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(54) **UICC APPARATUS**
(75) Inventors: **James Randolph Winter Lepp**, Ottawa (CA); **Jean-Philippe Paul Cormier**, Ottawa (CA); **Sheldon Terry Schwandt**, Wellesley (CA); **Oleg Los**, Buffalo Grove, IL (US); **Petra Braun**, Dormagen (DE)
(73) Assignee: **BlackBerry Limited**, Waterloo, Ontario
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4,535,219 A * 8/1985 Sliwa, Jr. 219/121.63
4,549,247 A * 10/1985 Hoppe et al. 361/749
4,591,945 A * 5/1986 Ugon
4,603,249 A * 7/1986 Hoppe et al. 235/492
4,617,605 A * 10/1986 Obrecht et al. 361/220
4,621,190 A * 11/1986 Saito et al. 235/492
4,625,102 A * 11/1986 Rebjock et al. 235/492
4,639,585 A * 1/1987 Haghiri-Tehrani et al. ... 235/492
4,674,175 A * 6/1987 Stampfli
4,755,661 A * 7/1988 Ruebsam 235/492
4,764,803 A * 8/1988 Ueda 257/679
4,774,633 A * 9/1988 Dehaine et al.
4,792,843 A * 12/1988 Haghiri-Tehrani et al.
4,803,542 A * 2/1989 Haghiri-Tehrani et al. ... 257/679
4,841,134 A * 6/1989 Hida et al.

(Continued)

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(52) **U.S. Cl.**
USPC **D14/436; D14/437**

(58) **Field of Classification Search**
USPC D14/435–437, 478–480, 485–495, 474, D14/217; D13/182; 369/275.1–275.5, 369/44.26, 100, 52.1, 272, 273, 280–288; 283/81; 720/718; 435/6, 287.2; 604/891.1; 216/2; D11/80; 235/492, 235/488, 493, 487, 375, 379, 439, 440, 441, 235/451, 486; 361/737, 748–752; D19/9, D19/10; D9/457; 705/51; 257/707, 686; 340/5.52, 5.25, 5.74

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,373,481 A * 3/1968 Lins et al. 228/175
3,676,742 A * 7/1972 Russell et al.
3,825,353 A * 7/1974 Loro 257/735
3,842,189 A * 10/1974 Southgate 174/547
D261,760 S 11/1981 Dlugos
4,450,024 A * 5/1984 Haghiri-Tehrani et al. ... 156/108

OTHER PUBLICATIONS

Nokia, "Nokia 4FF Proposal and Rationale," based on the discussion and feedback from leading suppliers and manufacturers of SIM card connectors, Aug. 25, 2011, 5 pages.

(Continued)

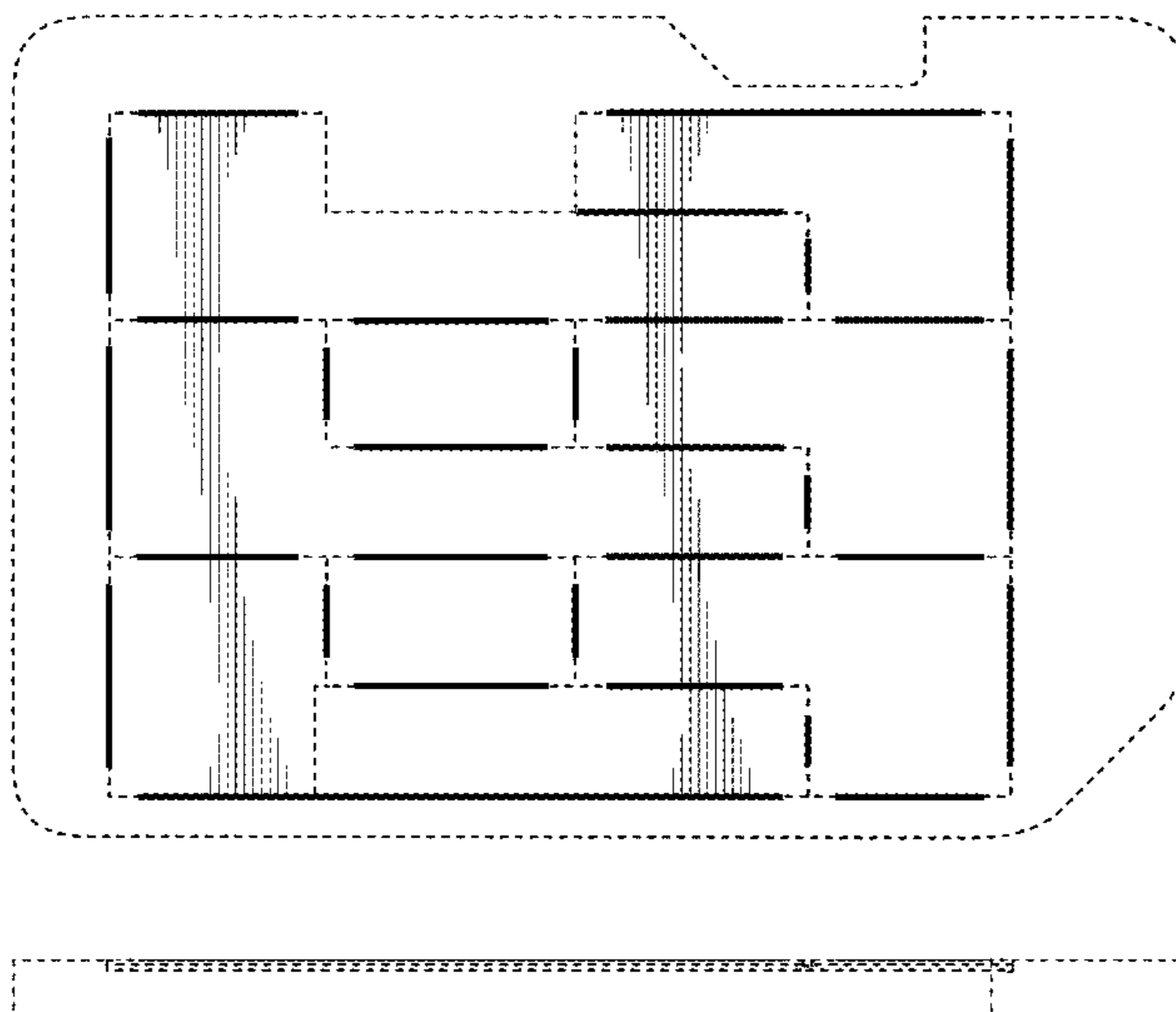
Primary Examiner — Susan Moon Lee
(74) *Attorney, Agent, or Firm* — Hanley, Flight & Zimmerman, LLC.

(57) **CLAIM**
We claim the ornamental design for a UICC apparatus, as shown and described.

DESCRIPTION

FIG. 1 is a plan view of a UICC apparatus;
FIG. 2 is a front view of the UICC apparatus of FIG. 1;
FIG. 3 is a right side view of the UICC apparatus of FIG. 1;
FIG. 4 is a left side view of the UICC apparatus of FIG. 1; and,
FIG. 5 is a rear view of the UICC apparatus of FIG. 1.
Broken lines and portions contained within broken lines are not claimed.

