



US00D648642S

(12) **United States Design Patent**
Wallaert et al.

(10) **Patent No.:** **US D648,642 S**

(45) **Date of Patent:** **** Nov. 15, 2011**

- (54) **THIN COVER PLATE FOR AN ELECTRONIC SYSTEM CONTROLLER**
- (75) Inventors: **Timothy Wallaert**, Wylie, TX (US);
Timothy H. Thorson, McKinney, TX (US); **Thomas G. Pavlak**, Commerce Township, MI (US)
- (73) Assignee: **Lennox Industries Inc.**, Richardson, TX (US)
- (**) Term: **14 Years**
- (21) Appl. No.: **29/345,748**
- (22) Filed: **Oct. 21, 2009**
- (51) **LOC (9) Cl.** **10-04**
- (52) **U.S. Cl.** **D10/50; D10/49**
- (58) **Field of Classification Search** D10/49-50;
D13/162; 55/270, 274, 279, DIG. 7, DIG. 34;
62/176.6, 125-130, 78, 180, 186; 73/23.2,
73/23.34, 31.01, 31.02, 431, 170.16-170.19,
73/170.21-170.25, 863.12, 29, 29.02, 335.01-335.14;
236/46 R, 47, 94, 44 C, 44 R, 49.3, 44 A,
236/96; 337/112, 327, 360; 340/602, 627,
340/632, 634; 361/346; 364/141, 146, 147,
364/188, 420, 557; 454/229, 239, 256, 257,
454/258; 700/18, 159, 181
- See application file for complete search history.

4,884,214 A	11/1989	Parker et al.
4,887,262 A	12/1989	van Veldhuizen
4,888,728 A	12/1989	Shirakawa et al.
4,889,280 A	12/1989	Grald et al.
4,931,948 A	6/1990	Parker et al.
4,941,143 A	7/1990	Twitty et al.
4,942,613 A	7/1990	Lynch
4,947,484 A	8/1990	Twitty et al.
4,947,928 A	8/1990	Parker et al.
4,953,083 A	8/1990	Takata et al.
4,955,018 A	9/1990	Twitty et al.
4,978,896 A	12/1990	Shah
4,991,770 A	2/1991	Bird et al.
4,996,513 A	2/1991	Mak et al.
5,006,827 A	4/1991	Brueton et al.
5,018,138 A	5/1991	Twitty et al.
5,042,997 A	8/1991	Rhodes
5,058,388 A	10/1991	Shaw et al.
5,103,896 A	4/1992	Saga
5,105,366 A	4/1992	Beckey
5,115,967 A	5/1992	Wedekind
5,180,102 A	1/1993	Gilbert et al.
5,181,653 A	1/1993	Foster et al.
5,184,122 A	2/1993	Decious et al.

(Continued)

Primary Examiner — Antoine D Davis

(57) **CLAIM**

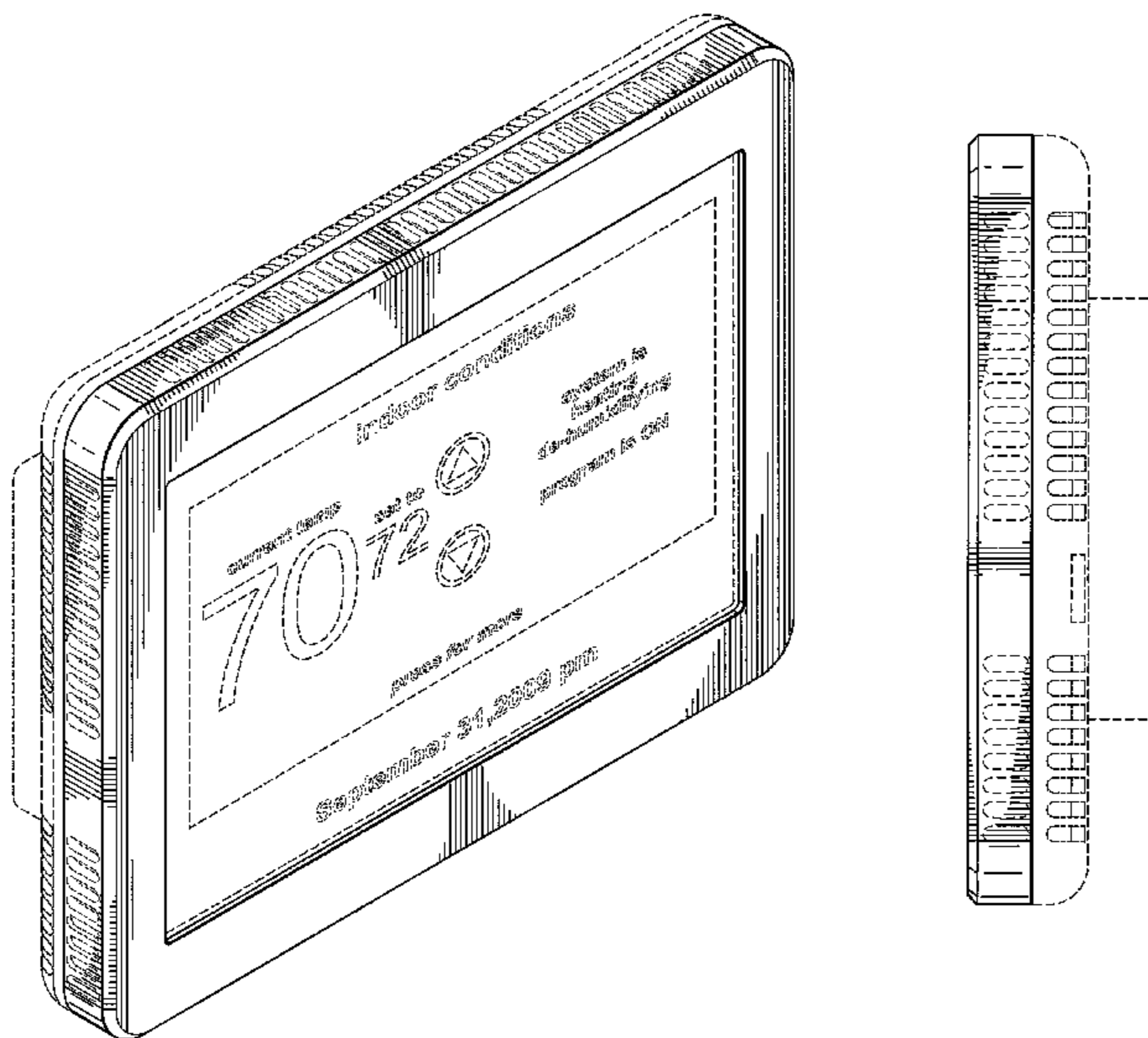
The ornamental design for a thin cover plate for an electronic system controller, as shown and described.

DESCRIPTION

FIG. 1 is a front perspective view of the thin cover plate; FIG. 2 is a top side view of the thin cover plate; FIG. 3 is a bottom side view of the thin cover plate; FIG. 4 is a front side view of the thin cover plate; FIG. 5 is a right side view of the thin cover plate; and, FIG. 6 is a left side view of the thin cover plate. The broken line showing of structural features is included for the purpose of illustrating non-claimed subject matter and forms no part of the claimed design.

