



US00D644314S

(12) **United States Design Patent**  
**Foerster**

(10) **Patent No.:** **US D644,314 S**

(45) **Date of Patent:** **\*\* Aug. 30, 2011**

(54) **PUMP UNIT**

(75) Inventor: **Lee Foerster**, Medford, OR (US)

(73) Assignee: **TF Industries, LLC**, Medford, OR (US)

(\*\*) Term: **14 Years**

(21) Appl. No.: **29/379,991**

(22) Filed: **Nov. 29, 2010**

**Related U.S. Application Data**

(62) Division of application No. 29/341,512, filed on Aug. 6, 2009, now Pat. No. Des. 629,498.

(51) **LOC (9) Cl.** ..... **28-99**

(52) **U.S. Cl.** ..... **D23/366**

(58) **Field of Classification Search** ..... D23/355-369;  
D28/5, 6; 261/DIG. 17, DIG. 42, DIG. 65,  
261/DIG. 88, DIG. 89; 392/386, 390-395;  
239/34, 35, 44-47, 50, 53, 56, 60, 145, 326

See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

4,200,940 A	5/1980	Buchanan
4,693,337 A	9/1987	Timmermeister
4,701,966 A	10/1987	Schaffer
D296,468 S	6/1988	Greubel
4,876,748 A	10/1989	Chun
D313,846 S	1/1991	Sullivan et al.
5,050,798 A	9/1991	Sullivan
D336,761 S	6/1993	Chan
5,231,705 A	8/1993	Ragusa
5,234,162 A	8/1993	Sullivan
D346,857 S	5/1994	Pan
D349,338 S	8/1994	Crinion
5,342,584 A	8/1994	Fritz et al.
5,369,812 A	12/1994	Trombley
5,386,594 A	2/1995	Hilton
5,491,847 A	2/1996	Shaffer

5,522,093 A	6/1996	Schaffer
5,547,616 A	8/1996	Dancs et al.
D377,390 S	1/1997	Ketcham
5,603,455 A	2/1997	Lin
D382,549 S	8/1997	Yoshimoto
D384,140 S	9/1997	Jane et al.

(Continued)

**OTHER PUBLICATIONS**

Hepalta Purified Air Inc., <http://www.hepalta.com/ambifresh>.

(Continued)

*Primary Examiner* — Sandra Snapp

(74) *Attorney, Agent, or Firm* — David S. Taylor; Berenato & White, LLC

(57) **CLAIM**

The ornamental design for a pump unit, as shown and described.

**DESCRIPTION**

FIG. 1 is an upper perspective view of a pump unit of a deodorizing assembly mounted on a toilet according to an embodiment of the invention.

FIG. 2 is an upper perspective view of the pump unit of FIG. 1.

FIG. 3 is a front view of the pump unit of FIG. 1.

FIG. 4 is a back view of the pump unit of FIG. 1.

FIG. 5 is a right side view of the pump unit of FIG. 1.

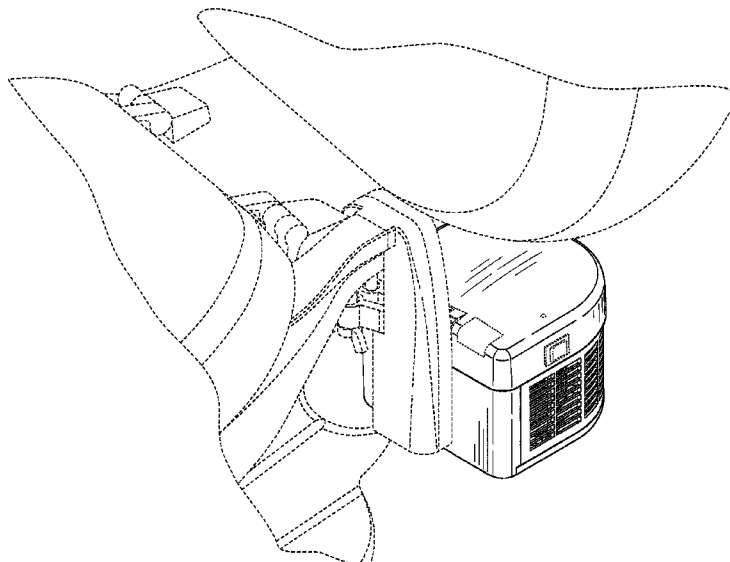
FIG. 6 is a left side view of the pump unit of FIG. 1.

