	Takanabe	6,119,114 A	9/2000	Smadja
5,387,164 A	2/1995	Brown, Jr.	6,122,520 A	9/2000	Want
5,437,289 A	8/1995	Liverance et al.	6,154,201 A	11/2000	Levin et al.
5,442,557 A	8/1995	Kaneko	6,160,489 A	12/2000	Perry
5,449,002 A	9/1995	Goldman	6,177,905 B1 *	1/2001	Welch 342/357.13
5,451,192 A	9/1995	Hefe	6,192,340 B1	2/2001	Abecassis
5,491,546 A	2/1996	Wascher	6,199,067 B1	3/2001	Geller
5,499,360 A	3/1996	Barbara et al.	6,211,861 B1	4/2001	Rosenberg et al.
5,534,917 A	7/1996	MacDougall	6,221,861 B1	4/2001	Seegmiller
5,545,112 A	8/1996	Densmore et al.	6,230,047 B1	5/2001	McHugh
5,559,412 A	9/1996	Schuler	6,239,501 B1	5/2001	Komarechka
5,572,201 A	11/1996	Graham et al.	6,244,742 B1	6/2001	Yamada et al.
5,592,143 A	1/1997	Romney	6,244,988 B1	6/2001	Delman
5,598,849 A	2/1997	Browne	6,246,362 B1	6/2001	Tsubata
5,614,687 A	3/1997	Yamada et al.	6,251,048 B1	6/2001	Kaufman
5,629,594 A	5/1997	Jacobus	6,255,799 B1	7/2001	Le et al.
5,634,051 A	5/1997	Thomson	6,256,011 B1	7/2001	Culver
5,643,087 A	7/1997	Marcus	6,266,612 B1 *	7/2001	Dussell et al. 701/207
5,666,138 A	9/1997	Culver	6,285,317 B1	9/2001	Ong
5,690,582 A	11/1997	Ulrich et al.	6,287,262 B1	9/2001	Amano et al.
5,699,441 A	12/1997	Sagawa et al.	6,292,747 B1	9/2001	Amro et al.
5,701,140 A	12/1997	Rosenberg	6,298,323 B1	10/2001	Kaemmerer
5,704,791 A	1/1998	Gillio	6,300,938 B1	10/2001	Culver
5,709,219 A	1/1998	Chen	6,304,520 B1	10/2001	Watanabe
5,721,566 A	2/1998	Rosenberg	6,314,094 B1	11/2001	Boys et al.
5,724,264 A	3/1998	Rosenberg	6,315,694 B1	11/2001	Osu et al.
5,728,960 A	3/1998	Sitrick	6,323,412 B1	11/2001	Loo
5,731,804 A	3/1998	Rosenberg	6,351,710 B1	2/2002	Mays
5,734,373 A	3/1998	Rosenberg	6,366,272 B1	4/2002	Rosenberg
5,739,811 A	4/1998	Rosenberg	6,376,971 B1	4/2002	Pelrine
5,742,278 A	4/1998	Chen	6,401,027 B1	6/2002	Xu et al.
5,747,714 A	5/1998	Kniest et al.	6,401,037 B1	6/2002	Muller et al.
5,754,023 A	5/1998	Roston	6,411,896 B1	6/2002	Shuman et al.
5,755,577 A	5/1998	Gillio	6,417,782 B1	7/2002	Darnall
5,767,839 A	6/1998	Rosenberg	6,429,846 B2	8/2002	Rosenberg
5,769,640 A	6/1998	Jacobus	6,470,207 B1	10/2002	Simon
5,791,908 A	8/1998	Gillio	6,470,302 B1	10/2002	Cunningham
5,794,361 A	8/1998	Sadler	6,477,239 B1	11/2002	Ohki et al.
5,800,177 A	9/1998	Gillio	6,497,638 B1	12/2002	Shea
5,800,178 A	9/1998	Gillio	6,498,982 B2	12/2002	Bellesfield et al.