1 Claim, 4 Drawing Sheets

- (56) **References Cited**
- U.S. PATENT DOCUMENTS
- | | | |
|-------------|---------|-------------------|
| 4,296,464 A | 10/1981 | Woods et al. |
| 4,501,125 A | 2/1985 | Han |
| 4,694,394 A | 9/1987 | Costantini |
| 4,698,628 A | 10/1987 | Herkert et al. |
| 4,703,325 A | 10/1987 | Chamberlin et al. |
| 4,706,247 A | 11/1987 | Yoshioka |
| 4,723,239 A | 2/1988 | Schwartz |
| 4,841,450 A | 6/1989 | Fredriksson |
| 4,873,649 A | 10/1989 | Grald et al. |



US D648,642 S

Page 2

U.S. PATENT DOCUMENTS						
5,191,643	A	3/1993	Alsenz	5,761,083 A	6/1998	Brown, Jr. et al.
5,195,327	A	3/1993	Kim	5,764,146 A	6/1998	Baldwin et al.
5,197,666	A	3/1993	Wedekind	5,772,326 A	6/1998	Batko et al.
5,197,668	A	3/1993	Ratz et al.	5,772,732 A	6/1998	James et al.
5,203,497	A	4/1993	Ratz et al.	5,774,322 A	6/1998	Walter et al.
5,220,260	A	6/1993	Schuler	5,774,492 A	6/1998	Orlowski, Jr. et al.
5,230,482	A	7/1993	Ratz et al.	5,774,493 A	6/1998	Ross
5,276,630	A	1/1994	Baldwin et al.	5,777,837 A	7/1998	Eckel et al.
5,277,036	A	1/1994	Dieckmann et al.	5,782,296 A	7/1998	Mehta
5,279,458	A	1/1994	DeWolf et al.	5,786,993 A	7/1998	Frutiger et al.
5,297,143	A	3/1994	Fridrich et al.	5,787,027 A	7/1998	Dolan et al.
5,314,004	A	5/1994	Strand et al.	5,791,332 A	8/1998	Thompson et al.
5,323,385	A	6/1994	Jurewicz et al.	5,802,485 A	9/1998	Koelle et al.
5,323,619	A	6/1994	Kim	5,809,063 A	9/1998	Ashe et al.
5,327,426	A	7/1994	Dolin, Jr. et al.	5,809,556 A	9/1998	Fujisawa et al.
5,329,991	A	7/1994	Mehta et al.	5,816,492 A	10/1998	Charles et al.
5,337,952	A	8/1994	Thompson	5,818,347 A	10/1998	Dolan et al.
5,355,323	A	10/1994	Bae	5,819,845 A	10/1998	Ryu et al.
5,383,116	A	1/1995	Lennartsson	5,826,038 A	10/1998	Nakazumi
5,384,697	A	1/1995	Pascucci	5,829,674 A	11/1998	Vanostrand et al.
5,414,337	A	5/1995	Schuler	5,841,654 A	11/1998	Verissimo et al.
5,417,368	A	5/1995	Jeffery et al.	5,848,887 A	12/1998	Zabielski et al.
5,420,572	A	5/1995	Dolin, Jr. et al.	5,854,744 A	12/1998	Zeng et al.
5,440,895	A	8/1995	Bahel et al.	5,856,972 A	1/1999	Riley et al.
5,444,626	A	8/1995	Schenk	5,860,411 A	1/1999	Thompson et al.
5,444,851	A	8/1995	Woest	5,860,473 A	1/1999	Seiden
5,448,180	A	9/1995	Kienzler et al.	5,862,411 A	1/1999	Kay et al.
5,448,561	A	9/1995	Kaiser et al.	5,864,581 A	1/1999	Alger-Meunier et al.
5,449,047	A	9/1995	Schivley, Jr.	5,873,519 A	2/1999	Beilfuss
5,452,201	A	9/1995	Pieronek et al.	5,878,236 A	3/1999	Kleineberg et al.
5,460,327	A	10/1995	Hill et al.	5,883,627 A	3/1999	Pleyer
5,463,735	A	10/1995	Pascucci et al.	5,892,690 A	4/1999	Boatman et al.
5,469,150	A	11/1995	Sitte	5,896,304 A	4/1999	Tiemann et al.
5,481,661	A	1/1996	Kobayashi	5,900,674 A	5/1999	Wojnarowski et al.
5,488,834	A	2/1996	Schwarz	5,903,454 A	5/1999	Hoffberg et al.
5,491,649	A	2/1996	Friday, Jr. et al.	5,912,877 A	6/1999	Shirai et al.
5,502,818	A	3/1996	Lamberg	5,914,453 A	6/1999	James et al.
5,513,324	A	4/1996	Dolin, Jr. et al.	5,915,101 A	6/1999	Kleineberg et al.
5,515,267	A	5/1996	Alsenz	5,927,398 A	7/1999	Maciulewicz
5,520,328	A	5/1996	Bujak, Jr.	5,930,249 A	7/1999	Stademann et al.
5,530,643	A	6/1996	Hodorowski	5,933,655 A	8/1999	Vrabec et al.
5,537,339	A	7/1996	Naganuma et al.	5,934,554 A	8/1999	Charles et al.
5,539,778	A	7/1996	Kienzler et al.	5,937,942 A	8/1999	Bias et al.
5,544,036	A	8/1996	Brown, Jr. et al.	5,946,209 A	8/1999	Eckel et al.
5,544,809	A	8/1996	Keating et al.	5,971,597 A	10/1999	Baldwin et al.
5,551,053	A	8/1996	Nadolski et al.	5,973,594 A	10/1999	Baldwin et al.
5,555,269	A	9/1996	Friday, Jr. et al.	5,983,646 A	11/1999	Grothe et al.
5,555,509	A	9/1996	Dolan et al.	5,993,195 A	11/1999	Thompson
5,559,407	A	9/1996	Dudley et al.	6,006,142 A	12/1999	Seem et al.
5,559,412	A	9/1996	Schuler	6,011,821 A	1/2000	Sauer et al.
5,566,879	A	10/1996	Longtin	6,021,252 A	2/2000	Faris et al.
5,572,658	A	11/1996	Mohr et al.	6,028,864 A	2/2000	Marttinen et al.
5,574,848	A	11/1996	Thomson	6,032,178 A	2/2000	Bacigalupo et al.
5,579,221	A	11/1996	Mun	6,035,024 A	3/2000	Stumer
5,581,478	A	12/1996	Cruse et al.	6,046,410 A	4/2000	Wojnarowski et al.
5,592,058	A	1/1997	Archer et al.	6,049,817 A	4/2000	Schoen et al.
5,592,059	A	1/1997	Archer	6,053,416 A	4/2000	Specht et al.
5,592,628	A	1/1997	Ueno et al.	6,061,603 A	5/2000	Papadopoulos et al.
5,596,437	A	1/1997	Heins	6,078,660 A	6/2000	Burgess
5,598,566	A	1/1997	Pascucci et al.	6,082,894 A	7/2000	Batko et al.
5,600,782	A	2/1997	Thomson	6,092,280 A	7/2000	Wojnarowski
5,613,369	A	3/1997	Sato et al.	6,095,674 A	8/2000	Verissimo et al.
5,617,282	A	4/1997	Rall et al.	6,098,116 A	8/2000	Nixon et al.
5,628,201	A	5/1997	Bahel et al.	6,101,824 A	8/2000	Meyer et al.
5,630,325	A	5/1997	Bahel et al.	6,110,260 A	8/2000	Kubokawa
5,634,590	A	6/1997	Gorski et al.	6,138,227 A	10/2000	Thewes et al.
5,675,830	A	10/1997	Satula	6,141,595 A	10/2000	Gloudeman et al.
5,684,717	A	11/1997	Beilfuss et al.	6,145,501 A	11/2000	Manohar et al.
5,699,243	A	12/1997	Eckel et al.	6,145,751 A	11/2000	Ahmed
5,711,480	A	1/1998	Zepke et al.	6,147,601 A	11/2000	Sandelman et al.
5,720,604	A	2/1998	Kelly et al.	6,151,298 A	11/2000	Bernhardsson et al.
5,722,822	A	3/1998	Wilson et al.	6,151,529 A	11/2000	Batko
5,726,900	A	3/1998	Walter et al.	6,151,625 A	11/2000	Swales et al.
5,737,529	A	4/1998	Dolin, Jr. et al.	6,151,650 A	11/2000	Birzer
5,748,923	A	5/1998	Eitrich	6,155,341 A	12/2000	Thompson et al.
5,751,572	A	5/1998	Maciulewicz	6,160,477 A	12/2000	Sandelman et al.
5,751,948	A	5/1998	Dolan et al.	6,160,484 A	12/2000	Spahl et al.
5,754,779	A	5/1998	Dolin, Jr. et al.	6,160,795 A	12/2000	Hosemann
				6,167,338 A	12/2000	De Wille et al.