FIG. 7 is a top view of the pump unit of FIG. 1; and,

FIG. 8 is a bottom view of the pump unit of FIG. 1.

The broken lines showing of a toilet in FIG. 1 are included for the purpose of illustrating environment and forms no part of the claimed design. Other broken lines showing structural elements in FIGS. 9-13, 15, and 16 form no part of the claimed design.

**1 Claim, 6 Drawing Sheets**



# US D644,314 S

Page 2

## U.S. PATENT DOCUMENTS

D384,736 S 10/1997 Goode et al.  
5,761,915 A 6/1998 Rao  
5,781,937 A 7/1998 Liang  
D401,318 S 11/1998 Rakocy  
5,875,496 A 3/1999 Schaffer  
5,996,131 A 12/1999 Vallair  
5,997,674 A 12/1999 Rakocy et al.  
D426,627 S 6/2000 Cho  
D428,645 S 7/2000 Rossman et al.  
D444,218 S 6/2001 Mittelstadt et al.  
6,260,214 B1 7/2001 Smith  
D452,302 S 12/2001 Hagen  
6,344,065 B1 2/2002 Boulva  
D455,826 S 4/2002 Gillingham et al.  
D456,499 S 4/2002 Ching  
6,363,542 B1 4/2002 Pope, Sr.  
D459,454 S 6/2002 Shapiro  
D467,325 S 12/2002 Ching  
6,523,184 B2 2/2003 Prisco  
6,550,072 B1 4/2003 Ware  
D480,127 S 9/2003 Cox et al.  
6,643,850 B2 11/2003 Chasen et al.  
6,678,900 B2 1/2004 Ware

D487,927 S 3/2004 Toro  
6,795,980 B1 9/2004 Ries  
D505,487 S 5/2005 Blateri  
D506,248 S 6/2005 Blateri  
D507,824 S 7/2005 Blateri  
D509,292 S 9/2005 Gatchell et al.  
D509,293 S 9/2005 Rivera  
D511,377 S 11/2005 Erwan et al.  
D522,116 S 5/2006 Zhixiang  
D557,773 S 12/2007 Antoniou  
D558,870 S 1/2008 Triplett et al.  
D583,279 S 12/2008 Lee et al.  
D588,257 S 3/2009 Reedy et al.  
D593,188 S 5/2009 Warne et al.  
D598,088 S \* 8/2009 Foerster ..... D23/365  
D612,922 S 3/2010 Foerster  
D629,498 S \* 12/2010 Foerster ..... D23/366

## OTHER PUBLICATIONS

OdorVac, <http://www.odorvac.com/>.  
Miracle Seat, <http://www.miracleseat.com/>.