5,807,267 A	9/1998	Bryars et al.	6,501,420 B2	12/2002	Townsend
5,813,142 A	9/1998	Demon	6,503,173 B2	1/2003	Clem
			6,506,142 B2	1/2003	Itoh et al.
			6,515,593 B1	2/2003	Stark et al.

US 7,577,522 B2

Page 3

6,515,651 B1	2/2003	Berstis	6,941,324 B2	9/2005	Plastina et al.
6,522,292 B1	2/2003	Ellenby et al.	6,950,695 B2	9/2005	Chen
6,526,411 B1	2/2003	Ward	6,955,630 B2	10/2005	Sher
6,527,674 B1	3/2003	Clem	6,956,538 B2	10/2005	Moore
6,529,831 B1	3/2003	Smith et al.	6,958,707 B1	10/2005	Siegel
6,539,232 B2	3/2003	Hendrey et al.	6,965,842 B2	11/2005	Rekimoto
6,563,487 B2	5/2003	Martin	6,970,088 B2	11/2005	Kovach
6,564,210 B1	5/2003	Korda et al.	6,978,684 B2	12/2005	Nurse
6,571,200 B1	5/2003	Mault	6,982,697 B2	1/2006	Wilson
6,572,511 B1	6/2003	Volpe	6,982,700 B2	1/2006	Rosenberg et al.
6,598,707 B2	7/2003	Nakagaki et al.	6,983,139 B2	1/2006	Dowling et al.
6,607,493 B2	8/2003	Song	6,985,143 B2	1/2006	Pharr
6,618,593 B1	9/2003	Drutman et al.	6,986,320 B2	1/2006	Shelton
6,623,427 B2	9/2003	Mandigo	6,987,221 B2	1/2006	Platt
6,626,728 B2	9/2003	Holt	6,991,586 B2	1/2006	Lapcevic
6,636,835 B2	10/2003	Ragsdale-Elliott et al.	6,997,852 B2	2/2006	Watterson et al.
6,640,187 B1	10/2003	Chenault	7,003,122 B2	2/2006	Chen
6,655,817 B2	12/2003	Devlin	7,007,001 B2	2/2006	Oliver et al.
6,657,116 B1	12/2003	Gunnerson	7,012,593 B2	3/2006	Yoon et al.
6,659,916 B1	12/2003	Shea	7,022,047 B2	4/2006	Cohen et al.
6,665,644 B1	12/2003	Kanevsky et al.	7,023,423 B2	4/2006	Rosenberg
6,671,736 B2	12/2003	Virine et al.	7,027,823 B2	4/2006	Mikuni
6,680,675 B1 *	1/2004	Suzuki 340/988	7,031,875 B2	4/2006	Ellenby et al.
6,683,538 B1	1/2004	Wilkes, Jr.	7,044,891 B1	5/2006	Rivera
6,686,531 B1	2/2004	Pennock et al.	7,046,588 B2	5/2006	Heo
6,686,911 B1	2/2004	Levin	7,060,006 B1	6/2006	Watterson et al.
6,687,535 B2	2/2004	Hautala et al.	7,089,264 B1	8/2006	Guido et al.
6,697,044 B2	2/2004	Shahoian	7,092,964 B1	8/2006	Dougherty
6,697,048 B2	2/2004	Rosenberg et al.	7,100,835 B2	9/2006	Selker
6,702,719 B1	3/2004	Brown et al.	7,138,575 B2	11/2006	Childs et al.
6,721,706 B1	4/2004	Strubbe et al.	7,156,773 B2	1/2007	Takai et al.
6,732,090 B2	5/2004	Shanahan et al.	7,166,062 B1	1/2007	Watterson et al.
