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**Petite**

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(54) **SYSTEMS AND METHODS FOR MONITORING AND CONTROLLING REMOTE DEVICES**

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(56) **References Cited**

U.S. PATENT DOCUMENTS

3,665,475 A 5/1972 Gram

(Continued)

FOREIGN PATENT DOCUMENTS

EP 0718954 6/1996

(Continued)

OTHER PUBLICATIONS

Khan, Robert E., "The Organization of Computer Resources into a Packet Radio Network," IEEE Transactions on Communications, Jan. 1977, vol. Com-25 No. 1, pp. 169-178.

Westcott, Jill A., "Issues in Distributed Routing for Mobile Packet Radio Network," IEEE 1982, pp. 233-238.

Brownrigg, E.B. et al.; A Packet Radio Network for Library Automation; IEEE (1987); pp. 456-462.

Brownrigg, E.B. et al.; A Packet Radio Networks; Architectures, Protocols, Technologies and Applications (1987), (introduction pp. ix-xviii); pp. 3-274.

(Continued)

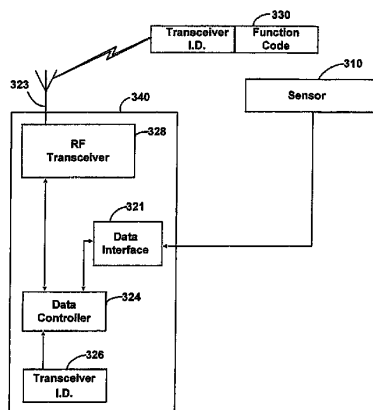
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(57) **ABSTRACT**

Systems and methods for monitoring and controlling remote devices are provided. In an embodiment, a system can comprise one or more remotely controlled sensors and actuators. The remote sensors/actuators can interface with uniquely identified remote transceivers that transmit and/or receive data. The embodiment can also comprise a plurality of transceivers each having a unique address, and a controller adapted to communicate with at least one of the transceivers in a preformatted message. A sensor can be associated with at least one transceiver to detect a condition and output a data signal to the transceiver, and an actuator can be associated with a transceiver to receive a control signal and activate a device. Other embodiments are also claimed and described.