\* cited by examiner

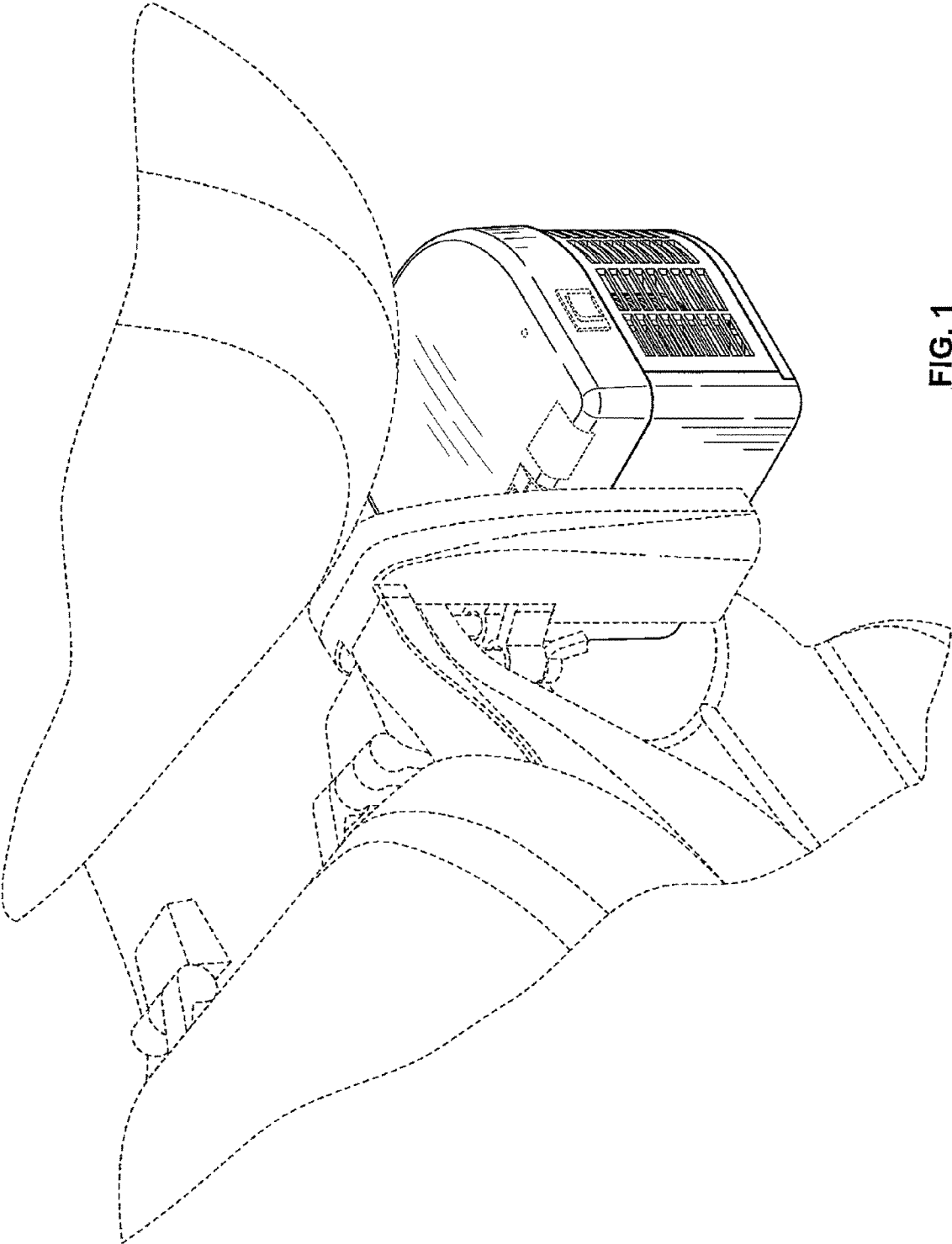


FIG. 1