6,735,568 B1	5/2004	Buckwalter et al.	7,177,672 B2	2/2007	Nissila
6,740,007 B2	5/2004	Gordon et al.	7,181,438 B1	2/2007	Szabo
6,749,537 B1	6/2004	Hickman	7,199,708 B2	4/2007	Terauchi et al.
6,768,066 B2	7/2004	Wehrenberg	7,207,935 B1	4/2007	Lipo
6,768,246 B2	7/2004	Pelrine	7,225,565 B2	6/2007	DiBenedetto et al.
6,772,026 B2	8/2004	Bradbury et al.	7,227,071 B2	6/2007	Tagawa et al.
6,778,226 B1	8/2004	Eshelman	7,229,416 B2	6/2007	Chen
6,781,289 B2	8/2004	Levin	7,232,416 B2	6/2007	Czernicki
6,783,482 B2	8/2004	Oglesby et al.	7,249,126 B1	7/2007	Ginsburg et al.
6,786,848 B2	9/2004	Yamashita et al.	7,271,736 B2	9/2007	Siegel et al.
6,790,178 B1	9/2004	Mault et al.	7,283,997 B1	10/2007	Howard et al.
6,793,607 B2	9/2004	Neil	RE39,906 E	11/2007	Roston et al.
6,801,837 B2	10/2004	Carlstedt et al.	7,293,060 B2	11/2007	Konsi
6,804,643 B1	10/2004	Kiss	7,310,676 B2	12/2007	Bourne
6,808,472 B1	10/2004	Hickman	7,310,895 B2	12/2007	Whittlesey et al.
6,808,473 B2	10/2004	Hisano	7,312,766 B1	12/2007	Edwards
6,812,394 B2	11/2004	Weissflog	7,312,785 B2	12/2007	Tsuk et al.
6,812,624 B1	11/2004	Pei et al.	7,342,649 B2	3/2008	Waibel
6,816,711 B2	11/2004	Standke	7,344,508 B2	3/2008	Surina
6,819,267 B1	11/2004	Edmark	7,348,967 B2	3/2008	Zadesky et al.
6,822,635 B2	11/2004	Shahoian	7,359,624 B2	4/2008	Adams et al.
6,824,502 B1	11/2004	Huang	7,373,820 B1	5/2008	James
6,829,599 B2	12/2004	Chidlovskii	7,394,405 B2 *	7/2008	Godden 340/996
6,832,109 B2	12/2004	Nissila	2001/0003542 A1	6/2001	Kita
6,836,744 B1	12/2004	Asphahani et al.	2001/0004622 A1	6/2001	Alessandri
6,858,970 B2	2/2005	Malkin	2001/0020242 A1	9/2001	Gupta
6,863,220 B2	3/2005	Selker	2001/0041647 A1	11/2001	Itoh et al.
6,863,641 B1	3/2005	Brown et al.	2002/0008635 A1	1/2002	Ewing et al.
6,866,613 B1	3/2005	Brown et al.	2002/0016786 A1	2/2002	Pitkow et al.
6,867,733 B2	3/2005	Sandhu	2002/0054060 A1	5/2002	Schena
6,871,142 B2	3/2005	Kumada et al.	2002/0059296 A1	5/2002	Hayashi
6,879,284 B2	4/2005	Dufek	2002/0078045 A1	6/2002	Dutta
6,882,086 B2	4/2005	Kornbluh	2002/0091049 A1	7/2002	Hisano
6,885,362 B2	4/2005	Suomela	2002/0091796 A1	7/2002	Higginson
6,888,457 B2	5/2005	Wilkinson et al.	2002/0116476 A1	8/2002	Eyal et al.
6,906,533 B1	6/2005	Yoshida	2002/0123988 A1	9/2002	Dean
6,906,643 B2	6/2005	Samadani	2002/0133418 A1	9/2002	Hammond et al.