1 Claim, 1 Drawing Sheet



(56)

References Cited

U.S. PATENT DOCUMENTS

- 4,860,087 A * 8/1989 Matsubara et al. 257/786
4,864,383 A * 9/1989 Gloton et al. 257/679
4,897,534 A 1/1990 Haghiri-Tehrani
4,937,653 A * 6/1990 Blonder et al. 257/739
4,942,495 A * 7/1990 Peres et al. 361/220
4,980,802 A 12/1990 Champagne et al.
4,994,659 A 2/1991 Yabe et al.
5,027,190 A * 6/1991 Haghiri-Tehrani et al. 257/679
5,031,026 A * 7/1991 Ueda 257/679
5,049,728 A * 9/1991 Rovin 235/492
5,055,907 A * 10/1991 Jacobs 257/773
5,055,913 A 10/1991 Haghiri-Tehrani
5,057,460 A * 10/1991 Rose 438/133
5,067,007 A * 11/1991 Otsuka et al. 257/701
5,079,673 A * 1/1992 Kodai et al. 361/783
5,086,216 A * 2/1992 Mollet et al. 235/492
5,091,618 A * 2/1992 Takahashi 235/441
5,091,769 A * 2/1992 Eichelberger 257/687
5,122,860 A 6/1992 Kikuchi et al.
5,126,548 A * 6/1992 Sekiguchi 235/492
D327,883 S * 7/1992 Gloton D14/437
D328,599 S * 8/1992 Gloton D14/437
5,149,662 A * 9/1992 Eichelberger 438/15
5,150,193 A * 9/1992 Yasuhara et al. 257/669
D331,922 S * 12/1992 Gloton D14/437
5,173,055 A * 12/1992 Grabbe 439/66
5,192,682 A * 3/1993 Kodai et al. 29/841
5,192,716 A * 3/1993 Jacobs 29/832
D335,663 S * 5/1993 Gloton D14/437
5,208,450 A * 5/1993 Uenishi et al. 235/492
5,241,456 A * 8/1993 Marcinkiewicz et al. 361/792
5,250,843 A * 10/1993 Eichelberger 257/692
5,255,430 A * 10/1993 Tallaksen 29/827
D342,728 S * 12/1993 Gloton D14/437
5,272,374 A * 12/1993 Kodai et al. 257/679
5,280,192 A 1/1994 Kryzaniwsky
D344,502 S * 2/1994 Gloton D14/437
5,289,349 A * 2/1994 Nishino 361/813
5,296,745 A * 3/1994 Shirai et al. 257/786
5,304,513 A 4/1994 Haghiri-Tehrani et al.
5,324,687 A * 6/1994 Wojnarowski 438/107
5,327,834 A * 7/1994 Atkeson 102/202.9
5,346,576 A 9/1994 Kobayashi et al.
5,360,941 A 11/1994 Roes
D353,135 S * 12/1994 Gloton D14/437
D353,136 S * 12/1994 Gloton D14/437
5,371,346 A 12/1994 Menoud
5,399,903 A * 3/1995 Rostoker et al. 257/666
D357,242 S * 4/1995 Gloton D14/437
D357,909 S * 5/1995 Gloton D14/437
D358,142 S * 5/1995 Gloton D14/437
5,434,395 A * 7/1995 Storck et al. 235/380
RE35,119 E * 12/1995 Blonder et al. 257/739
D365,092 S * 12/1995 Mundigl et al. D14/437
5,486,687 A 1/1996 Le Roux
D369,157 S 4/1996 Ohmori et al.
5,506,499 A * 4/1996 Puar 324/754.03
5,514,862 A 5/1996 Salzano
5,523,697 A * 6/1996 Farnworth et al. 324/754.2
5,531,145 A * 7/1996 Haghiri-Tehrani 83/27
5,550,402 A * 8/1996 Nicklaus 257/669
5,550,406 A * 8/1996 McCormick 257/666
5,554,940 A * 9/1996 Hubacher 324/762.03
D375,303 S * 11/1996 Gaumet D14/436
5,581,065 A * 12/1996 Nishikawa et al. 235/492
5,583,733 A 12/1996 Cronin
5,598,032 A * 1/1997 Fidalgo 257/679
5,599,203 A * 2/1997 Broschard, III 439/489
5,612,532 A * 3/1997 Iwasaki 235/492
D379,006 S 4/1997 Gaumet
5,633,780 A 5/1997 Cronin
5,637,858 A 6/1997 Hoppe et al.
5,639,385 A * 6/1997 McCormick 216/14
5,647,122 A * 7/1997 Launay et al. 29/840
5,671,525 A * 9/1997 Fidalgo 29/600
D384,971 S 10/1997 Kawan
5,688,716 A * 11/1997 DiStefano et al. 438/55
D387,746 S * 12/1997 Ishihara D14/437
D387,747 S * 12/1997 Ishihara D14/437
D388,066 S * 12/1997 Ishihara D14/437
D389,130 S * 1/1998 Ishihara D14/437
5,710,421 A * 1/1998 Kokubu 235/492
D393,458 S * 4/1998 Merlin et al. D14/437
5,757,116 A * 5/1998 Nishikawa et al. 235/492
5,776,796 A * 7/1998 Distefano et al. 438/106
5,796,570 A 8/1998 Mekdhanasarn et al.
5,808,758 A 9/1998 Solmsdorf
5,815,426 A 9/1998 Jigour et al.
5,822,190 A * 10/1998 Iwasaki 361/737
5,834,340 A * 11/1998 Sawai et al. 438/126
5,834,755 A 11/1998 Haghiri-Tehrani et al.
5,850,690 A * 12/1998 Launay et al. 29/841
5,864,463 A * 1/1999 Tsukada et al. 361/679.32
D405,779 S * 2/1999 Huber et al. D14/437
D406,822 S * 3/1999 Huber et al. D13/182
5,888,624 A 3/1999 Haghiri et al.
5,891,745 A * 4/1999 Dunaway et al. 438/18
5,898,223 A * 4/1999 Frye et al. 257/777
D412,164 S * 7/1999 Laviron et al. D14/437
5,925,445 A * 7/1999 Suzuki 428/209
5,932,866 A * 8/1999 Terada et al. 235/487
5,965,866 A 10/1999 Mederski
5,969,951 A * 10/1999 Fischer et al. 361/737
D416,246 S * 11/1999 Hileman D14/437
5,975,420 A * 11/1999 Gogami et al. 235/492
5,995,006 A 11/1999 Walsh
6,006,987 A 12/1999 Hoolhorst
6,025,997 A 2/2000 Huber et al.
6,027,028 A 2/2000 Pieterse et al.
6,036,099 A * 3/2000 Leighton 235/488
6,046,071 A * 4/2000 Sawai et al. 438/106
6,054,774 A * 4/2000 Ohmori et al. 257/786
D424,043 S * 5/2000 Shiroki D14/436
D424,539 S 5/2000 Shiroki
D425,519 S * 5/2000 Merlin et al. D14/436
6,065,681 A * 5/2000 Trueggelmann 235/487
6,072,698 A * 6/2000 Houdeau et al. 361/737
6,076,737 A * 6/2000 Gogami et al. 235/492
6,081,182 A * 6/2000 Tomozawa et al. 338/25
D427,577 S * 7/2000 Haas et al. D14/437
6,095,423 A * 8/2000 Houdeau et al. 235/487
6,109,530 A 8/2000 Larson et al.
6,112,997 A * 9/2000 Jelinek et al. 235/492
6,141,210 A * 10/2000 Iwasaki 361/679.31
6,142,381 A * 11/2000 Finn et al. 235/492
6,145,035 A * 11/2000 Mai et al. 710/62
6,147,860 A * 11/2000 Iwasaki 361/679.32
6,161,761 A * 12/2000 Ghaem et al. 235/492
6,175,287 B1 * 1/2001 Lampen et al. 333/247
6,184,477 B1 * 2/2001 Tanahashi 174/261
6,191,951 B1 2/2001 Houdeau et al.
6,193,163 B1 * 2/2001 Fehrman et al. 235/488
6,197,688 B1 * 3/2001 Simpson 438/678
6,202,931 B1 3/2001 Billebaud
6,223,989 B1 5/2001 Permingeat
D443,298 S 6/2001 Webb et al.
6,265,765 B1 * 7/2001 DiStefano et al. 257/678
6,276,609 B1 8/2001 Czar et al.
6,288,904 B1 * 9/2001 Houdeau et al. 361/760
6,293,470 B1 * 9/2001 Asplund 235/487
D450,854 S * 11/2001 Lipman et al. D24/225
6,313,524 B1 11/2001 Pueschner et al.
6,320,751 B2 * 11/2001 Takeda et al. 361/737
D452,243 S 12/2001 Wallace
6,326,683 B1 * 12/2001 Houdeau et al. 257/679
6,329,962 B2 * 12/2001 Ying 343/895
D452,864 S 1/2002 Wallace et al.
D452,865 S 1/2002 Wallace et al.
6,343,364 B1 * 1/2002 Leydier et al. 713/500
D453,934 S 2/2002 Wallace et al.
6,351,405 B1 * 2/2002 Lee et al. 365/63
D456,414 S * 4/2002 Turin D14/437
6,369,407 B1 * 4/2002 Hikita et al. 257/48
6,370,029 B1 * 4/2002 Kawan 361/737