**25 Claims, 9 Drawing Sheets**



U.S. PATENT DOCUMENTS

3,705,385 A	12/1972	Batz	4,980,907 A	12/1990	Raith et al.
3,723,876 A	3/1973	Seaborn, Jr.	4,989,230 A	1/1991	Gillig et al.
3,742,142 A	6/1973	Martin	4,991,008 A	2/1991	Nama
3,848,231 A	11/1974	Wooten	4,993,059 A	2/1991	Smith et al.
3,892,948 A	7/1975	Constable	4,998,095 A	3/1991	Shields
3,906,460 A	9/1975	Halpern	4,999,607 A	3/1991	Evans
3,914,692 A	10/1975	Seaborn, Jr.	5,007,052 A	4/1991	Flammer
3,922,492 A	11/1975	Lumsden	5,032,833 A	7/1991	Laporte
3,925,763 A	12/1975	Wadwhani et al.	5,038,372 A	8/1991	Elms et al.
4,025,315 A	5/1977	Mazelli	5,055,851 A	10/1991	Sheffer
4,056,684 A	11/1977	Lindstrom	5,057,814 A	10/1991	Onan et al.
4,058,672 A	11/1977	Crager et al.	5,061,997 A	10/1991	Rea et al.
4,083,003 A	4/1978	Haemmig	5,079,768 A	1/1992	Flammer
4,120,452 A	10/1978	Kimura et al.	5,086,391 A	2/1992	Chambers
4,124,839 A	11/1978	Cohen	5,091,713 A	2/1992	Horne et al.
4,135,181 A	1/1979	Bogacki et al.	5,111,199 A	5/1992	Tomoda et al.
4,204,195 A	5/1980	Bogacki	5,113,183 A	5/1992	Mizuno et al.
4,213,119 A	7/1980	Ward et al.	5,113,184 A	5/1992	Katayama
4,277,837 A	7/1981	Stuckert	5,115,224 A	5/1992	Kostusiak et al.
4,278,975 A	7/1981	Kimura et al.	5,115,433 A	5/1992	Baran et al.
4,322,842 A *	3/1982	Martinez ..... 370/204	5,124,624 A	6/1992	de Vries et al.
4,354,181 A	10/1982	Spletzer	5,128,855 A	7/1992	Hilber et al.
4,396,910 A	8/1983	Enemark et al.	5,130,519 A	7/1992	Bush et al.
4,396,915 A	8/1983	Farnsworth et al.	5,130,987 A	7/1992	Flammer
4,417,450 A	11/1983	Morgan, Jr. et al.	5,131,038 A	7/1992	Puhl et al.
4,436,957 A	3/1984	Mazza	5,134,650 A	7/1992	Blackmon
4,446,454 A	5/1984	Pyle	5,136,285 A	8/1992	Okuyama
4,446,458 A	5/1984	Cook	5,155,481 A	10/1992	Brennan, Jr. et al.
4,454,414 A	6/1984	Benton	5,159,317 A	10/1992	Brav
4,468,656 A	8/1984	Clifford et al.	5,162,776 A	11/1992	Bushnell et al.
4,488,152 A	12/1984	Arnason et al.	5,177,342 A	1/1993	Adams
4,495,496 A	1/1985	Miller, III	5,189,287 A	2/1993	Parienti
4,551,719 A	11/1985	Carlin et al.	5,191,192 A	3/1993	Takahira et al.
4,611,198 A	9/1986	Levinson et al.	5,191,326 A	3/1993	Montgomery
4,621,263 A	11/1986	Takenaka et al.	5,193,111 A	3/1993	Matty et al.
4,630,035 A	12/1986	Stahl et al.	5,195,018 A	3/1993	Kwon et al.
4,631,357 A	12/1986	Grunig	5,197,095 A	3/1993	Bonnet et al.
4,670,739 A	6/1987	Kelly, Jr.	5,200,735 A	4/1993	Hines
4,692,761 A	9/1987	Robinton	5,204,670 A	4/1993	Stinton
4,707,852 A	11/1987	Jahr et al.	5,212,645 A	5/1993	Wildes et al.
4,731,810 A	3/1988	Watkins	5,216,502 A	6/1993	Katz
4,742,296 A	5/1988	Petr et al.	5,221,838 A	6/1993	Gutman et al.
4,757,185 A	7/1988	Onishi	5,223,844 A	6/1993	Mansell et al.
4,788,721 A	11/1988	Krishnan et al.	5,231,658 A	7/1993	Eftechiou
4,800,543 A	1/1989	Lyndon-James et al.	5,235,630 A	8/1993	Moody et al.
4,825,457 A	4/1989	Lebowitz	5,239,294 A	8/1993	Flanders et al.
4,829,561 A	5/1989	Matheny	5,239,575 A	8/1993	White et al.
4,849,815 A	7/1989	Streck	5,241,410 A	8/1993	Streck et al.
4,851,654 A	7/1989	Nitta	5,243,338 A	9/1993	Brennan, Jr. et al.
4,856,046 A	8/1989	Steck et al.	5,245,633 A	9/1993	Schwartz et al.
4,857,912 A	8/1989	Everett, Jr. et al.	5,251,205 A	10/1993	Callon et al.
4,875,231 A	10/1989	Hara et al.	5,252,967 A	10/1993	Brennan et al.
4,884,123 A	11/1989	Morris et al.	5,253,167 A	10/1993	Yoshida et al.
4,897,644 A	1/1990	Hirano	5,265,150 A	11/1993	Helmkamp et al.
4,906,828 A	3/1990	Halpern	5,265,162 A	11/1993	Bush et al.
4,908,769 A	3/1990	Vaughan et al.	5,266,782 A	11/1993	Alanara et al.
4,918,690 A	4/1990	Markkula, Jr. et al.	5,272,747 A	12/1993	Meads
4,918,995 A	4/1990	Pearman et al.	5,282,204 A	1/1994	Shpancer et al.
4,928,299 A	5/1990	Tansky et al.	5,282,250 A	1/1994	Dent et al.
4,939,726 A	7/1990	Flammer et al.	5,289,165 A	2/1994	Belin
4,940,976 A	7/1990	Gastouniotis et al.	5,291,516 A	3/1994	Dixon et al.
4,949,077 A	8/1990	Mbuthia	5,295,154 A	3/1994	Meier et al.
4,952,928 A	8/1990	Carroll et al.	5,305,370 A	4/1994	Kearns et al.
4,962,496 A	10/1990	Vercellotti et al.	5,309,501 A	5/1994	Kozik et al.
4,967,366 A	10/1990	Kaehler	5,315,645 A	5/1994	Matheny
4,968,970 A	11/1990	LaPorte	5,317,309 A	5/1994	Vercellotti et al.
4,968,978 A	11/1990	Stolarczyk	5,319,364 A	6/1994	Waraksa et al.
4,972,504 A	11/1990	Daniel, Jr. et al.	5,319,698 A	6/1994	Glidwell et al.
4,973,957 A	11/1990	Shimizu et al.	5,319,711 A	6/1994	Servi
4,973,970 A	11/1990	Reeser	5,323,384 A	6/1994	Norwood et al.
4,977,612 A	12/1990	Wilson	5,325,429 A	6/1994	Kurgan
			5,329,394 A	7/1994	Calvani et al.
			5,331,318 A	7/1994	Montgomery