6,915,295 B2	7/2005	Okamoto et al.	2002/0142701 A1	10/2002	Rosenberg
6,917,373 B2	7/2005	Vong et al.	2002/0152077 A1	10/2002	Patterson
6,921,351 B1	7/2005	Hickman	2002/0186221 A1	12/2002	Bell
6,929,481 B1	8/2005	Alexander	2003/0009497 A1	1/2003	Yu

US 7,577,522 B2

Page 4

2003/0011467 A1	1/2003	Suomela	2005/0227712 A1	10/2005	Estevez
2003/0018527 A1	1/2003	Filepp	2005/0233859 A1	10/2005	Takai et al.
2003/0033287 A1	2/2003	Shanahan et al.	2005/0233861 A1	10/2005	Hickman et al.
2003/0041105 A1	2/2003	Patrick	2005/0234638 A1	10/2005	Ogaki
2003/0047683 A1	3/2003	Kaushal	2005/0240342 A1	10/2005	Ishihara
2003/0069077 A1	4/2003	Korienek	2005/0261609 A1	11/2005	Collings et al.
2003/0076301 A1	4/2003	Tsuk et al.	2005/0266961 A1	12/2005	Shum et al.
2003/0089218 A1	5/2003	Gang et al.	2005/0278317 A1	12/2005	Gross et al.
2003/0110038 A1	6/2003	Sharma	2005/0286546 A1	12/2005	Basseli et al.
2003/0115193 A1	6/2003	Okamoto et al.	2006/0004512 A1	1/2006	Herbst
2003/0132301 A1	7/2003	Selker	2006/0017692 A1	1/2006	Wehrenberg et al.
2003/0135490 A1	7/2003	Barrett et al.	2006/0020177 A1	1/2006	Seo et al.
2003/0187837 A1	10/2003	Culliss	2006/0022955 A1	2/2006	Kennedy
2003/0193572 A1	10/2003	Wilson	2006/0026521 A1	2/2006	Hotelling et al.
2003/0195884 A1	10/2003	Boyd et al.	2006/0052132 A1	3/2006	Naukkarinen
2003/0217007 A1	11/2003	Fukushima	2006/0060068 A1	3/2006	Hwang
2003/0220917 A1	11/2003	Copperman et al.	2006/0079800 A1	4/2006	Martikka et al.
2003/0236582 A1	12/2003	Zamir et al.	2006/0084551 A1	4/2006	Volpe, Jr.
2004/0012506 A1	1/2004	Fujiwara	2006/0095412 A1	5/2006	Zito et al.
2004/0015714 A1	1/2004	Abraham et al.	2006/0097991 A1	5/2006	Hotelling et al.
2004/0017482 A1	1/2004	Weitman	2006/0098772 A1	5/2006	Reho et al.
2004/0019588 A1	1/2004	Doganata et al.	2006/0101377 A1	5/2006	Toyama et al.
2004/0025563 A1	2/2004	Stierle	2006/0102171 A1	5/2006	Gavish
2004/0059708 A1	3/2004	Dean	2006/0107822 A1	5/2006	Bowen
2004/0068486 A1	4/2004	Chidlovskii	2006/0111621 A1	5/2006	Coppi et al.
2004/0097806 A1	5/2004	Hunter	2006/0136173 A1	6/2006	Case et al.
2004/0102684 A1	5/2004	Kawanishi et al.	2006/0161621 A1	7/2006	Rosenberg
2004/0103087 A1	5/2004	Mukherjee et al.	2006/0164382 A1	7/2006	Kulas
2004/0114129 A1	6/2004	Gogolla	2006/0167576 A1	7/2006	Rosenberg
2004/0124248 A1	7/2004	Selker	2006/0167943 A1	7/2006	Rosenberg
2004/0125073 A1	7/2004	Potter	2006/0169125 A1	8/2006	Ashkenazi
2004/0164971 A1	8/2004	Hayward	2006/0173828 A1	8/2006	Rosenberg
2004/0166937 A1	8/2004	Rothschild	2006/0173837 A1	8/2006	Berstis et al.