(56)

References Cited

U.S. PATENT DOCUMENTS

6,378,774	B1	4/2002	Emori et al.	
6,398,114	B1	6/2002	Nishikawa et al.	
6,402,032	B1 *	6/2002	Huang et al.	235/441
6,410,355	B1	6/2002	Wallace	
6,429,112	B1 *	8/2002	Smith et al.	438/611
6,433,285	B2	8/2002	Maeda et al.	
6,439,464	B1 *	8/2002	Fruhauf et al.	235/492
6,448,638	B1 *	9/2002	Fidalgo et al.	257/679
6,454,164	B1	9/2002	Wakabayashi et al.	
6,460,773	B1 *	10/2002	Kaiya et al.	235/492
6,462,273	B1	10/2002	Corisis et al.	
6,483,038	B2	11/2002	Lee et al.	
6,490,667	B1	12/2002	Ikeda	
6,514,367	B1 *	2/2003	Leighton	156/153
6,542,444	B1 *	4/2003	Rutsche	369/14
6,543,690	B2 *	4/2003	Leydier et al.	235/451
6,568,600	B1 *	5/2003	Carpier et al.	235/492
6,572,015	B1 *	6/2003	Norton	235/382
6,581,122	B1 *	6/2003	Sarat	710/301
6,581,830	B1 *	6/2003	Jelinek et al.	235/441
6,581,840	B2 *	6/2003	Takeda et al.	235/488
6,585,165	B1 *	7/2003	Kuroda et al.	235/492
6,592,042	B1	7/2003	El Yamani et al.	
6,601,770	B1	8/2003	Ikefuji et al.	
6,612,498	B1	9/2003	Lipponen et al.	
6,618,258	B2	9/2003	Goris	
6,628,240	B2 *	9/2003	Amadeo	343/866
6,632,997	B2	10/2003	Hoffman et al.	
6,634,561	B1	10/2003	Wallace	
6,634,565	B2 *	10/2003	Gray	235/492
6,641,049	B2 *	11/2003	Luu	235/492
6,642,611	B2 *	11/2003	Iwasaki	257/679
6,659,355	B1	12/2003	Fischer et al.	
6,659,356	B2 *	12/2003	Kashima	235/492
6,669,487	B1	12/2003	Nishizawa	
6,694,399	B1 *	2/2004	Leydier et al.	710/301
D487,747	S	3/2004	Yu et al.	
6,712,279	B2	3/2004	Muehlberger et al.	
D488,818	S	4/2004	Lee et al.	
6,717,801	B1	4/2004	Castell et al.	
6,720,927	B2 *	4/2004	Bakker et al.	343/702
D492,688	S *	7/2004	Wallace et al.	D14/437
D493,798	S	8/2004	Yu et al.	
6,776,347	B2 *	8/2004	Nishikawa et al.	235/492
6,778,407	B2 *	8/2004	Fischer et al.	361/777
6,793,144	B2	9/2004	Guez et al.	
6,797,543	B2 *	9/2004	Kasahara et al.	438/118
6,803,114	B1	10/2004	Vere et al.	
6,803,666	B2 *	10/2004	Takahashi et al.	257/784
6,811,082	B2 *	11/2004	Wong	235/451
6,817,533	B2	11/2004	Chen	
6,817,534	B2 *	11/2004	Gray	235/492
D501,560	S *	2/2005	Whyte et al.	D24/225
6,851,618	B2 *	2/2005	Halope	235/492
6,856,235	B2 *	2/2005	Fjelstad	338/324
6,865,086	B2	3/2005	Gochmour et al.	
6,870,733	B2	3/2005	Castell et al.	
6,896,189	B2 *	5/2005	Guion et al.	235/492
6,910,635	B1	6/2005	Miks et al.	
6,922,780	B1 *	7/2005	Siegel	713/189
6,964,377	B1 *	11/2005	Haghiri et al.	235/492
6,970,359	B2	11/2005	Gochmour et al.	
D512,512	S *	12/2005	Bell et al.	D24/225
6,978,940	B2	12/2005	Luu	
6,991,172	B2 *	1/2006	Luu	235/492
D516,076	S	2/2006	Ko	
6,994,263	B2	2/2006	Ueda et al.	
D517,559	S	3/2006	Yu et al.	
7,019,981	B2	3/2006	Heinemann et al.	
7,028,910	B2	4/2006	Reignoux et al.	
7,030,316	B2	4/2006	Centofante	
7,051,429	B2	5/2006	Kerr et al.	
D523,435	S	6/2006	Takiar et al.	
7,059,534	B2 *	6/2006	Takahashi	235/492
7,063,538	B2	6/2006	Chen	
7,064,423	B2 *	6/2006	Okita et al.	257/679
D525,248	S	7/2006	Takiar	
D525,623	S	7/2006	Takiar et al.	
D525,978	S	8/2006	Takiar et al.	
7,083,107	B2	8/2006	Sakamoto	
7,086,601	B2 *	8/2006	Dhers et al.	235/492
7,088,006	B2 *	8/2006	Janke et al.	257/783
7,094,106	B2	8/2006	Yamamoto et al.	
7,094,633	B2	8/2006	Takiar	
D529,031	S	9/2006	Huang et al.	
7,102,891	B1	9/2006	Miks et al.	
7,121,473	B2 *	10/2006	Boker	235/492
7,135,782	B2 *	11/2006	Nishikawa	257/796
7,137,563	B2 *	11/2006	Shibamoto et al.	235/487
D533,556	S	12/2006	Yamada et al.	
D534,537	S *	1/2007	Smith et al.	D14/437
7,156,313	B2 *	1/2007	Ou et al.	235/492
7,166,914	B2 *	1/2007	DiStefano et al.	257/713
D537,081	S	2/2007	Takiar et al.	
7,176,060	B2	2/2007	Yamada et al.	
7,179,129	B1	2/2007	Hwang	
7,180,176	B2 *	2/2007	Endou et al.	257/712
D538,286	S	3/2007	Takiar et al.	
7,193,161	B1	3/2007	Takiar et al.	
7,226,318	B1	6/2007	Lee	
7,233,499	B2	6/2007	Yu et al.	
7,234,644	B2 *	6/2007	Nishizawa et al.	235/492
7,239,973	B2	7/2007	Schahl et al.	
7,242,079	B2	7/2007	Nerot et al.	
7,252,242	B2 *	8/2007	Ho	235/492
D552,098	S	10/2007	Nishizawa et al.	
D552,099	S	10/2007	Nishizawa et al.	
7,291,903	B2	11/2007	Nishizawa et al.	
7,296,754	B2	11/2007	Nishizawa et al.	
D556,764	S	12/2007	Nishizawa et al.	
7,303,137	B2 *	12/2007	Ho	235/492
7,336,498	B2	2/2008	Takiar et al.	
D566,723	S *	4/2008	Okaro et al.	D14/490
7,352,588	B2	4/2008	Nishizawa et al.	
7,359,204	B1	4/2008	Jang et al.	
7,364,092	B2 *	4/2008	Narendra et al.	235/494
7,369,982	B2	5/2008	Leaming	
7,374,721	B2 *	5/2008	Huang et al.	422/82.02
D570,800	S *	6/2008	Chen et al.	D13/182
D571,810	S *	6/2008	Ikeda	D14/437
7,388,455	B2 *	6/2008	Larson et al.	333/189
D573,154	S	7/2008	Viegers et al.	
D574,384	S	8/2008	Knoch	
D574,835	S *	8/2008	Ho	D14/436
7,418,272	B2	8/2008	Son	
7,425,464	B2 *	9/2008	Fay et al.	438/107
7,427,819	B2 *	9/2008	Hoen et al.	310/320
7,433,196	B1	10/2008	Wang et al.	
D581,932	S	12/2008	Nishizawa et al.	
7,458,519	B2	12/2008	Aoki et al.	
7,475,818	B2 *	1/2009	Gallagher et al.	235/441
7,485,562	B2 *	2/2009	Chua et al.	438/613
7,486,520	B2	2/2009	Tang et al.	
7,494,058	B2 *	2/2009	Bonalle et al.	235/380
D588,080	S *	3/2009	Harnden et al.	D13/182
D589,471	S *	3/2009	Komatsu	D13/182
7,511,365	B2 *	3/2009	Wu et al.	257/676
7,552,876	B2 *	6/2009	Nishizawa et al.	235/492
7,557,436	B2 *	7/2009	Mizuno et al.	257/679
7,559,469	B2 *	7/2009	Noda et al.	235/441
7,560,806	B2	7/2009	Aoki	
7,566,001	B2 *	7/2009	Yamazaki	235/380
D598,126	S *	8/2009	Alvarez-Icaza et al.	D24/225
D599,308	S *	9/2009	Blumberg et al.	D13/182
D601,168	S *	9/2009	Barcheck	D14/492
7,587,756	B2 *	9/2009	Peart et al.	726/9
D601,521	S *	10/2009	Komatsu	D13/182
7,597,266	B2 *	10/2009	Benato	235/492
7,605,453	B2 *	10/2009	Stampka et al.	257/679
7,606,042	B2 *	10/2009	Goodwin	361/749
7,607,583	B2	10/2009	Berardi et al.	
7,615,855	B2	11/2009	Osaka et al.	
7,616,452	B2 *	11/2009	Wehrly et al.	361/803
7,619,901	B2 *	11/2009	Eichelberger et al.	361/763