5,334,974 A	8/1994	Simms et al.	5,574,111 A	11/1996	Brichta et al.
5,335,265 A	8/1994	Cooper et al.	5,583,850 A	12/1996	Snodgrass et al.
5,343,493 A	8/1994	Karimullah	5,587,705 A	12/1996	Morris
5,345,231 A	9/1994	Koo et al.	5,589,878 A	12/1996	Cortjens et al.
5,345,595 A	9/1994	Johnson et al.	5,590,038 A	12/1996	Pitroda
5,347,263 A	9/1994	Carroll et al.	5,590,179 A	12/1996	Shincovich et al.
5,354,974 A	10/1994	Eisenberg	5,592,491 A	1/1997	Dinkins
5,355,278 A	10/1994	Hosoi et al.	5,594,431 A	1/1997	Sheppard et al.
5,355,513 A	10/1994	Clarke et al.	5,596,719 A	1/1997	Ramakrishnan et al.
5,365,217 A	11/1994	Toner	5,602,843 A	2/1997	Gray
5,371,736 A	12/1994	Evan	5,604,414 A	2/1997	Milligan et al.
5,382,778 A	1/1995	Takahira et al.	5,604,869 A	2/1997	Mincher et al.
5,383,134 A	1/1995	Wrzesinski	5,606,361 A	2/1997	Davidsohn et al.
5,390,206 A	2/1995	Rein	5,608,786 A	3/1997	Gordon
5,406,619 A	4/1995	Akhteruzzman et al.	5,613,620 A	3/1997	Center et al.
5,412,192 A	5/1995	Hoss	5,615,277 A	3/1997	Hoffman
5,412,760 A	5/1995	Peitz	5,619,192 A	4/1997	Ayala
5,416,475 A	5/1995	Tolbert et al.	5,625,410 A	4/1997	Washino et al.
5,416,725 A	5/1995	Pacheco et al.	5,628,050 A	5/1997	McGraw et al.
5,418,812 A	5/1995	Reyes et al.	5,629,687 A	5/1997	Sutton et al.
5,420,910 A	5/1995	Rudokas et al.	5,629,875 A	5/1997	Adair, Jr.
5,424,708 A	6/1995	Ballestry et al.	5,630,209 A	5/1997	Wizgall et al.
5,432,507 A	7/1995	Mussino et al.	5,631,554 A	5/1997	Briese et al.
5,438,329 A	8/1995	Gastouniotis et al.	5,636,216 A	6/1997	Fox et al.
5,439,414 A	8/1995	Jacob	5,640,002 A	6/1997	Ruppert et al.
5,440,545 A	8/1995	Buchholz et al.	5,644,294 A	7/1997	Ness
5,442,553 A	8/1995	Parrillo	5,655,219 A	8/1997	Jusa et al.
5,445,287 A	8/1995	Center et al.	5,657,389 A	8/1997	Houvener
5,445,347 A	8/1995	Ng	5,659,300 A	8/1997	Dresselhuys et al.
5,451,929 A	9/1995	Adelman et al.	5,659,303 A	8/1997	Adair, Jr.
5,451,938 A	9/1995	Brennan, Jr.	5,668,876 A	9/1997	Falk et al.
5,452,344 A	9/1995	Larson	5,673,252 A	9/1997	Johnson et al.
5,454,024 A	9/1995	Lebowitz	5,673,304 A	9/1997	Connor et al.
5,465,401 A	11/1995	Thompson	5,673,305 A	9/1997	Ross
5,467,074 A	11/1995	Pedtke	5,682,139 A	10/1997	Pradeep et al.
5,467,082 A	11/1995	Sanderson	5,682,476 A	10/1997	Tapperson et al.