2004/0186824 A1	9/2004	Delic et al.	2006/0188109 A1	8/2006	Makino et al.
2004/0204240 A1	10/2004	Barney	2006/0189386 A1	8/2006	Rosenberg
2004/0215469 A1	10/2004	Fukushima	2006/0195361 A1	8/2006	Rosenberg
2004/0219961 A1	11/2004	Ellenby	2006/0229163 A1	10/2006	Waters
2004/0224638 A1	11/2004	Fadell et al.	2006/0243120 A1	11/2006	Takai
2004/0225519 A1	11/2004	Martin	2006/0253210 A1	11/2006	Rosenberg
2004/0225635 A1	11/2004	Toyama	2006/0256082 A1	11/2006	Cho
2004/0248653 A1	12/2004	Barros	2006/0276919 A1	12/2006	Shirai
2004/0252397 A1	12/2004	Hodge et al.	2006/0288846 A1	12/2006	Logan
2005/0012611 A1 *	1/2005	Osman 340/539.13	2007/0021269 A1	1/2007	Shum
2005/0021470 A1	1/2005	Martin et al.	2007/0027000 A1	2/2007	Shirai
2005/0032528 A1	2/2005	Dowling	2007/0044641 A1	3/2007	McKinney et al.
2005/0039206 A1	2/2005	Opdycke	2007/0060446 A1	3/2007	Asukai
2005/0049113 A1	3/2005	Yueh	2007/0067294 A1	3/2007	Ward et al.
2005/0060299 A1	3/2005	Filley	2007/0074618 A1	4/2007	Vergo
2005/0071328 A1	3/2005	Lawrence et al.	2007/0074619 A1	4/2007	Vergo
2005/0080786 A1	4/2005	Fish	2007/0079691 A1	4/2007	Turner
2005/0096047 A1	5/2005	Haberman et al.	2007/0103431 A1	5/2007	Tabatowski-Bush
2005/0107218 A1	5/2005	Chuang et al.	2007/0113725 A1	5/2007	Oliver
2005/0107688 A1	5/2005	Strommer	2007/0125852 A1	6/2007	Rosenberg
2005/0114149 A1	5/2005	Rodriguez	2007/0135264 A1	6/2007	Rosenberg
2005/0126370 A1	6/2005	Takai	2007/0145680 A1	6/2007	Rosenberg
2005/0129253 A1	6/2005	Chen	2007/0156676 A1	7/2007	Rosenberg
2005/0130802 A1	6/2005	Kinnunen et al.	2007/0156677 A1	7/2007	Szabo
2005/0134479 A1	6/2005	Isaji	2007/0173377 A1	7/2007	Jansen et al.
2005/0139660 A1	6/2005	Maxymych et al.	2007/0174416 A1	7/2007	Waters
2005/0141729 A1	6/2005	Kanzaki	2007/0198182 A1	8/2007	Singh
2005/0143173 A1	6/2005	Barney et al.	2007/0236493 A1	10/2007	Horiuchi
2005/0149213 A1	7/2005	Guzak et al.	2007/0271228 A1	11/2007	Querel
2005/0149499 A1	7/2005	Franz et al.	2008/0005075 A1	1/2008	Horvitz et al.
2005/0154636 A1	7/2005	Hildinger et al.	2008/0016040 A1	1/2008	Jones et al.
2005/0174975 A1	8/2005	Mgrdechian et al.	2008/0016218 A1	1/2008	Jones et al.
2005/0177614 A1	8/2005	Bourne	2008/0147217 A1	6/2008	Chung
2005/0182564 A1	8/2005	Kim			
2005/0184878 A1	8/2005	Grold et al.			
2005/0197237 A1	9/2005	Chen			
2005/0210419 A1	9/2005	Kela et al.			
2005/0212749 A1	9/2005	Marvit et al.			
2005/0222981 A1	10/2005	Lawrence et al.			