US D648,642 S

6,169,937 B1	1/2001	Peterson	6,600,923 B1	7/2003	Dzuban
6,177,945 B1	1/2001	Pleyer	6,608,560 B2	8/2003	Abrams
6,179,213 B1	1/2001	Gibino et al.	6,609,127 B1	8/2003	Lee et al.
6,182,130 B1	1/2001	Dolin, Jr. et al.	6,615,088 B1	9/2003	Myer et al.
6,188,642 B1	2/2001	Schoniger et al.	6,615,594 B2	9/2003	Jayanth et al.
6,190,442 B1	2/2001	Redner	6,618,394 B1	9/2003	Hilleary
6,208,905 B1	3/2001	Giddings et al.	6,619,555 B2	9/2003	Rosen
6,208,924 B1	3/2001	Bauer	6,621,507 B1	9/2003	Shah
6,211,782 B1	4/2001	Sandelman et al.	6,622,926 B1	9/2003	Sartain et al.
6,216,066 B1	4/2001	Goebel et al.	6,628,993 B1	9/2003	Bauer
6,227,191 B1	5/2001	Garloch	6,633,781 B1	10/2003	Lee et al.
6,232,604 B1	5/2001	McDaniel et al.	6,636,771 B1	10/2003	Varma et al.
6,237,113 B1	5/2001	Daiber	6,640,145 B2	10/2003	Hoffberg et al.
6,252,890 B1	6/2001	Alger-Meunier et al.	6,640,890 B1	11/2003	Dage et al.
6,254,009 B1	7/2001	Proffitt et al.	6,643,689 B2	11/2003	Rode et al.
6,266,205 B1	7/2001	Schreck et al.	6,647,317 B2	11/2003	Takai et al.
6,269,127 B1	7/2001	Richards	6,650,949 B1	11/2003	Fera et al.
6,282,454 B1	8/2001	Papadopoulos et al.	6,651,034 B1	11/2003	Hedlund et al.
6,285,912 B1	9/2001	Ellison et al.	6,658,373 B2	12/2003	Rossi et al.
6,292,518 B1	9/2001	Grabb et al.	RE38,406 E	1/2004	Faris et al.
6,298,376 B1	10/2001	Rosner et al.	6,681,215 B2	1/2004	Jammu
6,298,454 B1	10/2001	Schleiss et al.	6,688,387 B1	2/2004	Wellington et al.
6,298,551 B1	10/2001	Wojnarowski et al.	6,704,688 B2	3/2004	Aslam et al.
6,304,557 B1	10/2001	Nakazumi	6,708,239 B1	3/2004	Ellerbrock et al.
6,324,008 B1	11/2001	Baldwin et al.	6,715,120 B1	3/2004	Hladik et al.
6,324,854 B1	12/2001	Jayanth	6,715,302 B2	4/2004	Ferragut, II
6,336,065 B1	1/2002	Gibson et al.	6,715,690 B2	4/2004	Hull et al.
6,343,236 B1	1/2002	Gibson et al.	6,717,513 B1	4/2004	Sandelman et al.
6,349,883 B1	2/2002	Simmons et al.	6,718,384 B2	4/2004	Linzy
6,353,775 B1	3/2002	Nichols	6,722,143 B2	4/2004	Moon et al.
6,385,510 B1	5/2002	Hoog et al.	6,725,180 B2	4/2004	Mayer et al.
6,390,806 B1	5/2002	Dempsey et al.	6,725,398 B1	4/2004	Varma et al.
6,393,023 B1	5/2002	Shimizu et al.	6,728,369 B2	4/2004	Burgess
6,400,996 B1	6/2002	Hoffberg et al.	6,732,191 B1	5/2004	Baker et al.
6,405,104 B1	6/2002	Dougherty	6,735,196 B1	5/2004	Manzardo
6,408,228 B1	6/2002	Seem et al.	6,735,282 B2	5/2004	Matsushita et al.
6,411,701 B1	6/2002	Stademann	6,735,965 B2	5/2004	Moon et al.
6,412,435 B1	7/2002	Timmons, Jr.	6,738,676 B2	5/2004	Hirayama
6,415,395 B1	7/2002	Varma et al.	6,741,915 B2	5/2004	Poth
6,418,507 B1	7/2002	Fackler	6,744,771 B1	6/2004	Barber et al.
6,423,118 B1	7/2002	Becerra et al.	6,745,106 B2	6/2004	Howard et al.
6,424,872 B1	7/2002	Glanzer et al.	6,758,050 B2	7/2004	Jayanth et al.
6,424,874 B1	7/2002	Cofer	6,758,051 B2	7/2004	Jayanth et al.
6,429,845 B1	8/2002	Unselde et al.	6,763,040 B1	7/2004	Hite et al.
6,434,715 B1	8/2002	Andersen	6,763,272 B2	7/2004	Knepper
6,435,418 B1	8/2002	Toth et al.	6,765,993 B2	7/2004	Cueman
6,437,691 B1	8/2002	Sandelman et al.	6,768,732 B1	7/2004	Neuhaus
6,442,952 B2	9/2002	Roh et al.	6,774,786 B1	8/2004	Havekost et al.
6,448,896 B1	9/2002	Bankus et al.	6,779,176 B1	8/2004	Chambers, II et al.
6,449,315 B2	9/2002	Richards	6,783,079 B2	8/2004	Carey et al.
6,450,409 B1	9/2002	Rowlette et al.	6,789,739 B2	9/2004	Rosen
6,454,177 B1	9/2002	Sasao et al.	6,791,530 B2	9/2004	Vernier et al.
6,462,654 B1	10/2002	Sandelman et al.	6,795,935 B1	9/2004	Unkle et al.
6,478,084 B1	11/2002	Kumar et al.	6,798,341 B1	9/2004	Eckel et al.
6,497,570 B1	12/2002	Sears et al.	6,801,524 B2	10/2004	Eteminan
6,498,844 B1	12/2002	Stademann	6,804,564 B2	10/2004	Crispin et al.
6,504,338 B1	1/2003	Eichorn	6,810,333 B2	10/2004	Adedeji et al.
6,526,122 B2	2/2003	Matsushita et al.	6,814,299 B1	11/2004	Carey
6,535,123 B2	3/2003	Sandelman et al.	6,814,660 B1	11/2004	Cavett
6,535,138 B1	3/2003	Dolan et al.	6,816,071 B2	11/2004	Conti
6,539,489 B1	3/2003	Reinert	6,819,802 B2	11/2004	Higgs et al.
6,540,148 B1	4/2003	Salsbury et al.	6,822,202 B2	11/2004	Atlas
6,542,462 B1	4/2003	Sohraby et al.	6,823,680 B2	11/2004	Jayanth
6,543,007 B1	4/2003	Bliley et al.	6,824,069 B2	11/2004	Rosen
6,545,660 B1	4/2003	Shen et al.	6,826,454 B2	11/2004	Sulfstede
6,546,008 B1	4/2003	Wehrend	6,826,590 B1	11/2004	Glanzer et al.
6,554,198 B1	4/2003	Hull et al.	6,832,118 B1	12/2004	Heberlein et al.
6,560,976 B2	5/2003	Jayanth	6,833,844 B1	12/2004	Shiota et al.
6,567,476 B2	5/2003	Kohl et al.	6,840,052 B2	1/2005	Smith et al.
6,572,363 B1	6/2003	Virgil, Jr. et al.	6,842,117 B2	1/2005	Keown
6,574,215 B2	6/2003	Hummel	6,842,808 B2	1/2005	Weigl et al.
6,574,234 B1	6/2003	Myer et al.	6,845,918 B2	1/2005	Rotondo
6,574,581 B1	6/2003	Bohrer et al.	6,850,992 B2	2/2005	Heinrich et al.
6,575,233 B1	6/2003	Krumnow	6,851,948 B2	2/2005	Dempsey et al.
6,580,950 B1	6/2003	Johnson et al.	6,853,291 B1	2/2005	Aisa
6,587,039 B1	7/2003	Woestemeyer et al.	6,854,444 B2	2/2005	Plagge et al.
6,587,739 B1	7/2003	Abrams et al.	6,865,449 B2	3/2005	Dudley
6,587,884 B1	7/2003	Papadopoulos et al.	6,865,596 B1	3/2005	Barber et al.
6,595,430 B1	7/2003	Shah	6,865,898 B2	3/2005	Yamanashi et al.