5,467,345 A	11/1995	Cutler, Jr. et al.	5,689,229 A	11/1997	Chaco et al.
5,468,948 A	11/1995	Koenck et al.	5,699,328 A	12/1997	Ishizaki et al.
5,471,201 A	11/1995	Cerami et al.	5,701,002 A	12/1997	Oishi et al.
5,473,322 A	12/1995	Carney	5,702,059 A	12/1997	Chu et al.
5,475,689 A	12/1995	Kay et al.	5,704,046 A	12/1997	Hogan
5,481,259 A	1/1996	Bane	5,704,517 A	1/1998	Lancaster, Jr.
5,481,532 A	1/1996	Hassan et al.	5,706,191 A	1/1998	Bassett et al.
5,484,997 A	1/1996	Haynes	5,706,976 A	1/1998	Purkey
5,488,608 A	1/1996	Flammer, III	5,708,223 A	1/1998	Wyss
5,493,273 A	2/1996	Smurlo et al.	5,708,655 A	1/1998	Toth et al.
5,493,287 A	2/1996	Bane	5,712,619 A	1/1998	Simkin
5,502,726 A	3/1996	Fischer	5,712,980 A	1/1998	Beeler et al.
5,506,837 A	4/1996	Sollner et al.	5,714,931 A	2/1998	Petite et al.
5,509,073 A	4/1996	Monnin	5,717,718 A	2/1998	Roswell et al.
5,513,244 A	4/1996	Joao et al.	5,719,564 A *	2/1998	Sears ..... 340/870.02
5,515,419 A	5/1996	Sheffer	5,726,634 A	3/1998	Hess et al.
5,517,188 A	5/1996	Caroll et al.	5,726,984 A	3/1998	Kubler et al.
5,522,089 A	5/1996	Kikinis et al.	5,732,074 A	3/1998	Spaur et al.
5,528,215 A	6/1996	Siu et al.	5,732,078 A	3/1998	Arango
5,539,825 A	7/1996	Akiyama et al.	5,736,965 A	4/1998	Mosebrook et al.
5,541,938 A	7/1996	Di Zenzo et al.	5,740,232 A	4/1998	Pailles et al.
5,542,100 A	7/1996	Hatakeyama	5,742,509 A	4/1998	Goldberg et al.
5,544,036 A	8/1996	Brown, Jr. et al.	5,745,849 A	4/1998	Britton
5,544,784 A	8/1996	Malaspina	5,748,104 A	5/1998	Argyroudis et al.
5,548,632 A	8/1996	Walsh et al.	5,748,619 A	5/1998	Meier
5,550,358 A	8/1996	Tait et al.	5,754,111 A	5/1998	Garcia
5,550,359 A	8/1996	Bennett	5,754,227 A	5/1998	Fukuoka
5,550,535 A	8/1996	Park	5,757,783 A	5/1998	Eng et al.
5,553,094 A	9/1996	Johnson et al.	5,757,788 A	5/1998	Tatsumi et al.
5,555,258 A	9/1996	Snelling et al.	5,761,083 A	6/1998	Brown, Jr. et al.
5,555,286 A	9/1996	Tendler	5,764,742 A	6/1998	Howard et al.
5,562,537 A	10/1996	Zver et al.	5,767,791 A	6/1998	Stoop et al.
5,565,857 A	10/1996	Lee	5,771,274 A	6/1998	Harris
5,568,535 A	10/1996	Sheffer et al.	5,774,052 A	6/1998	Hamm et al.
5,570,084 A	10/1996	Ritter et al.	5,781,143 A	7/1998	Rossin
5,572,438 A	11/1996	Ehlers et al.	5,790,644 A	8/1998	Kikinis
5,573,181 A	11/1996	Ahmed	5,790,662 A	8/1998	Valerij et al.