2005/0222989 A1	10/2005	Haveliwala et al.			

FOREIGN PATENT DOCUMENTS

WO WO-02073818 9/2002

WO WO-2006086439 8/2006

OTHER PUBLICATIONS

- "Human Metrics: Jung Typology Test", available at: <http://www.humanmetrics.com/cgi-win/JTypes2.asp> last visited Jun. 15, 2007.
- Rosenberg, "U.S. Appl. No. 11/246,050", (filed Feb. 8, 2007).
- Rosenberg, "U.S. Appl. No. 11/260,000", (filed Oct. 26, 2005).
- Office Action from 11282379 dated Sep. 18, 2007.
- Kornbluh, et al., "High-field Electrostriction of Elastomeric Polymer Dielectrics for Actuation", *SPIE Conference on Electroactive Polymer Actuators and Devices*, (Mar. 1999).
- Kawahara, et al., "Designing a Universal Remote Control for the Ubiquitous Computing Environment," *EE Times*, 2003.
- Abrial, et al., "A New Contactless Smartcard IC Using an On-Chip Antenna and an Asynchronous Micro-controller", (2001).
- Rosenberg, "U.S. Appl. No. 11/341,100", (filed Jan. 27, 2006).
- Rosenberg, "U.S. Appl. No. 11/278,120", (filed Oct. 5, 2006).
- Morhring, et al., "Video See-Through AR on Consumer Cell-Phones", (Mar. 2004).
- Gordon, et al., "Silicon Optical Navigation", (2003).
- "Remotely Operated Vehicles Seaeeye Falcon", www.roperresources.com, (May 2002).
- "Remotely Operated Vehicle", www.seabotix.com/products/lbv150.htm, (Dec. 2001).
- "Unmanned Aircraft Systems", www.baiaerosystems.com, (1985).
- "www.gesturetek.com", (Jul. 1996).
- "www.reactrix.com", (2002).
- Office Action from 11422065 dated Mar. 28, 2007.
- Office Action from 11422065 dated Aug. 31, 2007.
- Rosenberg, "U.S. Appl. No. 11/749,134", (filed May 15, 2007).
- Rosenberg, "U.S. Appl. No. 11/749,137", (filed May 15, 2007).
- Rosenberg, "U.S. Appl. No. 11/762,017", (filed Oct. 4, 2007).
- Rosenberg, "U.S. Appl. No. 11/772,803", (filed Jul. 12, 2007).
- Rosenberg, "U.S. Appl. No. 11/846,530", (filed Aug. 29, 2007).
- Rosenberg, "U.S. Appl. No. 11/851,340", (filed Sep. 6, 2007).
- Rosenberg, "U.S. Appl. No. 11/841,868", (filed Aug. 20, 2007).
- Rosenberg, "U.S. Appl. No. 11/461,375", (filed Nov. 9, 2006).
- Rosenberg, "U.S. Appl. No. 11/555,784", (filed May 24, 2007).
- Rosenberg, "U.S. Appl. No. 11/563,610", (filed Jun. 28, 2007).
- Rosenberg, "U.S. Appl. No. 11/697,706", (filed Aug. 16, 2007).
- Rosenberg, "U.S. Appl. No. 11/618,858", (filed Jun. 14, 2007).
- Rosenberg, "U.S. Appl. No. 11/676,298", (filed Jul. 5, 2007).
- Rosenberg, "U.S. Appl. No. 11/697,732", (filed Apr. 8, 2007).
- Rosenberg, "U.S. Appl. No. 11/744,879", (filed Sep. 20, 2007).
- Rosenberg, "U.S. Appl. No. 11/775,314", (filed Jul. 30, 2007).
- "Bodybug Calorie Management System", downloaded from www.ubergizmo.com/15/archives/2005/03/bodybug_calori.html on Jul. 9, 2007, (Mar. 18, 2005).