US D648,642 S

Page 4

6,866,375	B2	3/2005	Leighton et al.	7,092,794	B1	8/2006	Hill et al.
6,868,900	B2	3/2005	Dage et al.	7,096,078	B2	8/2006	Burr et al.
6,874,693	B2	4/2005	Radio et al.	7,096,285	B2	8/2006	Ellerbrock et al.
6,876,891	B1	4/2005	Schuler et al.	7,099,965	B2	8/2006	Ellerbrock et al.
6,879,881	B1	4/2005	Attridge, Jr.	7,100,382	B2	9/2006	Butler et al.
6,888,441	B2	5/2005	Carey	7,103,000	B1	9/2006	Rode et al.
6,892,121	B2	5/2005	Schmidt	7,103,016	B1	9/2006	Duffy et al.
6,894,703	B2	5/2005	Vernier et al.	7,103,420	B2	9/2006	Brown et al.
6,900,808	B2	5/2005	Lassiter et al.	7,110,835	B2	9/2006	Blevins et al.
6,901,316	B1	5/2005	Jensen et al.	7,114,088	B2	9/2006	Horbelt
6,901,439	B1	5/2005	Bonasia et al.	7,114,554	B2	10/2006	Bergman et al.
6,907,329	B2	6/2005	Junger et al.	7,117,050	B2	10/2006	Sasaki et al.
6,909,948	B2	6/2005	Mollmann et al.	7,117,051	B2	10/2006	Landry et al.
6,918,064	B2	7/2005	Mueller et al.	7,117,395	B2	10/2006	Opaterny
6,920,318	B2	7/2005	Brooking et al.	7,120,036	B2	10/2006	Kyono
6,925,360	B2	8/2005	Yoon et al.	7,123,428	B2	10/2006	Yeo et al.
6,931,645	B2	8/2005	Murching et al.	7,123,774	B2	10/2006	Dhavala et al.
6,938,106	B2	8/2005	Ellerbrock et al.	7,127,305	B1	10/2006	Palmon
6,941,193	B2	9/2005	Frecka et al.	7,130,409	B2	10/2006	Beyda
6,954,680	B2	10/2005	Kreidler et al.	7,130,719	B2	10/2006	Ehlers et al.
6,955,060	B2	10/2005	Homan et al.	7,133,407	B2	11/2006	Jinzaki et al.
6,955,302	B2	10/2005	Erdman, Jr.	7,133,748	B2	11/2006	Robinson
6,956,424	B2	10/2005	Hohnel	7,133,749	B2	11/2006	Goldberg et al.
6,957,696	B1	10/2005	Krumnow	7,135,982	B2	11/2006	Lee
6,963,288	B1	11/2005	Sokol et al.	7,139,550	B2	11/2006	Cuellar et al.
6,963,922	B2	11/2005	Papadopoulos et al.	7,146,230	B2	12/2006	Glanzer et al.
6,965,802	B2	11/2005	Sexton	7,146,231	B2	12/2006	Schleiss et al.
6,968,295	B1	11/2005	Carr	7,146,253	B2	12/2006	Hoog et al.
6,973,366	B2	12/2005	Komai	7,150,408	B2	12/2006	DeLuca
6,975,219	B2	12/2005	Eryurek et al.	7,155,318	B2	12/2006	Sharma et al.
6,975,913	B2	12/2005	Kreidler et al.	7,155,499	B2	12/2006	Soemo et al.
6,975,958	B2	12/2005	Bohrer et al.	7,156,316	B2	1/2007	Kates
6,980,796	B1	12/2005	Cuellar et al.	7,162,512	B1	1/2007	Amit et al.
6,981,266	B1	12/2005	An et al.	7,162,883	B2	1/2007	Jayanth et al.
6,983,271	B2	1/2006	Morrow et al.	7,163,156	B2	1/2007	Kates
6,983,889	B2	1/2006	Alles	7,163,158	B2	1/2007	Rossi et al.
6,988,011	B2	1/2006	Varma et al.	7,167,762	B2	1/2007	Glanzer et al.
6,988,671	B2	1/2006	DeLuca	7,168,627	B2	1/2007	Kates
6,990,381	B2	1/2006	Nomura et al.	7,171,579	B2	1/2007	Weigl et al.
6,990,540	B2	1/2006	Dalakuras et al.	7,172,132	B2	2/2007	Proffitt et al.
6,993,414	B2	1/2006	Shah	7,174,239	B2	2/2007	Butler et al.
RE38,985	E	2/2006	Boatman et al.	7,174,728	B2	2/2007	Jayanth
6,994,620	B2	2/2006	Mills	7,175,086	B2	2/2007	Gascoyne et al.
6,999,473	B2	2/2006	Windecker	7,175,098	B2	2/2007	DeLuca
6,999,824	B2	2/2006	Glanzer et al.	7,177,926	B2	2/2007	Kramer
7,000,849	B2	2/2006	Ashworth et al.	7,181,317	B2	2/2007	Amundson et al.
7,003,378	B2	2/2006	Poth	7,185,262	B2	2/2007	Barthel et al.
7,006,460	B1	2/2006	Vollmer et al.	7,186,290	B2	3/2007	Sheehan et al.
7,006,881	B1	2/2006	Hoffberg et al.	7,187,354	B2	3/2007	Min et al.
7,013,239	B2	3/2006	Hedlund et al.	7,187,986	B2	3/2007	Johnson et al.
7,017,827	B2	3/2006	Shah et al.	7,188,002	B2	3/2007	Chapman, Jr. et al.
7,020,798	B2	3/2006	Meng et al.	7,188,207	B2	3/2007	Mitter
7,022,008	B1	4/2006	Crocker	7,188,482	B2	3/2007	Sadegh et al.
7,024,282	B2	4/2006	Coogan et al.	7,188,779	B2	3/2007	Alles
7,024,283	B2	4/2006	Bicknell	7,191,028	B2	3/2007	Nomura et al.
7,025,281	B2	4/2006	DeLuca	7,194,663	B2	3/2007	Fletcher et al.
7,029,391	B2	4/2006	Nagaya et al.	7,195,211	B2	3/2007	Kande et al.
7,032,018	B2	4/2006	Lee et al.	7,197,717	B2	3/2007	Anderson et al.
7,035,719	B2	4/2006	Howard et al.	7,200,450	B2	4/2007	Boyer et al.
7,035,898	B1	4/2006	Baker	7,203,165	B1	4/2007	Kowalewski
7,036,743	B2	5/2006	Shah	7,203,575	B2	4/2007	Maturana et al.
7,043,339	B2	5/2006	Maeda et al.	7,203,776	B2	4/2007	Junger et al.
7,044,397	B2	5/2006	Bartlett et al.	7,206,646	B2	4/2007	Nixon et al.
7,047,092	B2	5/2006	Wimsatt	7,206,647	B2	4/2007	Kumar
7,051,282	B2	5/2006	Marcjan	7,209,485	B2	4/2007	Guse
7,058,459	B2	6/2006	Weiberle et al.	7,209,748	B2	4/2007	Wong et al.
7,058,477	B1	6/2006	Rosen	7,212,825	B2	5/2007	Wong et al.
7,058,693	B1	6/2006	Baker, Jr.	7,213,044	B2	5/2007	Tjong et a
7,058,737	B2	6/2006	Ellerbrock et al.	7,216,016	B2	5/2007	Van Ostrand et al.
7,062,927	B2	6/2006	Kwon et al.	7,216,017	B2	5/2007	Kwon et al.
7,068,612	B2	6/2006	Berkcan et al.	7,216,497	B2	5/2007	Hull et al.
7,076,962	B2	7/2006	He et al.	7,218,589	B2	5/2007	Wisnudel et al.
7,082,339	B2	7/2006	Murray et al.	7,218,996	B1	5/2007	Beitelmal et al.
7,082,352	B2	7/2006	Lim	7,219,141	B2	5/2007	Bonasia et al.
7,083,109	B2	8/2006	Pouchak	7,222,152	B1	5/2007	Thompson et al.
7,085,626	B2	8/2006	Harrod et al.	7,222,493	B2	5/2007	Jayanth et al.
7,089,087	B2	8/2006	Dudley	7,222,494	B2	5/2007	Peterson et al.
7,089,088	B2	8/2006	Terry et al.	7,224,366	B2	5/2007	Kessler et al.
7,092,772	B2	8/2006	Murray et al.	7,225,054	B2	5/2007	Amundson et al.