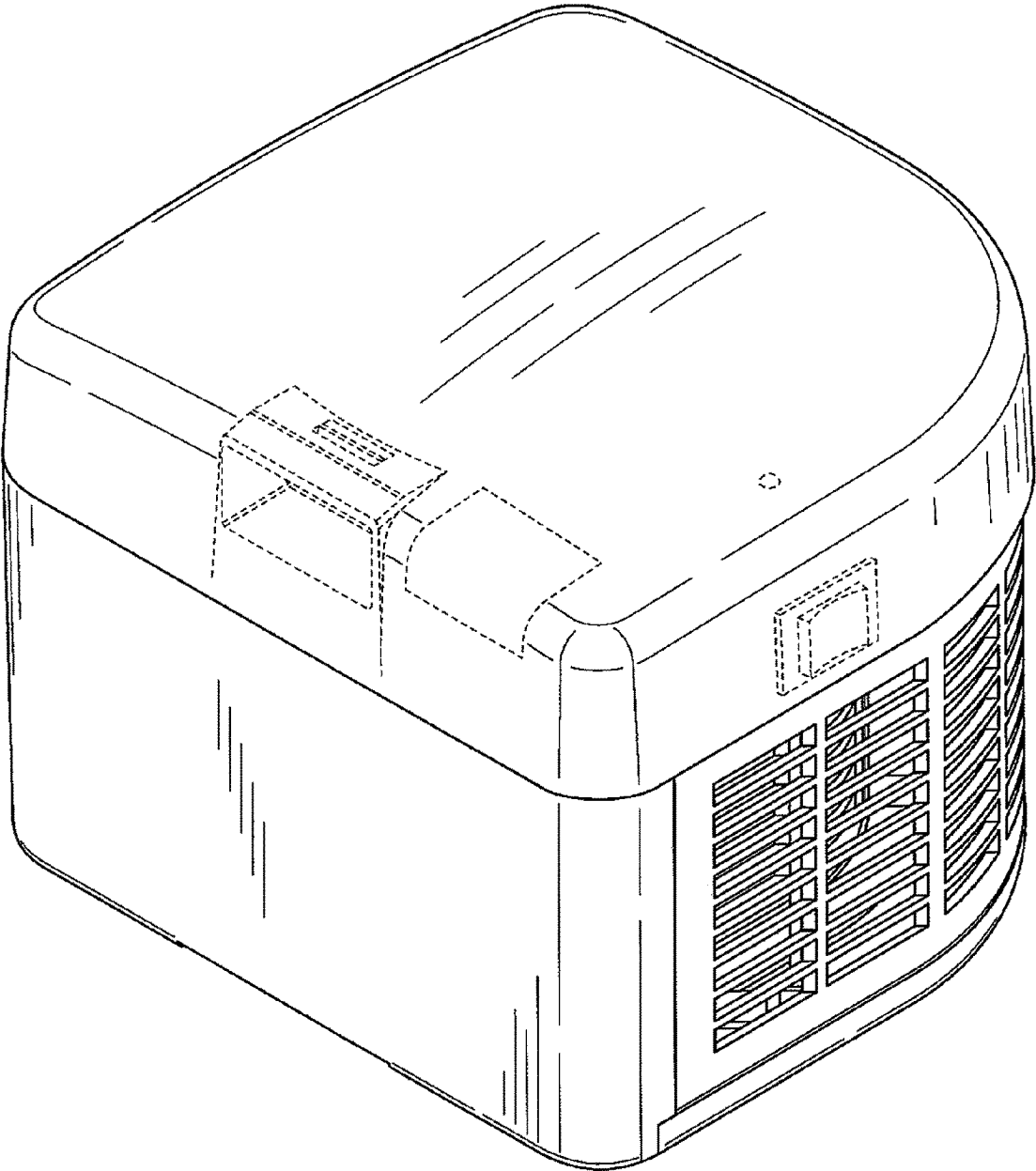


FIG. 2

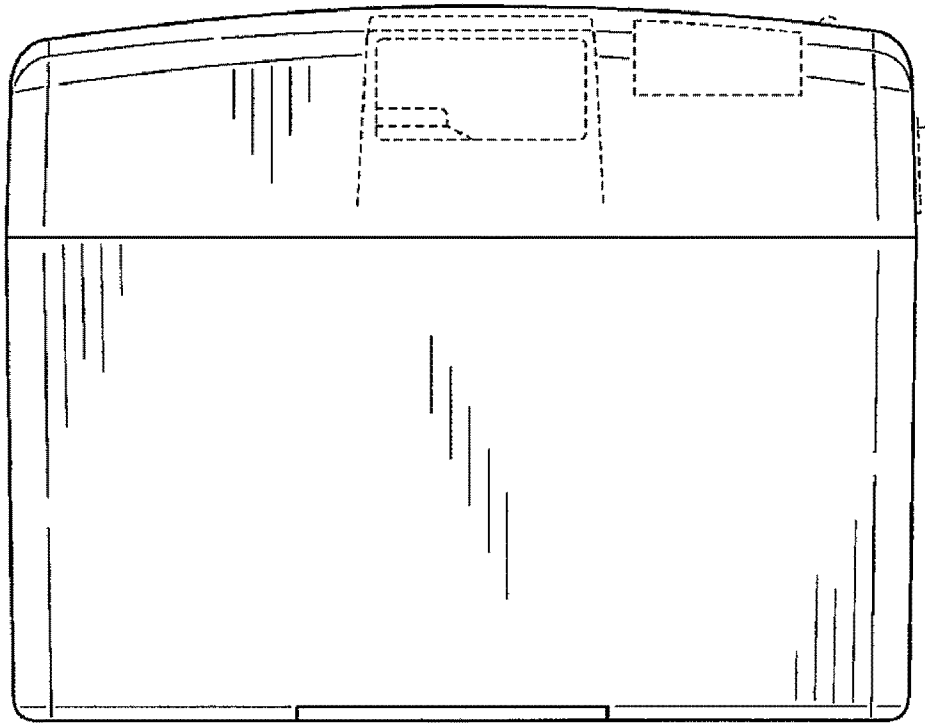


FIG. 3