US 7,697,492 B2

Page 4

5,790,938 A	8/1998	Talaro	5,991,639 A	11/1999	Rautiola et al.
5,796,727 A	8/1998	Harrison et al.	5,994,892 A	11/1999	Turino et al.
5,798,964 A	8/1998	Shimizu et al.	5,995,592 A	11/1999	Shirai et al.
5,801,643 A	9/1998	Williams et al.	5,995,593 A	11/1999	Cho
5,815,505 A	9/1998	Mills	5,997,170 A	12/1999	Brodbeck
5,818,822 A	10/1998	Thomas et al.	5,999,094 A	12/1999	Nilssen
5,822,273 A	10/1998	Bary et al.	6,005,759 A	12/1999	Hart et al.
5,822,544 A	10/1998	Chaco et al.	6,005,963 A	12/1999	Bolle et al.
5,825,772 A	10/1998	Dobbins et al.	6,021,664 A	2/2000	Granato et al.
5,826,195 A	10/1998	Westerlage et al.	6,023,223 A	2/2000	Baxter, Jr.
5,828,044 A	10/1998	Jun et al.	6,026,095 A	2/2000	Sherer et al.
5,832,057 A	11/1998	Furman	6,028,522 A	2/2000	Petite
5,838,223 A	11/1998	Gallant et al.	6,028,857 A	2/2000	Poor
5,838,237 A	11/1998	Revell et al.	6,031,455 A	2/2000	Grube et al.
5,838,812 A	11/1998	Pare, Jr. et al.	6,032,197 A	2/2000	Birdwell et al.
5,841,118 A	11/1998	East et al.	6,035,213 A	3/2000	Tokuda et al.
5,841,764 A	11/1998	Roderique et al.	6,035,266 A	3/2000	Williams et al.
5,842,976 A	12/1998	Williamson	6,036,086 A	3/2000	Sizer, II et al.
5,844,808 A	12/1998	Konsmo et al.	6,038,491 A	3/2000	McGarry et al.
5,845,230 A	12/1998	Lamberson	6,044,062 A	3/2000	Brownrigg et al.
5,852,658 A	12/1998	Knight et al.	6,054,920 A	4/2000	Smith et al.
5,854,994 A	12/1998	Canada et al.	6,060,994 A	5/2000	Chen
5,862,201 A	1/1999	Sands	6,061,604 A	5/2000	Russ et al.
5,864,772 A	1/1999	Alvarado et al.	6,064,318 A	5/2000	Kirchner, III et al.
5,873,043 A	2/1999	Comer	6,067,017 A	5/2000	Stewart et al.
5,874,903 A *	2/1999	Shuey et al. .... 340/870.02	6,067,030 A	5/2000	Burnett et al.
5,880,677 A	3/1999	Lestician	6,069,886 A	5/2000	Ayerst et al.
5,883,886 A *	3/1999	Eaton et al. .... 370/314	6,073,169 A	6/2000	Shuey et al.
5,884,184 A	3/1999	Sheffer	6,073,266 A	6/2000	Ahmed et al.
5,884,271 A	3/1999	Pitroda	6,073,840 A	6/2000	Marion
5,886,333 A	3/1999	Miyake	6,075,451 A	6/2000	Lebowitz et al.
5,889,468 A	3/1999	Banga	6,078,251 A	6/2000	Landt et al.
5,892,690 A	4/1999	Boatman et al.	6,087,957 A	7/2000	Gray
5,892,758 A	4/1999	Argyroudis	6,088,659 A	7/2000	Kelley et al.
5,892,924 A	4/1999	Lyon et al.	6,094,622 A	7/2000	Hubbard et al.
5,896,097 A	4/1999	Cardozo	6,100,817 A	8/2000	Mason, Jr. et al.
5,897,607 A	4/1999	Jenney et al.	6,101,427 A	8/2000	Yang