(56)

References Cited

U.S. PATENT DOCUMENTS

7,630,209	B2 *	12/2009	Kim et al.	361/767	2002/0023963	A1 *	2/2002	Luu	235/492
D608,770	S *	1/2010	Deguchi et al.	D14/230	2002/0049887	A1	4/2002	Takahashi	
7,655,501	B2 *	2/2010	Yang et al.	438/106	2002/0050527	A1 *	5/2002	Nishikawa et al.	235/492
7,662,667	B2 *	2/2010	Shen	438/112	2002/0069392	A1 *	6/2002	Saitoh	716/1
7,663,564	B2	2/2010	Ayala et al.		2002/0110955	A1 *	8/2002	Patrice et al.	438/106
7,667,318	B2 *	2/2010	Yang et al.	257/700	2002/0169943	A1 *	11/2002	Rabeler	712/43
D611,039	S *	3/2010	Deguchi et al.	D14/230	2002/0170974	A1 *	11/2002	Kashima	235/492
7,669,773	B2 *	3/2010	Nishizawa et al.	235/492	2002/0177255	A1 *	11/2002	Kasahara et al.	438/110
7,675,151	B1 *	3/2010	Boone	257/686	2002/0186542	A1 *	12/2002	Choi	361/719
7,686,228	B2 *	3/2010	Oddou et al.	235/492	2003/0016116	A1 *	1/2003	Blaha	338/2
7,719,846	B2 *	5/2010	Frallicciardi et al.	361/737	2003/0016507	A1	1/2003	Fischer et al.	
7,760,513	B2 *	7/2010	Partridge et al.	361/803	2003/0024995	A1 *	2/2003	Conner et al.	235/492
7,763,976	B2 *	7/2010	Tang et al.	257/725	2003/0024996	A1 *	2/2003	Muehlberger et al.	235/492
7,768,796	B2 *	8/2010	Cady et al.	361/803	2003/0085287	A1 *	5/2003	Gray	235/492
7,807,502	B2 *	10/2010	Kwang et al.	438/108	2003/0102544	A1 *	6/2003	Nishikawa	257/678
7,810,718	B2	10/2010	Bonneau, Jr. et al.		2003/0103301	A1 *	6/2003	Fechner	361/15
7,812,434	B2 *	10/2010	Yang	257/684	2003/0116634	A1 *	6/2003	Tanaka	235/492
D628,202	S	11/2010	Pomerantz et al.		2003/0168515	A1 *	9/2003	Gray	235/492
7,837,122	B2 *	11/2010	Martinent et al.	235/492	2003/0213849	A1 *	11/2003	Luu	235/492
7,847,380	B2 *	12/2010	Huang	257/678	2003/0226901	A1 *	12/2003	Kim et al.	235/492
7,855,895	B2 *	12/2010	Kim et al.	361/767	2004/0031857	A1 *	2/2004	Sato	235/492
7,862,381	B2	1/2011	Miller		2004/0037145	A1	2/2004	Tagawa et al.	
7,874,491	B2	1/2011	Janke et al.		2004/0061234	A1 *	4/2004	Shah et al.	257/758
7,909,251	B2	3/2011	Yi et al.		2004/0089717	A1 *	5/2004	Harari et al.	235/441
7,909,611	B2	3/2011	Miller		2004/0113265	A1 *	6/2004	DiBattista et al.	257/714
7,914,296	B1 *	3/2011	Howell	439/67	2004/0117317	A1 *	6/2004	Feinman	705/65
7,922,097	B2 *	4/2011	Yoshikawa et al.	235/492	2004/0194861	A1 *	10/2004	Endou et al.	148/432
D638,431	S	5/2011	Pomerantz et al.		2004/0211843	A1 *	10/2004	Boker	235/492
7,946,876	B1 *	5/2011	Huang	439/329	2004/0232246	A1 *	11/2004	Dhers et al.	235/492
7,958,622	B1	6/2011	Ayala et al.		2004/0238857	A1 *	12/2004	Beroz et al.	257/232
7,961,101	B2 *	6/2011	Narendra et al.	340/572.1	2004/0245347	A1	12/2004	Shibamoto et al.	
7,964,946	B2 *	6/2011	Kwang et al.	257/685	2004/0252070	A1 *	12/2004	Chuang	343/795
7,975,915	B2	7/2011	Fidalgo et al.		2004/0259423	A1	12/2004	Elbaz et al.	
7,980,477	B2 *	7/2011	Finn	235/492	2005/0007744	A1 *	1/2005	Okita et al.	361/728
D643,040	S	8/2011	Sedio et al.		2005/0011671	A1	1/2005	Takiar et al.	
8,002,196	B2 *	8/2011	Yu et al.	235/492	2005/0035909	A1 *	2/2005	Lin	343/700 MS
8,003,513	B2 *	8/2011	Shah et al.	438/622	2005/0037540	A1 *	2/2005	Pepe et al.	438/108
8,016,191	B2 *	9/2011	Bonalle et al.	235/379	2005/0045729	A1 *	3/2005	Yamazaki	235/492
8,030,745	B2 *	10/2011	Yamazaki	257/679	2005/0082636	A1 *	4/2005	Yashima et al.	257/532
8,030,746	B2 *	10/2011	Tan	257/686	2005/0099269	A1 *	5/2005	Diorio et al.	340/10.51
8,061,623	B2	11/2011	Balchaytis		2005/0105360	A1	5/2005	Takiar et al.	
8,061,625	B2 *	11/2011	Yu et al.	235/492	2005/0111280	A1	5/2005	Takiar et al.	
8,072,331	B2 *	12/2011	Narendra et al.	340/572.1	2005/0139489	A1 *	6/2005	Davies et al.	205/775
8,079,528	B2 *	12/2011	Song	235/492	2005/0148217	A1	7/2005	Takiar et al.	
8,085,547	B2 *	12/2011	Wu et al.	361/762	2005/0156310	A1 *	7/2005	Benner et al.	257/712
D651,992	S *	1/2012	Nishiguchi et al.	D13/182	2005/0194453	A1 *	9/2005	Conner et al.	235/492
8,107,246	B2	1/2012	Fidalgo et al.		2005/0197169	A1 *	9/2005	Son	455/572
8,110,434	B2	2/2012	Okada et al.		2005/0202667	A1 *	9/2005	Cohen et al.	438/622
8,110,916	B2 *	2/2012	Weng et al.	257/693	2005/0212690	A1 *	9/2005	Nishikawa	340/932.2
8,127,997	B2 *	3/2012	Droz	235/492	2005/0218235	A1 *	10/2005	Chang et al.	235/492
8,136,725	B2 *	3/2012	Yamazaki	235/380	2005/0224588	A1 *	10/2005	Ruping et al.	235/492
8,136,732	B2 *	3/2012	Narendra et al.	235/451	2005/0230485	A1 *	10/2005	Ross et al.	235/492
8,143,713	B2 *	3/2012	Song et al.	257/690	2005/0231921	A1 *	10/2005	Noda et al.	361/737
8,167,659	B2	5/2012	Miller		2005/0236490	A1 *	10/2005	Fortune et al.	235/492
8,174,105	B2 *	5/2012	Kwang et al.	257/685	2005/0247797	A1 *	11/2005	Ramachandran	235/492
8,181,880	B2	5/2012	Kwon et al.		2005/0252978	A1 *	11/2005	Nishizawa et al.	235/492
8,191,788	B2 *	6/2012	Morrill-Webb et al.	235/487	2005/0253239	A1	11/2005	Nishizawa et al.	
8,231,061	B2 *	7/2012	Narendra et al.	235/492	2005/0281010	A1	12/2005	Wang et al.	
D667,442	S *	9/2012	Phelan	D14/492	2005/0287846	A1 *	12/2005	Dozen et al.	439/85
8,268,702	B2 *	9/2012	Takayama et al.	438/458	2006/0000915	A1 *	1/2006	Kodukula et al.	235/492
D669,478	S	10/2012	Lepp et al.		2006/0006241	A1 *	1/2006	Soyer et al.	235/492
D669,479	S	10/2012	Lepp et al.		2006/0047971	A1 *	3/2006	Miyazaki et al.	713/186
8,297,518	B2 *	10/2012	Yamazaki et al.	235/492	2006/0049263	A1 *	3/2006	Ou et al.	235/492
8,301,915	B2 *	10/2012	Watanabe et al.	713/300	2006/0054710	A1 *	3/2006	Forster et al.	235/492
8,333,004	B2	12/2012	Bashan et al.		2006/0058065	A1 *	3/2006	Shen et al.	455/558
8,336,784	B2 *	12/2012	Phillips	235/492	2006/0097059	A1 *	5/2006	Miyazaki	235/492
8,342,416	B2 *	1/2013	Kato	235/492	2006/0131429	A1 *	6/2006	Knoll	235/492
8,422,238	B2	4/2013	Hsiao et al.		2006/0139901	A1 *	6/2006	Meireles et al.	361/760
D681,640	S	5/2013	Aoki et al.		2006/0142063	A1	6/2006	Monsacre	
D686,214	S	7/2013	Maus et al.		2006/0145929	A1 *	7/2006	Teng et al.	343/700 MS
8,507,377	B2	8/2013	Watanabe et al.		2006/0152417	A1 *	7/2006	Ying et al.	343/702
8,573,494	B2	11/2013	Narendra et al.		2006/0175417	A1 *	8/2006	Ho	235/492
2001/0005291	A1 *	6/2001	Iwasaki	360/60	2006/0175418	A1 *	8/2006	Ho	235/492
2001/0011685	A1 *	8/2001	Fries et al.	235/492	2006/0194479	A1	8/2006	Osako et al.	
2001/0012682	A1 *	8/2001	Kayanakis et al.	438/585	2006/0202034	A1	9/2006	Wallace et al.	
					2006/0205280	A1	9/2006	Nishizawa et al.	
					2006/0278722	A1 *	12/2006	Tominaga	235/492
					2006/0288145	A1	12/2006	Chen	
					2006/0288146	A1	12/2006	Chen	