- "www.fitlinxx.com", downloaded from www.fitlinxx.com/brand/about_tour3.htm on Jul. 9, 2007, (2003).
- "YMCA", downloaded from www.ymcamidpen.org/textpage.php?b=2&p=fitlinxx on Jul. 10, 2007, (2003).
- Demartini, Marilyn "Cyber Fitness", downloaded from www.physicalmag.com/articles/Temp.asp?dept=14&articleID=1812 on Jul. 10, 2007, (Feb. 18, 2001).
- Munro, Aria "eNewsChannels", downloaded from enewschannels.com/20070106enc582-025321.php on Aug. 5, 2007, (Jul. 1, 2007).
- Oliver, Nuria et al., "Enhancing Exercise Performance through Real-time Physiological Monitoring and Music: A User Study", *Proceedings of Pervasive Health 2006*, Innsbruck, Austria, Nov. 2006, et al.=Lucas Kreger-Stekles, (Nov. 2006).
- Bettyon, Jim "Omni Fitness Equipment Stores Integrate Physical Genius Online Fitness Tools", downloaded from www.physicalgenius.com on Aug. 5, 2007, (Apr. 19, 2000).
- "Tune Your Run", *Apple Computer/Nike*, downloaded from www.apple.com on Jun. 28, 2006.
- Nintendo, "Kirby's Tilt N' Tumble", downloaded from www.nintendo.com, Nov. 14, 2006; 2 pages, (Nov. 14, 2006), 2 pages.
- Cook, Perry et al., "Using DSP-Based Parametric Physical Syntheses Models to Study Human Sound Perception", *2003 IEEE Workshop on Applications of Signal Processing to Audio and Acoustics*, (2003).
- "Yahoo media player", downloaded from www.yahoo.com on Sep. 19, 2006. Not admitted as prior art., (Sep. 19, 2006).
- McKinney and Moelants, "Extracting the Perceptual Tempo from Music", published at the *ISMIR 2004 5th International Conference on Music Information Retrieval*, (2004).
- "PCDJ Red Virtual Rack Module", by Visiosonic of Clearwater, FL. Downloaded from www.visiosonic.com on Jun. 27, 2006.
- "Beat rates per minute", downloaded from www.bpm1ist.com on Jun. 27, 2006. Lulu Publishing. ISBN 1-4116-4211-2.
- Metzger, Christian et al., "FreeDigiter: A Contact-free Device for Gesture Control", *IEEE 8th International Symposium on Wearable Computers*, (Nov. 4, 2004).
- "Jukebox Without Quarters", *Business Opportunities Weblog*, <http://www.business-opportunities.biz/2007/03/30/jukebox-without-quarters/>, cited Mar. 30, 2007, printed May 22, 2007, (May 30, 2007), 2 pages.
- Rosenberg, "U.S. Appl. No. 11/551,702", (filed Oct. 20, 2006).
- Office Action from U.S. Appl. No. 11/298,797 dated Jan. 9, 2008.
- Office Action from U.S. Appl. No. 11/341,021 dated Jan. 18, 2008.
- "Total Immersion", *D'Fusion Software*, 2004.
- Rosenberg, Louis "A force Feedback Programming Primer", *Immersion Corporation*, (1997).
- Rosenberg, "U.S. Appl. No. 11/772,808", (filed Jul. 2, 2007).
- Rosenberg, "U.S. Appl. No. 11/223,368", (filed Sep. 9, 2005).
- Rosenberg, "U.S. Appl. No. 11/285,534", (filed Nov. 22, 2005).
- Rosenberg, "U.S. Appl. No. 11/533,037", (filed Sep. 19, 2006).
- Casey, Michael "MPEG-7 Sound-Recognition Tools", *IEEE Transactions on Circuits and Systems for Video Technology*, vol. 11, No. 6, Jun. 2001.