5,898,369 A	4/1999	Godwin	6,101,445 A	8/2000	Alvarado et al.
5,905,438 A	5/1999	Weiss et al.	6,108,614 A *	8/2000	Lincoln et al. .... 702/183
5,907,291 A	5/1999	Chen et al.	6,112,983 A	9/2000	D'Anniballe et al.
5,907,491 A	5/1999	Canada et al.	6,115,580 A	9/2000	Chuprun et al.
5,907,540 A	5/1999	Hayashi	6,119,076 A	9/2000	Williams et al.
5,907,807 A	5/1999	Chavez, Jr. et al.	6,121,593 A	9/2000	Mansbery et al.
5,914,672 A	6/1999	Glorioso et al.	6,121,885 A	9/2000	Masone et al.
5,914,673 A	6/1999	Jennings et al.	6,124,806 A *	9/2000	Cunningham et al. ... 340/870.02
5,917,405 A	6/1999	Joao	6,127,917 A	10/2000	Tuttle
5,917,629 A	6/1999	Hortensius et al.	6,128,551 A	10/2000	Davis et al.
5,923,269 A *	7/1999	Shuey et al. .... 340/870.02	6,130,622 A	10/2000	Hussey et al.
5,926,103 A	7/1999	Petite	6,133,850 A	10/2000	Moore
5,926,529 A	7/1999	Hache et al.	6,137,423 A	10/2000	Glorioso et al.
5,926,531 A	7/1999	Petite	6,140,975 A	10/2000	Cohen
5,933,073 A	8/1999	Shuey	6,141,347 A	10/2000	Shaughnessy et al.
5,941,363 A	8/1999	Partyka et al.	6,150,936 A	11/2000	Addy
5,941,955 A	8/1999	Wilby et al.	6,150,955 A	11/2000	Tracy et al.
5,948,040 A	9/1999	DeLorme et al.	6,157,464 A	12/2000	Bloomfield et al.
5,949,779 A	9/1999	Mostafa et al.	6,157,824 A	12/2000	Bailey
5,949,799 A	9/1999	Grivna et al.	6,163,276 A	12/2000	Irving et al.
5,953,319 A	9/1999	Dutta et al.	6,172,616 B1	1/2001	Johnson et al.
5,953,371 A	9/1999	Roswell et al.	6,174,205 B1	1/2001	Madsen et al.
5,955,718 A	9/1999	Levasseur et al.	6,175,922 B1	1/2001	Wang
5,960,074 A	9/1999	Clark	6,177,883 B1	1/2001	Jennetti et al.
5,963,146 A	10/1999	Johnson et al.	6,181,255 B1	1/2001	Crimmins et al.
5,963,452 A	10/1999	Etoh et al.	6,181,284 B1	1/2001	Madsen et al.
5,963,650 A	10/1999	Simionescu et al.	6,181,981 B1	1/2001	Varga et al.
5,966,658 A	10/1999	Kennedy, III et al.	6,188,354 B1	2/2001	Soliman et al.
5,969,608 A	10/1999	Sojdehei et al.	6,192,390 B1	2/2001	Berger et al.
5,973,756 A	10/1999	Erlin	6,198,390 B1	3/2001	Schlager et al.
5,974,236 A	10/1999	Sherman	6,199,068 B1	3/2001	Carpenter
5,978,364 A	11/1999	Melnik	6,208,266 B1	3/2001	Lyons et al.
5,978,371 A	11/1999	Mason, Jr. et al.	6,215,404 B1	4/2001	Morales
5,986,574 A	11/1999	Colton	6,218,953 B1	4/2001	Petite
5,987,421 A	11/1999	Chuang	6,218,958 B1	4/2001	Eichstaedt
5,991,625 A	11/1999	Vanderpool	6,218,983 B1	4/2001	Kerry et al.