US D648,642 S

7,225,356 B2	5/2007	Monitzer	7,395,122 B2	7/2008	Kreidler et al.
7,228,187 B2	6/2007	Ticky et al.	7,395,137 B2	7/2008	Robinson
7,232,058 B2	6/2007	Lee	7,403,128 B2	7/2008	Scuka et al.
7,233,229 B2	6/2007	Stroupe et al.	7,412,839 B2	8/2008	Jayanth
7,239,623 B2	7/2007	Burghardt et al.	7,412,842 B2	8/2008	Pham
7,242,988 B1	7/2007	Hoffberg et al.	D578,026 S	10/2008	Roher et al.
7,243,004 B2	7/2007	Shah et al.	7,433,740 B2	10/2008	Hesse et al.
7,244,294 B2	7/2007	Kates	7,434,744 B2	10/2008	Garozzo et al.
7,246,753 B2	7/2007	Hull et al.	7,436,292 B2	10/2008	Rourke et al.
7,248,576 B2	7/2007	Hoffmann	7,436,293 B2	10/2008	Rourke et al.
7,251,534 B2	7/2007	Walls et al.	7,436,296 B2	10/2008	Rourke et al.
7,257,813 B1	8/2007	Mayer et al.	7,436,400 B2	10/2008	Cheng
7,260,084 B2	8/2007	Saller	7,437,198 B2	10/2008	Iwaki
7,260,451 B2	8/2007	Takai et al.	7,441,094 B2	10/2008	Stephens
7,260,609 B2	8/2007	Fuehrer et al.	7,451,937 B2	11/2008	Flood et al.
7,260,948 B2	8/2007	Jayanth et al.	7,454,269 B1	11/2008	Dushane et al.
7,261,241 B2	8/2007	Eoga	7,455,240 B2	11/2008	Chapman, Jr. et al.
7,261,243 B2	8/2007	Butler et al.	7,460,933 B2	12/2008	Chapman, Jr. et al.
7,261,762 B2	8/2007	Kang et al.	D610,475 S *	2/2010	Beers et al. D10/50
7,266,775 B2	9/2007	Patitucci	D642,081 S *	7/2011	Kashimoto D10/49
7,266,960 B2	9/2007	Shah	2001/0034586 A1	10/2001	Ewert et al.
7,269,962 B2	9/2007	Bachmann	2001/0048376 A1	12/2001	Maeda et al.
7,272,154 B2	9/2007	Loebig	2002/0022894 A1	2/2002	Eryurek et al.
7,272,452 B2	9/2007	Coogan et al.	2002/0026476 A1	2/2002	Miyazaki et al.
7,272,457 B2	9/2007	Glanzer et al.	2002/0072814 A1	6/2002	Schuler et al.
7,274,972 B2	9/2007	Amundson et al.	2002/0091784 A1	7/2002	Baker et al.
7,274,973 B2	9/2007	Nichols et al.	2002/0123896 A1	9/2002	Diez et al.
7,277,280 B2	10/2007	Peng	2002/0163427 A1	11/2002	Eryurek et al.
7,277,970 B2	10/2007	Ellerbrock et al.	2002/0190242 A1	12/2002	Iillie et al.
7,278,103 B1	10/2007	Clark et al.	2003/0058863 A1	3/2003	Oost
7,287,062 B2	10/2007	Im et al.	2003/0078677 A1	4/2003	Hull et al.
7,287,708 B2	10/2007	Lucas et al.	2003/0108064 A1	6/2003	Bilke et al.
7,287,709 B2	10/2007	Proffitt et al.	2003/0115177 A1	6/2003	Takanabe et al.
7,289,458 B2	10/2007	Gila et al.	2003/0229784 A1	12/2003	Cuellar et al.
7,292,900 B2	11/2007	Kreidler et al.	2004/0039478 A1	2/2004	Kiesel et al.
7,293,422 B2	11/2007	Parachini et al.	2004/0095237 A1	5/2004	Chen et al.
7,295,099 B2	11/2007	Lee et al.	2004/0104942 A1	6/2004	Weigel
7,296,426 B2	11/2007	Butler et al.	2004/0107717 A1	6/2004	Yoon et al.
7,299,279 B2	11/2007	Sadaghiany	2004/0111186 A1	6/2004	Rossi et al.
7,299,996 B2	11/2007	Garrett et al.	2004/0117330 A1	6/2004	Ehlers et al.
7,301,699 B2	11/2007	Kanamori et al.	2004/0139038 A1	7/2004	Ehlers et al.
7,305,495 B2	12/2007	Carter	2004/0143360 A1	7/2004	Kiesel et al.
7,306,165 B2	12/2007	Shah	2004/0146008 A1	7/2004	Conradt et al.
7,310,559 B2	12/2007	Walko, Jr.	2004/0156360 A1	8/2004	Sexton et al.
7,313,716 B2	12/2007	Weigl et al.	2004/0159112 A1	8/2004	Jayanth et al.
7,313,923 B2	1/2008	Jayanth et al.	2004/0189590 A1	9/2004	Mehaffey et al.
7,315,768 B2	1/2008	Dang et al.	2004/0204775 A1	10/2004	Keyes et al.
7,317,970 B2	1/2008	Pienta et al.	2004/0205781 A1	10/2004	Hill et al.
7,320,110 B2	1/2008	Shah	2004/0206096 A1	10/2004	Jayanth
7,324,874 B2	1/2008	Jung	2004/0210348 A1	10/2004	Imhof et al.
7,327,376 B2	2/2008	Shen et al.	2004/0218591 A1	11/2004	Ogawa et al.
7,327,815 B1	2/2008	Jurisch	2004/0236471 A1	11/2004	Poth
7,330,512 B2	2/2008	Frank et al.	2004/0266491 A1	12/2004	Howard et al.
7,331,191 B2	2/2008	He et al.	2004/0267790 A1	12/2004	Pak et al.
7,334,161 B2	2/2008	Williams et al.	2005/0005249 A1	1/2005	Hill et al.
7,336,650 B2	2/2008	Franz et al.	2005/0007249 A1	1/2005	Eryurek et al.
7,337,369 B2	2/2008	Barthel et al.	2005/0010759 A1	1/2005	Wakiyama
7,337,619 B2	3/2008	Hsieh et al.	2005/0033707 A1	2/2005	Ehlers et al.
7,343,226 B2	3/2008	Ehlers et al.	2005/0034023 A1	2/2005	Maturana et al.
7,346,404 B2	3/2008	Eryurek et al.	2005/0041633 A1	2/2005	Roeser et al.
7,346,835 B1	3/2008	Lobinger et al.	2005/0054381 A1	3/2005	Lee et al.
7,349,761 B1	3/2008	Cruse	2005/0055427 A1	3/2005	Frutiger et al.
7,354,005 B2	4/2008	Carey et al.	2005/0068978 A1	3/2005	Sexton et al.
7,356,050 B2	4/2008	Reindl et al.	2005/0076150 A1	4/2005	Lee et al.
7,359,345 B2	4/2008	Chang et al.	2005/0080879 A1	4/2005	Kim et al.
7,360,002 B2	4/2008	Brueckner et al.	2005/0081156 A1	4/2005	Clark et al.
7,360,370 B2	4/2008	Shah et al.	2005/0081157 A1	4/2005	Clark et al.
7,360,717 B2	4/2008	Shah	2005/0096872 A1	5/2005	Blevins et al.
7,364,093 B2	4/2008	Garozzo	2005/0109048 A1	5/2005	Lee
7,365,812 B2	4/2008	Lee	2005/0116023 A1	6/2005	Amundson et al.
7,366,498 B2	4/2008	Ko et al.	2005/0118996 A1	6/2005	Lee et al.
7,366,944 B2	4/2008	Oshins et al.	2005/0119766 A1	6/2005	Amundson et al.
7,370,074 B2	5/2008	Alexander et al.	2005/0120012 A1	6/2005	Poth et al.
7,377,450 B2	5/2008	Van Ostrand et al.	2005/0125495 A1	6/2005	Tjong et al.
7,383,158 B2	6/2008	Krocker et al.	2005/0143138 A1	6/2005	Lee et al.
7,389,150 B2	6/2008	Inoue et al.	2005/0145705 A1	7/2005	Shah et al.
7,389,204 B2	6/2008	Eryurek et al.	2005/0150967 A1	7/2005	Chapman et al.
RE40,437 E	7/2008	Rosen et al.	2005/0161517 A1	7/2005	Helt et al.
7,392,661 B2	7/2008	Alles	2005/0166610 A1	8/2005	Jayanth