- Shahinpoor, Mohsen "Electro-mechanics of ionoelectric beams as electrically-controllable artificial muscles", *SPIE Conference on Electroactive Polymer Actuators and Devices, SPEE* vol. 3669, 1999.
- Oguro, K et al., "Polymer Electrolyte Actuator with Gold Electrodes", *SPIE Conference on Electroactive Polymer Actuators and Devices, SPEE* vol. 3669, 1999.
- Rosenberg, "U.S. Appl. No. 11/298,434", (filed Dec. 9, 2005).
- Rosenberg, "U.S. Appl. No. 11/427,320", (filed Jun. 28, 2006).
- McKinney and Moelants, et al., "Deviations from the Resonance Theory of Temp Induction", published at the *Conference on Interdisciplinary Musicology*, et al.=Dirk Moelands, (2004).
- Rosenberg, "U.S. Appl. No. 11/626,355", (filed Jan. 23, 2007).
- Rosenberg, "U.S. Appl. No. 11/561,981", (filed Nov. 21, 2006).
- Rosenberg, "U.S. Appl. No. 11/539,598", (filed Jun. 7, 2007).
- Rosenberg, "U.S. Appl. No. 11/535,417", (filed Sep. 26, 2006).
- Murray, et al., "Underwater Telerobotics and Virtual Reality: A New Partnership", *NCCOSC RDT&E Division*, Jun. 20, 1996; pp. 1-10; San Diego, CA, (Jun. 20, 1996), 1-10.
- Rosenberg, "U.S. Appl. No. 11/610,499", (filed Dec. 13, 2006).
- Rosenberg, "U.S. Appl. No. 11/619,607", (filed Jan. 3, 2007).
- Rosenberg, "U.S. Appl. No. 11/341,948", (filed Jan. 27, 2006).
- Rosenberg, "U.S. Appl. No. 11/683,394", (filed Mar. 7, 2007).
- Rosenberg, "U.S. Appl. No. 11/344,613", (filed Jan. 31, 2006).
- Rosenberg, "U.S. Appl. No. 11/682,874", (filed Mar. 6, 2007).
- Rosenberg, "U.S. Appl. No. 11/278,531", (filed Apr. 3, 2006).
- Rosenberg, "U.S. Appl. No. 11/697,704", (filed Apr. 6, 2007).
- Sharper Image, "Laser Baseball", Item # PS115; downloaded from www.sharperimage.com on Dec. 9, 2005, 18 pages, (Dec. 9, 2005), 18 pages.
- Rosenberg, "U.S. Appl. No. 11/610,615", (filed May 10, 2007).
- Rosenberg, "U.S. Appl. No. 11/677,045", (filed Feb. 20, 2007).
- Rosenberg, "U.S. Appl. No. 11/619,605", (filed Jan. 3, 2007).
- Rosenberg, "U.S. Appl. No. 11/610,494", (filed Dec. 13, 2006).
- Rosenberg, "U.S. Appl. No. 11/562,036", (filed Nov. 21, 2006).
- Reinhold, Ross "Applications of Myers-Briggs Type Indicator, Personality Type", available at <http://www.personalitypathways.com/> last visited Jun. 15, 2007.
- Rosenberg, "U.S. Appl. No. 11/539,598", (filed Oct. 6, 2006).
- Rosenberg, Louis, U.S. Appl. No. 11/267,079, filed Nov. 3, 2005.
- Rosenberg, Louis, U.S. Appl. No. 11/282,379, filed Nov. 18, 2005.
- Rosenberg, Louis, U.S. Appl. No. 11/298,797, filed Dec. 9, 2005.
- Rosenberg, Louis, U.S. Appl. No. 11/299,096, filed Dec. 9, 2005.
- Rosenberg, Louis, U.S. Appl. No. 11/315,755, filed Dec. 21, 2005.
- Rosenberg, Louis, U.S. Appl. No. 11/315,762, filed Dec. 21, 2005.

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