US 7,697,492 B2

Page 5

6,219,409 B1	4/2001	Smith et al.	6,574,603 B1	6/2003	Dickson et al.
6,229,439 B1	5/2001	Tice	6,584,080 B1	6/2003	Ganz et al.
6,233,327 B1	5/2001	Petite	6,600,726 B1	7/2003	Nevo et al.
6,234,111 B1	5/2001	Ulman et al.	6,608,551 B1	8/2003	Anderson et al.
6,236,332 B1	5/2001	Conkright et al.	6,618,578 B1	9/2003	Petite
6,243,010 B1	6/2001	Addy et al.	6,618,709 B1	9/2003	Sneeringer
6,246,677 B1	6/2001	Nap et al.	6,628,764 B1	9/2003	Petite
6,246,886 B1	6/2001	Olivia	6,628,965 B1	9/2003	LaRosa et al.
6,249,516 B1	6/2001	Brownrigg et al.	6,653,945 B2	11/2003	Johnson et al.
6,259,369 B1	7/2001	Monico	6,654,357 B1	11/2003	Wiedeman
6,275,707 B1	8/2001	Reed et al.	6,671,586 B2	12/2003	Davis et al.
6,286,756 B1	9/2001	Stinson et al.	6,674,403 B2	1/2004	Gray et al.
6,288,634 B1	9/2001	Weiss et al.	6,678,255 B1	1/2004	Kuriyan
6,288,641 B1	9/2001	Carsais	6,678,285 B1	1/2004	Garg
6,295,291 B1	9/2001	Larkins	6,731,201 B1	5/2004	Bailey et al.
6,301,514 B1	10/2001	Canada et al.	6,735,630 B1	5/2004	Gelvin et al.
6,304,556 B1	10/2001	Haas	6,747,557 B1	6/2004	Petite et al.
6,305,602 B1	10/2001	Grabowski et al.	6,771,981 B1	8/2004	Zalewski et al.
6,308,111 B1	10/2001	Koga	6,804,532 B1	10/2004	Moon et al.
6,311,167 B1	10/2001	Davis et al.	6,816,088 B1	11/2004	Knoska et al.
6,314,169 B1	11/2001	Schelberg, Jr. et al.	6,888,876 B1	5/2005	Mason, Jr. et al.
6,317,029 B1	11/2001	Fleeter	6,891,838 B1	5/2005	Petite
6,334,117 B1	12/2001	Covert et al.	6,914,533 B2	7/2005	Petite
6,351,223 B1	2/2002	DeWeerd et al.	6,914,893 B2	7/2005	Petite
6,356,205 B1	3/2002	Salvo et al.	6,959,550 B2	11/2005	Freeman et al.
6,357,034 B1	3/2002	Muller et al.	7,027,416 B1	4/2006	Kriz
6,362,745 B1	3/2002	Davis	7,054,271 B2	5/2006	Brownrigg et al.
6,363,057 B1	3/2002	Ardalan et al.	7,227,927 B1*	6/2007	Benedyk et al. .... 379/9.05
6,366,217 B1	4/2002	Cunningham et al.	2001/0002210 A1	5/2001	Petite
6,366,622 B1	4/2002	Brown et al.	2001/0003479 A1	6/2001	Fujiwara
6,369,769 B1	4/2002	Nap et al.	2001/0021646 A1	9/2001	Antonucci et al.
6,370,489 B1	4/2002	Williams et al.	2001/0024163 A1	9/2001	Petite
6,373,399 B1	4/2002	Johnson et al.	2001/0034223 A1	10/2001	Rieser et al.
6,380,851 B1	4/2002	Gilbert et al.	2001/0038343 A1	11/2001	Meyer et al.
6,384,722 B1	5/2002	Williams	2002/0002444 A1	1/2002	Williams et al.
6,393,341 B1	5/2002	Lawrence et al.	2002/0013679 A1	1/2002	Petite
6,393,381 B1	5/2002	Williams et al.	2002/1112323	1/2002	Petite