(56)

References Cited

U.S. PATENT DOCUMENTS

- 2007/0013396 A1* 1/2007 Kim et al. 324/763
 2007/0023532 A1* 2/2007 Narendra et al. 235/493
 2007/0025092 A1* 2/2007 Lee et al. 361/761
 2007/0026740 A1 2/2007 Chen
 2007/0032268 A1* 2/2007 Gotfried 455/558
 2007/0080869 A1* 4/2007 Chen et al. 343/700 MS
 2007/0082703 A1* 4/2007 Van Kleef 455/558
 2007/0095910 A1* 5/2007 Gallagher et al. 235/438
 2007/0108294 A1* 5/2007 Rossiter 235/492
 2007/0108298 A1* 5/2007 Kalck et al. 235/492
 2007/0108521 A1* 5/2007 Dekker 257/347
 2007/0125866 A1 6/2007 Nishizawa
 2007/0126099 A1 6/2007 Aoki et al.
 2007/0138301 A1* 6/2007 Cinkler 235/492
 2007/0145133 A1* 6/2007 Jolivet 235/441
 2007/0152072 A1* 7/2007 Frallicciardi et al. 235/492
 2007/0153487 A1* 7/2007 Frallicciardi et al. 361/737
 2007/0164119 A1* 7/2007 Liu et al. 235/492
 2007/0213096 A1* 9/2007 Bella et al. 455/558
 2007/0228536 A1 10/2007 Aoki
 2007/0279312 A1* 12/2007 Mei et al. 343/845
 2007/0290049 A1* 12/2007 Ratcliffe 235/492
 2008/0006703 A1* 1/2008 Ortigosa Vallejo et al. .. 235/492
 2008/0020800 A1* 1/2008 Xu 455/558
 2008/0054079 A1* 3/2008 Mullen 235/492
 2008/0054493 A1* 3/2008 Leddige et al. 257/786
 2008/0061150 A1* 3/2008 Phillips 235/492
 2008/0061151 A1* 3/2008 Phillips 235/492
 2008/0076474 A1* 3/2008 Ho 455/558
 2008/0083831 A1* 4/2008 Perez Lafuente et al. 235/492
 2008/0088038 A1* 4/2008 Hsu et al. 257/786
 2008/0099559 A1 5/2008 Lo et al.
 2008/0099932 A1* 5/2008 Silverbrook 257/786
 2008/0101986 A1* 5/2008 Saini et al. 422/56
 2008/0102895 A1* 5/2008 Fernandez 455/558
 2008/0112852 A1* 5/2008 Neel et al. 422/82.01
 2008/0135625 A1* 6/2008 Waschk 235/492
 2008/0135626 A1* 6/2008 Reignoux et al. 235/492
 2008/0144650 A1* 6/2008 Boch et al. 370/464
 2008/0146280 A1* 6/2008 Sasse et al. 455/558
 2008/0149737 A1* 6/2008 Ohshima 235/492
 2008/0153205 A1 6/2008 Nishizawa et al.
 2008/0164324 A1* 7/2008 Song 235/492
 2008/0182120 A1* 7/2008 Tan et al. 428/603
 2008/0223937 A1* 9/2008 Preta et al. 235/492
 2008/0245877 A1* 10/2008 Billebaud et al. 235/492
 2008/0257967 A1* 10/2008 Nishizawa et al. 235/492
 2008/0263363 A1* 10/2008 Jueneman et al. 713/184
 2008/0265038 A1* 10/2008 Mumbro Forn et al. 235/492
 2008/0265039 A1* 10/2008 Skowronek et al. 235/492
 2008/0272197 A1* 11/2008 Nishizawa et al. 235/492
 2008/0277484 A1* 11/2008 Launay et al. 235/492
 2008/0290160 A1* 11/2008 Huot et al. 235/382
 2008/0299860 A1* 12/2008 Lee et al. 445/24
 2008/0302876 A1* 12/2008 Mullen 235/492
 2008/0308640 A1* 12/2008 Chien 235/492
 2008/0308641 A1* 12/2008 Finn 235/492
 2009/0032593 A1* 2/2009 Ljungcrantz 235/441
 2009/0040116 A1* 2/2009 Eray 343/702
 2009/0057417 A1* 3/2009 Shinohara et al. 235/492
 2009/0061933 A1 3/2009 Lo et al.
 2009/0065587 A1* 3/2009 Phillips 235/492
 2009/0065591 A1* 3/2009 Paul et al. 235/492
 2009/0065592 A1* 3/2009 Paul et al. 235/492
 2009/0069052 A1* 3/2009 Jain et al. 455/558
 2009/0079053 A1* 3/2009 Huang 257/679
 2009/0084858 A1* 4/2009 Borracci 235/492
 2009/0101722 A1* 4/2009 Ortigosa Vallejo et al. .. 235/492
 2009/0108063 A1* 4/2009 Jain et al. 235/380
 2009/0111522 A1* 4/2009 Robles 455/558
 2009/0121020 A1* 5/2009 Gallagher et al. 235/438
 2009/0127345 A1* 5/2009 Chamley et al. 235/492