US D648,642 S

Page 6

2005/0176410	A1	8/2005	Brooking et al.	2007/0090199	A1	4/2007	Hull et al.
2005/0193155	A1	9/2005	Fujita	2007/0093226	A1	4/2007	Foltyn et al.
2005/0223339	A1	10/2005	Lee	2007/0102149	A1	5/2007	Kates
2005/0229610	A1	10/2005	Park et al.	2007/0109975	A1	5/2007	Reckamp et al.
2005/0235661	A1	10/2005	Pham	2007/0113247	A1	5/2007	Kwak
2005/0235662	A1	10/2005	Pham	2007/0119957	A1	5/2007	Kates
2005/0235663	A1	10/2005	Pham	2007/0119958	A1	5/2007	Kates
2005/0258257	A1	11/2005	Thurman et al.	2007/0129820	A1	6/2007	Glanzer et al.
2005/0270151	A1	12/2005	Winick	2007/0129825	A1	6/2007	Kargenian
2005/0278071	A1	12/2005	Durham, III	2007/0129826	A1	6/2007	Kreidler et al.
2005/0280364	A1	12/2005	Omura et al.	2007/0129917	A1	6/2007	Blevins et al.
2005/0281368	A1	12/2005	Droba et al.	2007/0130834	A1	6/2007	Kande et al.
2005/0288823	A1	12/2005	Hesse et al.	2007/0130969	A1	6/2007	Peterson et al.
2006/0006244	A1	1/2006	Morrow et al.	2007/0135692	A1	6/2007	Hwang et al.
2006/0021358	A1	2/2006	Nallapa	2007/0135946	A1	6/2007	Sugiyama et al.
2006/0021359	A1	2/2006	Hur et al.	2007/0136669	A1	6/2007	Kwon et al.
2006/0030954	A1	2/2006	Bergman et al.	2007/0136687	A1	6/2007	Pak
2006/0041898	A1	2/2006	Potyrailo et al.	2007/0138307	A1	6/2007	Khoo
2006/0048064	A1	3/2006	Vronay	2007/0138308	A1	6/2007	Schultz et al.
2006/0058924	A1	3/2006	Shah	2007/0143704	A1	6/2007	Laird-McConnell
2006/0090142	A1	4/2006	Glasgow et al.	2007/0143707	A1	6/2007	Yun et al.
2006/0090483	A1	5/2006	Kim et al.	2007/0158442	A1	7/2007	Chapman, Jr. et al.
2006/0091227	A1	5/2006	Attridge, Jr.	2007/0168887	A1	7/2007	Lee
2006/0092977	A1	5/2006	Bai et al.	2007/0177505	A1	8/2007	Charrua et al.
2006/0106791	A1	5/2006	Morrow et al.	2007/0191024	A1	8/2007	Kim et al.
2006/0108432	A1	5/2006	Mattheis	2007/0192731	A1	8/2007	Townsend et al.
2006/0111816	A1	5/2006	Spalink et al.	2007/0204637	A1	9/2007	Fujii et al.
2006/0130497	A1	6/2006	Kang et al.	2007/0205297	A1	9/2007	Finkam et al.
2006/0144055	A1	7/2006	Ahn	2007/0208461	A1	9/2007	Chase
2006/0144232	A1	7/2006	Kang et al.	2007/0208549	A1	9/2007	Blevins et al.
2006/0149414	A1	7/2006	Archacki et al.	2007/0213853	A1	9/2007	Glanzer et al.
2006/0150027	A1	7/2006	Paden	2007/0223500	A1	9/2007	Lee et al.
2006/0153247	A1	7/2006	Stumer	2007/0225868	A1	9/2007	Terlson et al.
2006/0155398	A1	7/2006	Hoffberg et al.	2007/0225869	A1	9/2007	Amundson et al.
2006/0158051	A1	7/2006	Bartlett et al.	2007/0237032	A1	10/2007	Rhee et al.
2006/0159007	A1	7/2006	Frutiger et al.	2007/0238413	A1	10/2007	Coutts
2006/0168522	A1	7/2006	Bala	2007/0239658	A1	10/2007	Cunningham et al.
2006/0186214	A1	8/2006	Simon et al.	2007/0240226	A1	10/2007	Song et al.
2006/0190138	A1	8/2006	Stone et al.	2007/0241203	A1	10/2007	Wagner et al.
2006/0192021	A1	8/2006	Schultz et al.	2007/0242058	A1	10/2007	Yamada
2006/0196953	A1	9/2006	Simon et al.	2007/0245306	A1	10/2007	Dameshek et al.
2006/0200253	A1	9/2006	Hoffberg et al.	2007/0257120	A1	11/2007	Chapman, Jr. et al.
2006/0200258	A1	9/2006	Hoffberg et al.	2007/0260978	A1	11/2007	Oh et al.
2006/0200259	A1	9/2006	Hoffberg et al.	2007/0266329	A1	11/2007	Gaudette
2006/0200260	A1	9/2006	Hoffberg et al.	2007/0271521	A1	11/2007	Harriger et al.
2006/0202978	A1	9/2006	Lee et al.	2007/0274093	A1	11/2007	Haim et al.
2006/0206220	A1	9/2006	Amundson	2007/0277013	A1	11/2007	Rexha et al.
2006/0209208	A1	9/2006	Kim et al.	2007/0278320	A1	12/2007	Lunacek et al.
2006/0219799	A1	10/2006	Schultz et al.	2007/0284452	A1	12/2007	Butler et al.
2006/0229090	A1	10/2006	LaDue	2007/0299857	A1	12/2007	Gwozdz et al.
2006/0235548	A1	10/2006	Gaudette	2007/0300064	A1	12/2007	Isaacs et al.
2006/0236351	A1	10/2006	Ellerbrock et al.	2008/0004727	A1	1/2008	Glanzer et al.
2006/0239296	A1	10/2006	Jinzaki et al.	2008/0005428	A1	1/2008	Maul et al.
2006/0248233	A1	11/2006	Park et al.	2008/0006709	A1	1/2008	Ashworth et al.
2006/0276917	A1	12/2006	Li et al.	2008/0031147	A1	2/2008	Fieremans et al.
2007/0005191	A1	1/2007	Sloup et al.	2008/0040351	A1	2/2008	Jin et al.
2007/0008116	A1	1/2007	Bergman et al.	2008/0048045	A1	2/2008	Butler et al.
2007/0012052	A1	1/2007	Butler et al.	2008/0054082	A1	3/2008	Evans et al.
2007/0013534	A1	1/2007	DiMaggio	2008/0055190	A1	3/2008	Lee
2007/0014233	A1	1/2007	Oguro et al.	2008/0057872	A1	3/2008	McFarland et al.
2007/0016311	A1	1/2007	Bergman et al.	2008/0059682	A1	3/2008	Cooley et al.
2007/0016476	A1	1/2007	Hoffberg et al.	2008/0062892	A1	3/2008	Dodgen et al.
2007/0025368	A1	2/2007	Ha et al.	2008/0063006	A1	3/2008	Nichols
2007/0032909	A1	2/2007	Tolbert et al.	2008/0065926	A1	3/2008	Poth et al.
2007/0033310	A1	2/2007	Kweon	2008/0072704	A1	3/2008	Clark et al.
2007/0040040	A1	2/2007	Mueller	2008/0073440	A1	3/2008	Butler et al.
2007/0043478	A1	2/2007	Ehlers et al.	2008/0077884	A1	3/2008	Patitucci
2007/0045429	A1	3/2007	Chapman, Jr. et al.	2008/0077886	A1	3/2008	Eichner
2007/0045431	A1	3/2007	Chapman, Jr. et al.	2008/0083009	A1	4/2008	Kaler et al.
2007/0045442	A1	3/2007	Chapman, Jr. et al.	2008/0097651	A1	4/2008	Shah et al.
2007/0051818	A1	3/2007	Atlas	2008/0104189	A1	5/2008	Baker et al.
2007/0055407	A1	3/2007	Goldberg et al.	2008/0114500	A1	5/2008	Hull et al.
2007/0067496	A1	3/2007	Deiretsbacher et al.	2008/0128523	A1	6/2008	Hoglund et al.
2007/0073973	A1	3/2007	Hazay	2008/0133033	A1	6/2008	Wolff et al.
2007/0080235	A1	4/2007	Fulton, Jr.	2008/0133060	A1	6/2008	Hoglund et al.
2007/0083721	A1	4/2007	Grinspan	2008/0133061	A1	6/2008	Hoglund et al.
2007/0084937	A1	4/2007	Ahmed	2008/0134087	A1	6/2008	Hoglund et al.
2007/0088883	A1	4/2007	Wakabayashi	2008/0134098	A1	6/2008	Hoglund et al.
2007/0089090	A1	4/2007	Riedl et al.	2008/0161977	A1	7/2008	Takach et al.