6,393,382 B1	5/2002	Williams et al.	2002/0019725 A1	2/2002	Petite
6,396,839 B1	5/2002	Ardalan et al.	2002/0027504 A1	3/2002	Petite et al.
6,400,819 B1	6/2002	Nakano et al.	2002/0031101 A1	3/2002	Petite
6,401,081 B1	6/2002	Montgomery et al.	2002/0032746 A1	3/2002	Lazaridis
6,405,018 B1	6/2002	Reudink et al.	2002/0061031 A1	5/2002	Sugar et al.
6,411,889 B1	6/2002	Mizunuma et al.	2002/0072348 A1	6/2002	Wheeler et al.
6,415,245 B2	7/2002	Williams et al.	2002/0089428 A1	7/2002	Walden et al.
6,421,354 B1	7/2002	Godlewski	2002/0095399 A1	7/2002	Devine et al.
6,421,731 B1	7/2002	Ciotti, Jr. et al.	2002/0098858 A1	7/2002	Struhsaker
6,422,464 B1	7/2002	Terranova	2002/0109607 A1	8/2002	Cumeralto et al.
6,424,270 B1	7/2002	Ali	2002/0136233 A1	9/2002	Chen et al.
6,424,931 B1	7/2002	Sigmar et al.	2002/0158774 A1	10/2002	Johnson et al.
6,430,268 B1	8/2002	Petite	2002/0163442 A1	11/2002	Fischer
6,431,439 B1	8/2002	Suer et al.	2002/0169643 A1	11/2002	Petite
6,437,692 B1	8/2002	Petite et al.	2002/0193144 A1	12/2002	Belski et al.
6,438,575 B1	8/2002	Khan et al.	2003/0001754 A1	1/2003	Johnson et al.
6,445,291 B2	9/2002	Addy et al.	2003/0023146 A1	1/2003	Shusterman
6,456,960 B1	9/2002	Williams et al.	2003/0028632 A1	2/2003	Davis
6,457,038 B1	9/2002	Defosse	2003/0030926 A1	2/2003	Aguren et al.
6,462,644 B1	10/2002	Howell et al.	2003/0034900 A1	2/2003	Han
6,462,672 B1	10/2002	Besson	2003/0035438 A1	2/2003	Larsson
6,477,558 B1	11/2002	Irving et al.	2003/0036822 A1	2/2003	Davis et al.
6,483,290 B1	11/2002	Hemminger et al.	2003/0046377 A1	3/2003	Daum et al.
6,484,939 B1	11/2002	Blaeuer	2003/0058818 A1	3/2003	Wilkes et al.
6,489,884 B1	12/2002	Lamberson et al.	2003/0069002 A1	4/2003	Hunter et al.
6,491,828 B1	12/2002	Sivavec et al.	2003/0073406 A1	4/2003	Benjamin et al.
6,492,910 B1	12/2002	Ragle et al.	2003/0078029 A1	4/2003	Petite
6,504,357 B1	1/2003	Hemminger et al.	2003/0093484 A1	5/2003	Petite
6,507,794 B1	1/2003	Hubbard et al.	2003/0133473 A1	7/2003	Manis et al.
6,509,722 B2	1/2003	Lopata	2003/0169710 A1	9/2003	Fan et al.
6,519,568 B1	2/2003	Harvey et al.	2003/0185204 A1	10/2003	Murdock
6,538,577 B1	3/2003	Ehrke et al.	2003/0210638 A1	11/2003	Yoo
6,542,076 B1	4/2003	Joao	2004/0047324 A1	3/2004	Diener
6,542,077 B2	4/2003	Joao	2004/0053639 A1	3/2004	Petite
6,543,690 B2	4/2003	Leydier et al.	2004/0131125 A1	7/2004	Sanderford, Jr. et al.
6,560,223 B1	5/2003	Egan et al.	2004/0133917 A1	7/2004	Schilling

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