 2009/0140443 A1* 6/2009 Hohlfeld et al. 257/786
 2009/0156254 A1* 6/2009 Montes 455/558
 2009/0160071 A1* 6/2009 Shen 257/786
 2009/0166895 A1* 7/2009 Noguchi et al. 257/786
 2009/0169013 A1* 7/2009 Fascenda et al. 380/277
 2009/0172279 A1 7/2009 Yuan et al.
 2009/0173793 A1* 7/2009 Kojo et al. 235/492
 2009/0200382 A1* 8/2009 Kwon et al. 235/492
 2009/0210569 A1* 8/2009 Lusetti et al. 710/16
 2009/0216681 A1* 8/2009 McCown 705/75
 2009/0224888 A1* 9/2009 Caruana 340/10.2
 2009/0235037 A1* 9/2009 Mounier et al. 711/161
 2009/0242646 A1* 10/2009 Aznar et al. 235/492
 2009/0245029 A1* 10/2009 Kam 368/10
 2009/0250523 A1* 10/2009 Tran 235/492
 2009/0272815 A1* 11/2009 Tanner et al. 235/492
 2009/0302119 A1* 12/2009 Dohmann et al. 235/492
 2010/0001080 A1* 1/2010 Sim et al. 235/492
 2010/0025480 A1 2/2010 Nishizawa et al.
 2010/0032487 A1* 2/2010 Bohn et al. 235/492
 2010/0033307 A1* 2/2010 Narendra et al. 340/10.1
 2010/0033310 A1* 2/2010 Narendra et al. 340/10.51
 2010/0038435 A1* 2/2010 Tomoeda 235/492
 2010/0049878 A1* 2/2010 Yu et al. 710/11
 2010/0072284 A1 3/2010 Nishizawa et al.
 2010/0072618 A1* 3/2010 Camacho et al. 257/738
 2010/0078485 A1* 4/2010 Li 235/492
 2010/0078486 A1* 4/2010 Kai et al. 235/492
 2010/0084759 A1* 4/2010 Shen 257/690
 2010/0140814 A1* 6/2010 Jones et al. 257/786
 2010/0176207 A1* 7/2010 Yoshikawa et al. 235/492
 2010/0190528 A1* 7/2010 Hsiao et al. 455/558
 2010/0200661 A1* 8/2010 Shafran et al. 235/492
 2010/0203870 A1* 8/2010 Hubinak et al. 455/414.1
 2010/0223403 A1* 9/2010 Chau et al. 710/14
 2010/0227644 A1* 9/2010 Yu et al. 455/558
 2010/0262840 A1* 10/2010 Benteo et al. 713/190
 2010/0273528 A1* 10/2010 Yu et al. 455/558
 2010/0285841 A1* 11/2010 Jolivet et al. 455/558
 2010/0293784 A1 11/2010 Bashan et al.
 2010/0312698 A1 12/2010 Bonalle et al.
 2011/0059773 A1* 3/2011 Neumann et al. 455/558
 2011/0077051 A1* 3/2011 Brown et al. 455/558
 2011/0111593 A1* 5/2011 Kanno 438/689
 2011/0115060 A1* 5/2011 Chiu et al. 257/660
 2011/0117961 A1* 5/2011 Kim et al. 455/558
 2011/0125967 A1* 5/2011 Kim et al. 711/115
 2011/0147463 A1* 6/2011 Schiller et al. 235/492
 2011/0147467 A1* 6/2011 Choi 235/492
 2011/0149533 A1* 6/2011 Luo et al. 361/751
 2011/0157838 A1 6/2011 Morita et al.
 2011/0171996 A1* 7/2011 Narendra et al. 455/558
 2011/0180599 A1* 7/2011 Hu et al. 235/380
 2011/0182037 A1 7/2011 Katsumura
 2011/0186641 A1* 8/2011 Kato et al. 235/492
 2011/0194265 A1* 8/2011 Su et al. 361/761
 2011/0204147 A1* 8/2011 Amadeo et al. 235/492
 2011/0210177 A1* 9/2011 Pepin et al. 235/492
 2011/0233545 A1* 9/2011 Shin et al. 257/48
 2011/0253793 A1* 10/2011 King 235/492
 2011/0253795 A1* 10/2011 Kato 235/492
 2011/0259966 A1* 10/2011 Phillips 235/492
 2011/0298585 A1* 12/2011 Barry 340/5.84
 2011/0304060 A1* 12/2011 Qin et al. 257/786
 2012/0048948 A1* 3/2012 Bertin et al. 235/492
 2012/0104634 A1* 5/2012 Weng et al. 257/786
 2012/0161337 A1* 6/2012 Utsumi 257/786
 2012/0225691 A1* 9/2012 Desjeux et al. 455/558
 2012/0256324 A1* 10/2012 Liao et al. 257/786
 2012/0289196 A1 11/2012 Tan et al.
 2012/0292395 A1* 11/2012 Huang et al. 235/492
 2013/0015441 A1* 1/2013 Takayama et al. 257/49
 2013/0084918 A1* 4/2013 Sheshadri 455/558