US D648,642 S

Page 7

2008/0161978	A1	7/2008	Shah	2008/0256475	A1	10/2008	Amundson et al.
2008/0168356	A1	7/2008	Eryurek et al.	2008/0264085	A1	10/2008	Perry et al.
2008/0183335	A1	7/2008	Poth et al.	2008/0294274	A1	11/2008	Laberge et al.
2008/0185976	A1	8/2008	Dickey et al.	2008/0294932	A1	11/2008	Oshins et al.
2008/0186160	A1	8/2008	Kim et al.	2009/0001180	A1	1/2009	Siddaramanna et al.
2008/0195254	A1	8/2008	Jung et al.	2009/0001182	A1	1/2009	Siddaramanna et al.
2008/0195687	A1	8/2008	Jung et al.	2009/0049847	A1	2/2009	Butler et al.
2008/0215987	A1	9/2008	Alexander et al.	2009/0261174	A1	10/2009	Butler et al.
2008/0217418	A1	9/2008	Helt et al.				
2008/0223944	A1	9/2008	Helt et al.				

* cited by examiner

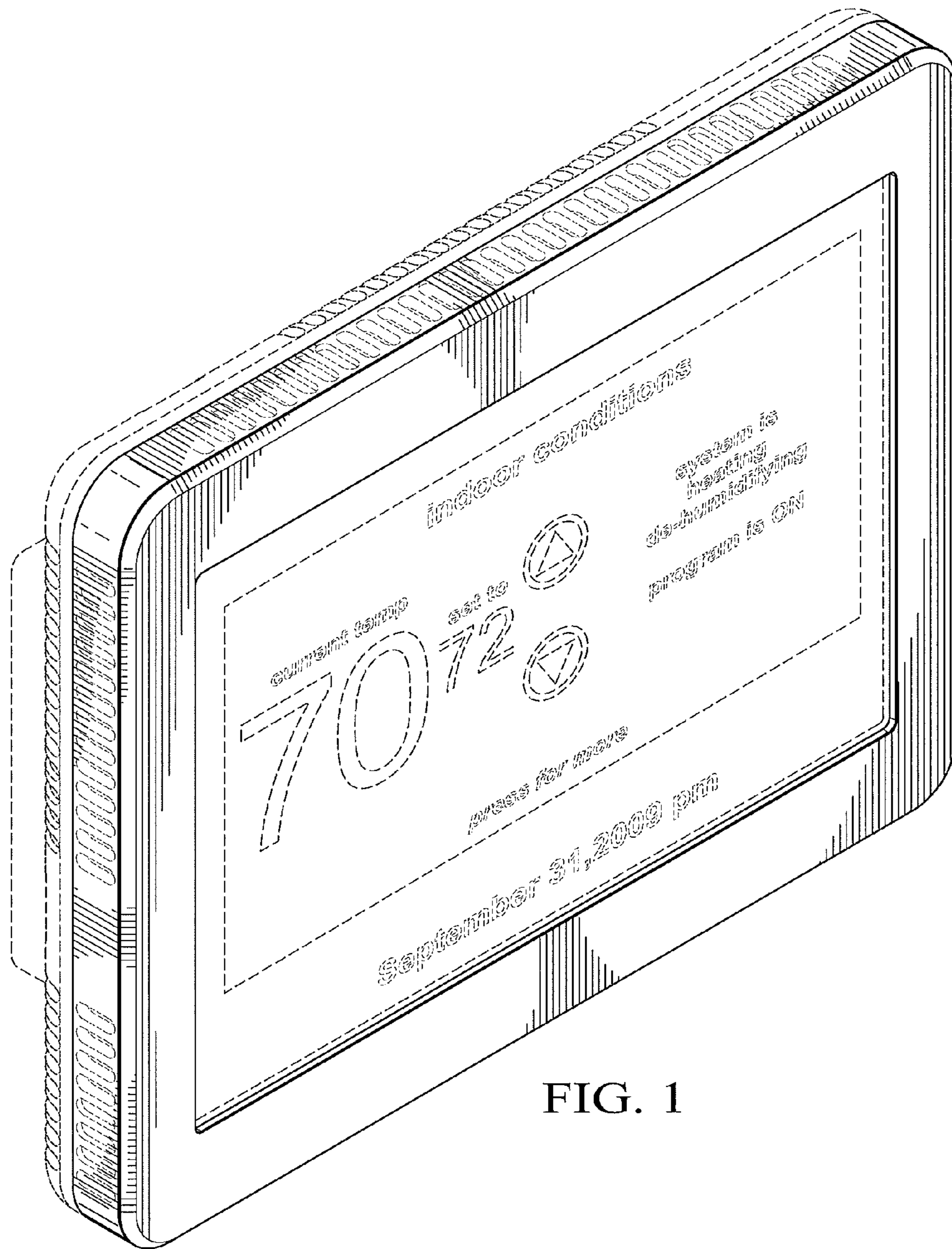


FIG. 1

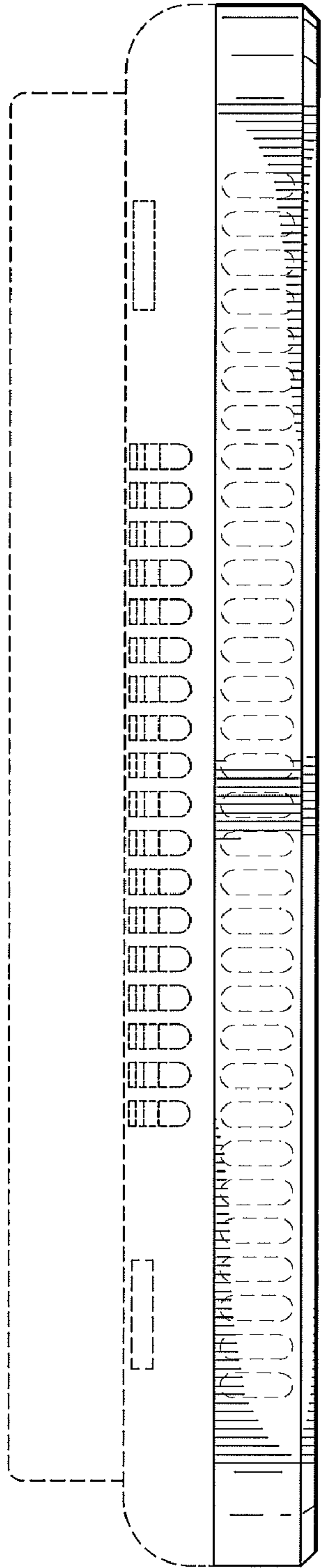


FIG. 2

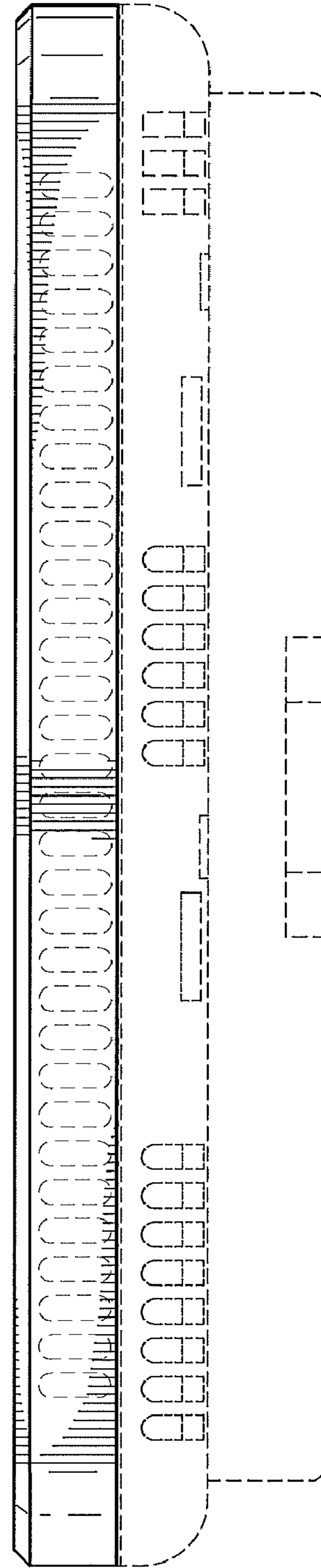


FIG. 3

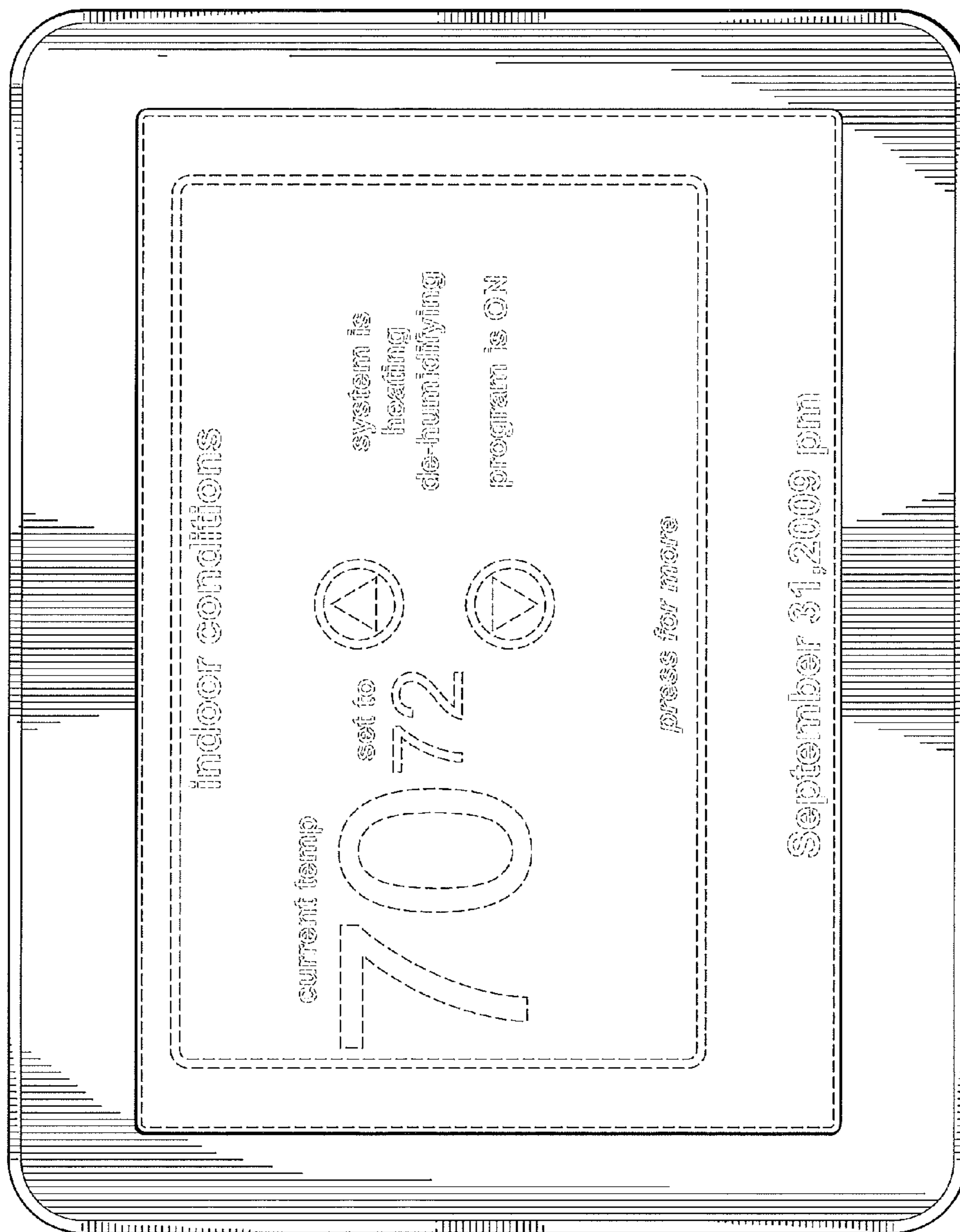


FIG. 4

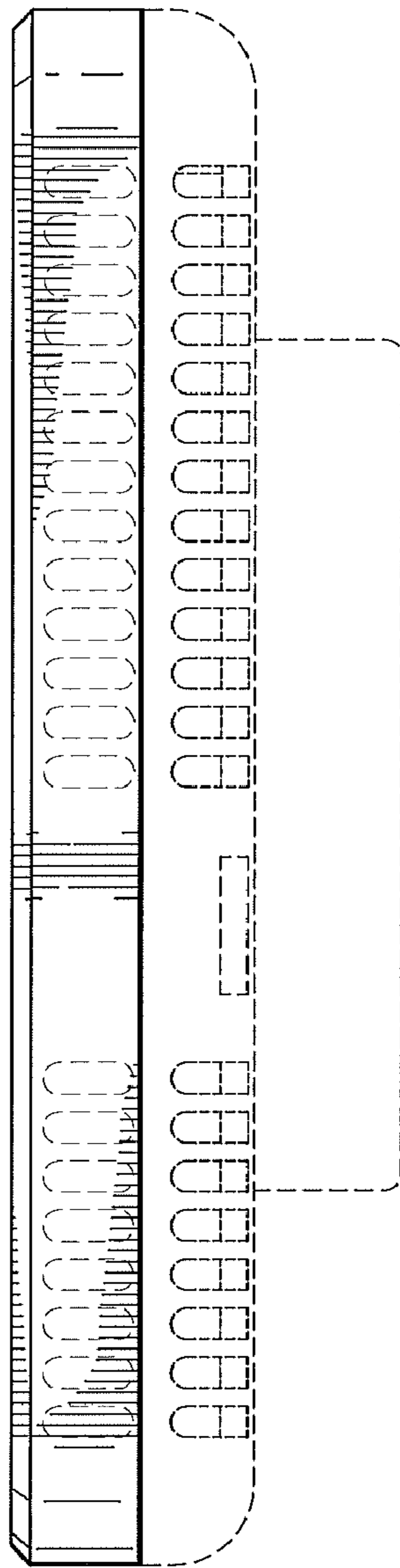


FIG. 5

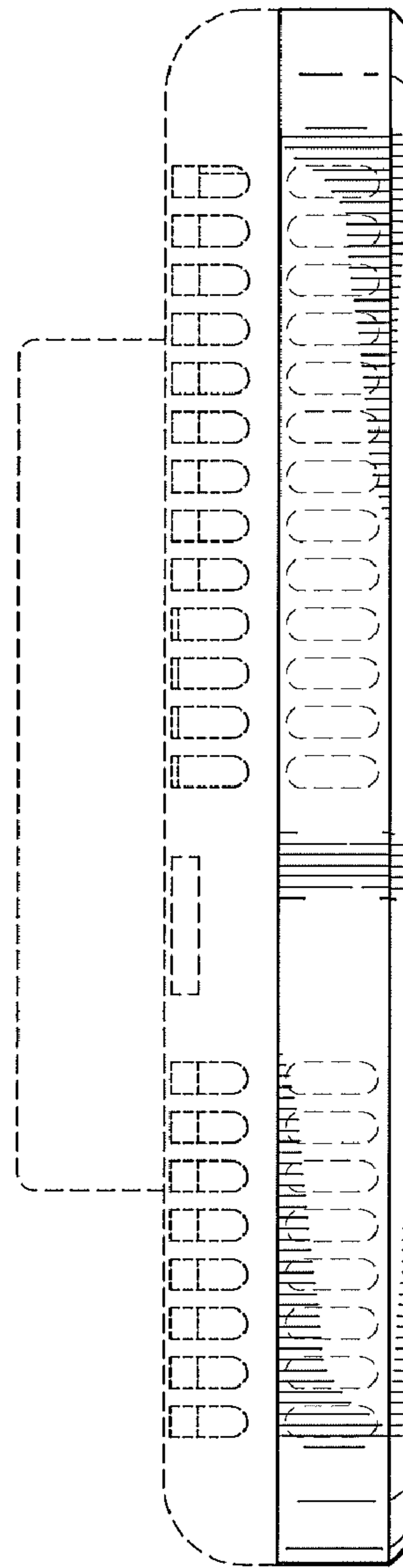


FIG. 6