OTHER PUBLICATIONS

- ETSI, "ETSI TS 102 221," V9.2.0, Technical Specification, Oct. 2010, 179 pages.
 ETSI, ETSI TS 102 412, V11.0.0, Technical Specification, May 2011, 90 pages.
 ETSI, ETSI TS 102 600, V10.0.0, Technical Specification, Oct. 2010, 26 pages.

(56)

References Cited

OTHER PUBLICATIONS

ETSI, ETSI TS 102 613, V9.2.0, Mar. 2011, 57 pages.

ETSI, ETSI TS 102 671, V9.1.0, Sep. 2011, 21 pages.

TE Connectivity, "Recommendations 4FF SIM for ETSI," Mar. 30, 2011, 9 pages.

"3GPP TSG-CT6#55," Distributing mini-UICC as punch out from Plug-in or double punch-out from ID-1, Kyoto, Japan, May 11-14, 2010, 2 pages.

"ETSI TC SCP Meeting #51," San Diego, CA, Jul. 21-22, 2011, 5 pages.

"ETSI SCP TEC Meeting #40," Sophia Antipolis, France, Aug. 29-Sep. 1, 2011, 5 pages.

"ETSI TC SCP TEC #40," Sophia-Antipolis, France, Aug. 26-Sep. 1, 2011, 1 page.

"iPhone Teardown," © 2011 iFixit, 4 pages.

International Organization for Standardization, "Identification Cards-Physical Characteristics," ISO/IEC 7810, Nov. 1, 2003, 26 pages.

International Organization for Standardization, "Identification Cards-Integrated Circuit Cards," ISO/IEC 7816-1, Feb. 15, 2011, 8 pages.

International Organization for Standardization, "Identification Cards-Integrated Circuit Cards," ISO/IEC 7816-2, Oct. 15, 2007, 14 pages.

International Organization for Standardization, "Identification Cards-Integrated Circuit Cards," ISO/IEC 7816-3, Nov. 1, 2006, 58 pages.

SMK, "Push-Push Style Micro SIM Memory Card Connector," retrieved from www.smkusa.com/usa/featured_products/mem/, Dec. 12, 2011, 4 pages.

State Intellectual Property Office of P.R. China, "Office Action," with unverified redacted English translation, issued in connection with Chinese application serial No. 201230153596, issued Sep. 18, 2012, 2 pages.

United States Patent and Trademark Office, "Non-Final Office Action," issued in connection with U.S. Appl. No. 29/405,848, issued Oct. 2, 2012, 4 pages.

United States Patent and Trademark Office, "Non-Final Office Action," issued in connection with U.S. Appl. No. 29/405,845, issued Sep. 27, 2012, 4 pages.

Canadian Intellectual Property Office, "Office Action," issued in connection with Canadian application serial No. 145596, issued Oct. 26, 2012, 2 pages.

United States Patent and Trademark Office, "Non-Final Office Action," issued in connection with U.S. Appl. No. 29/432,138, mailed Jan. 11, 2013, 9 pages.

United States Patent and Trademark Office, "Non-Final Office Action," issued in connection with U.S. Appl. No. 29/432,136, mailed Jan. 7, 2013, 9 pages.

United States Patent and Trademark Office, "Restriction Requirement," issued in connection with U.S. Appl. No. 29/418,619, mailed Jan. 17, 2013, 9 pages.

United States Patent and Trademark Office, "Restriction Requirement," issued in connection with U.S. Appl. No. 29/418,309, mailed Dec. 28, 2012, 9 pages.

United States Patent and Trademark Office, "Non-Final Office Action," issued in connection with U.S. Appl. No. 13/290,874, issued Feb. 28, 2013, 38 pages.

United States Patent and Trademark Office, "Ex Parte Quayle Action," issued in connection with U.S. Appl. No. 29/418,309, issued Feb. 6, 2013, 6 pages.

United States Patent and Trademark Office, "Final Office Action," issued in connection with U.S. Appl. No. 29/405,848, issued Feb. 22, 2013, 11 pages.

United States Patent and Trademark Office, "Ex Parte Quayle Action," issued in connection with U.S. Appl. No. 29/418,619, issued Feb. 27, 2013, 6 pages.

United States Patent and Trademark Office, "Restriction Requirement," issued in connection with U.S. Appl. No. 29/419,286, issued Mar. 7, 2013, 9 pages.

United States Patent and Trademark Office, "Final Rejection," issued in connection with U.S. Appl. No. 13/290,874, mailed on Jun. 18, 2013. (42 pages).

United States Patent and Trademark Office, "Ex Parte Quayle Action," issued in connection with U.S. Appl. No. 29/419,286, mailed on Jun. 20, 2013. (33 pages).

United States Patent and Trademark Office, "Notice of Allowance and Fee(s) Due," issued in connection with U.S. Appl. No. 29/405,848, mailed on Jun. 25, 2013. (42 pages).

United States Patent and Trademark Office, "Ex Parte Quayle Action," issued in connection with U.S. Appl. No. 29/418,619, mailed on Jun. 20, 2013. (49 pages).

United States Patent and Trademark Office, "Ex Parte Quayle Action," issued in connection with U.S. Appl. No. 29/418,309, mailed on Jun. 21, 2013. (51 pages).

Canadian Intellectual Property Office, Industrial Design Certificate of Registration, issued in connection with Canadian Patent Application No. 147625 on Sep. 18, 2013, 8 pages.

Canadian Intellectual Property Office, Industrial Design Certificate of Registration, issued in connection with Canadian Patent Application No. 147626 on Sep. 18, 2013, 8 pages.

Canadian Intellectual Property Office, Industrial Design Examiners Report, issued in connection with Canadian Patent Application No. 147627 on Sep. 19, 2013, 2 pages.

The United States Patent and Trademark Office, Notice of Allowance and Fee(s) Due, issued in connection with U.S. Appl. No. 29/419,286, mailed Nov. 12, 2013, 35 pages.

The United States Patent and Trademark Office, Notice of Allowance and Fee(s) Due, issued in connection with U.S. Appl. No. 29/418,619, mailed Nov. 14, 2013, 22 pages.

The United States Patent and Trademark Office, Notice of Allowance and Fee(s) Due, issued in connection with U.S. Appl. No. 29/418,309, mailed Nov. 14, 2013, 21 pages.

The United States Patent and Trademark Office, "Supplemental Notice of Allowance for a Design Application," issued in connection with U.S. Appl. No. 29/418,619, mailed Jan. 2, 2014, 4 pages.

The United States Patent and Trademark Office, "Supplemental Notice of Allowance for a Design Application," issued in connection with U.S. Appl. No. 29/418,309, mailed Jan. 6, 2014, 9 pages.

The United States Patent and Trademark Office, "Supplemental Notice of Allowance for a Design Application," issued in connection with U.S. Appl. No. 29/419,286, mailed Jan. 6, 2014, 5 pages.

* cited by examiner

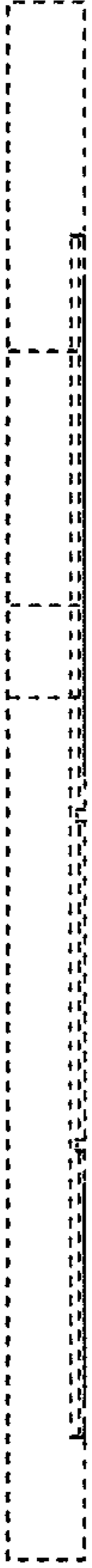


FIG. 4



FIG. 2

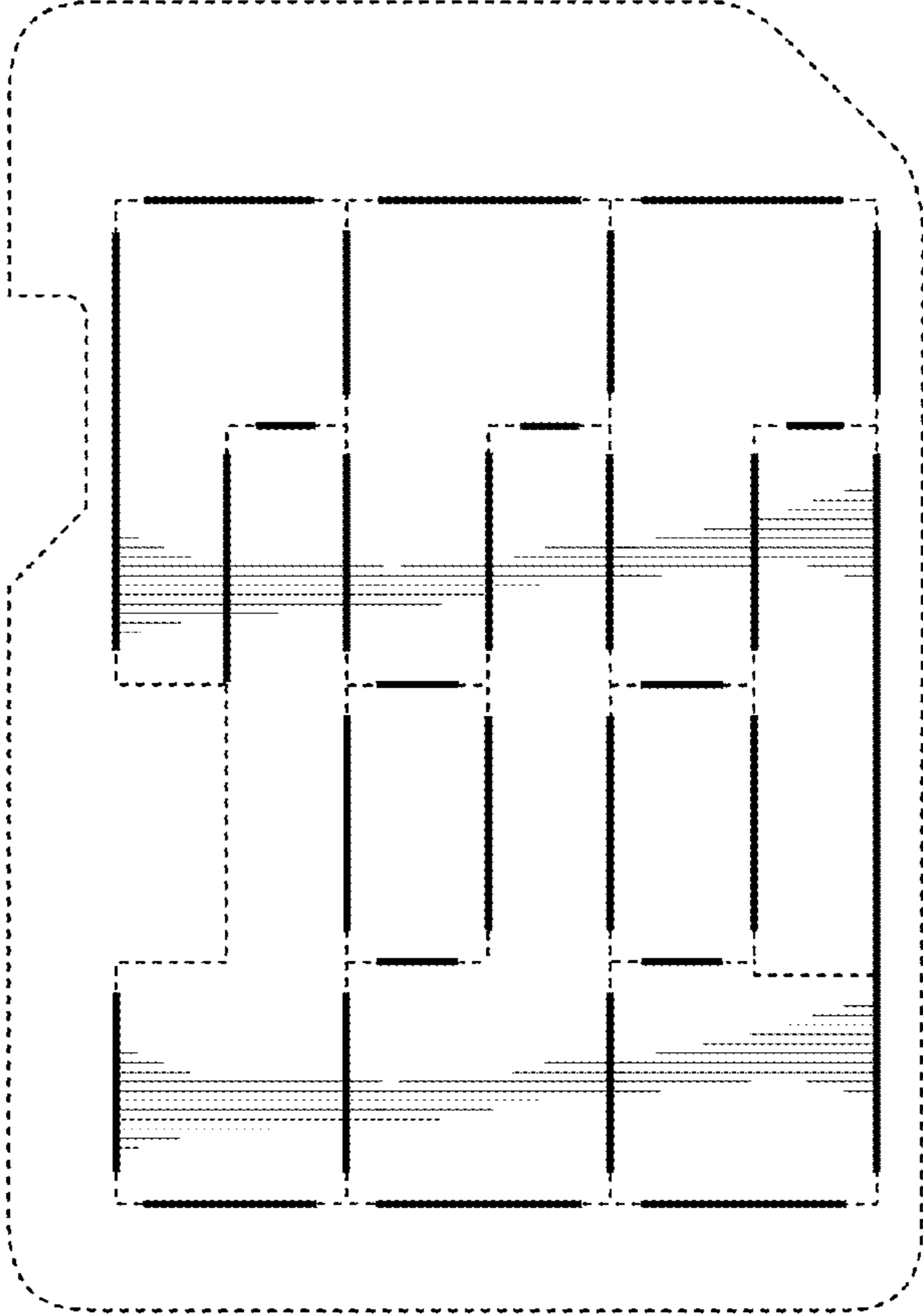


FIG. 1



FIG. 3



FIG. 5