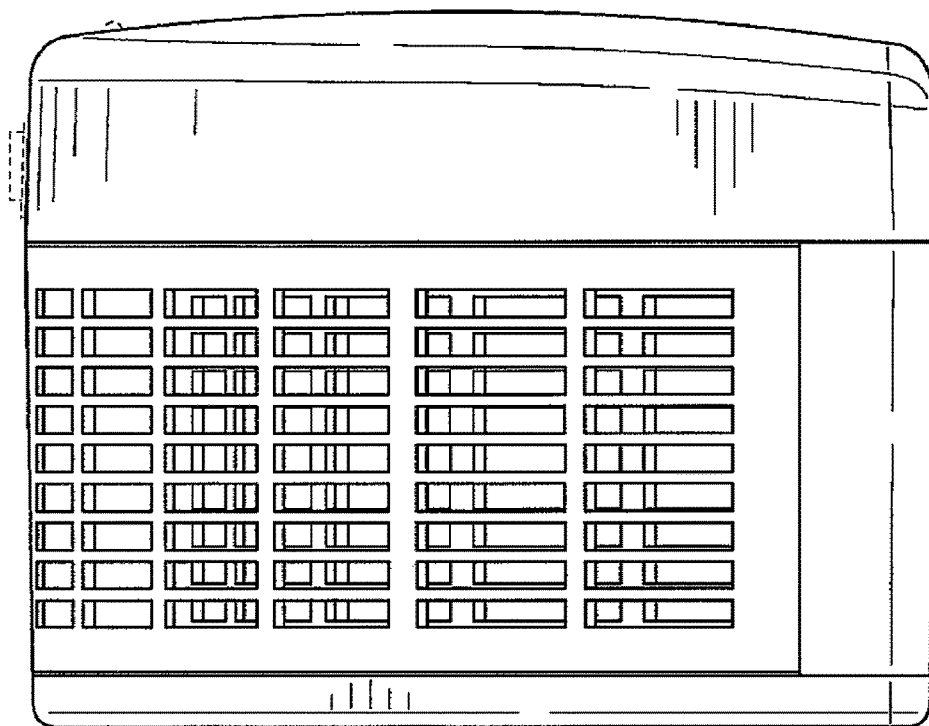


FIG. 4

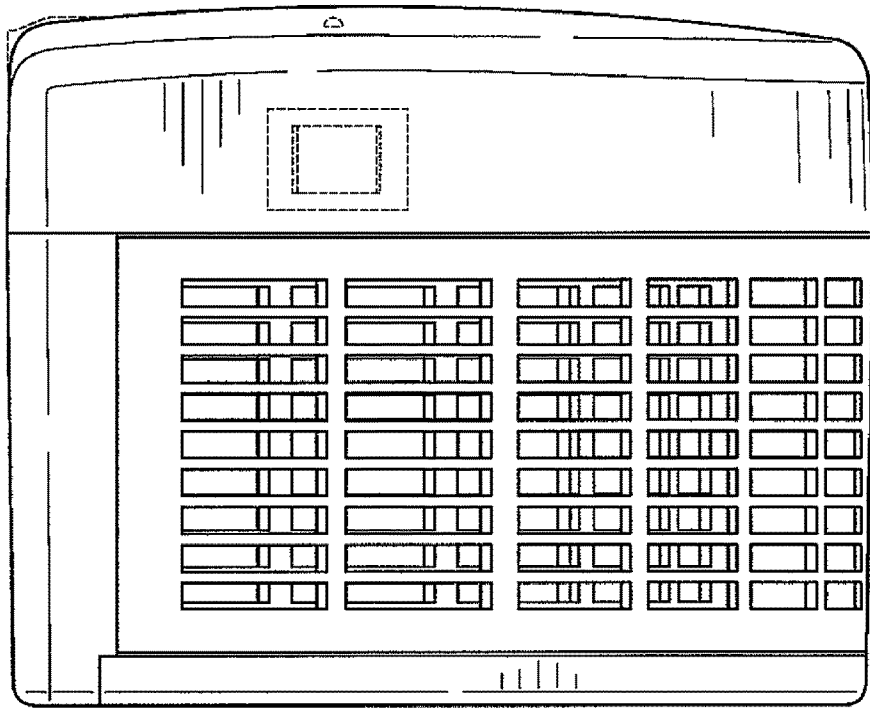


FIG. 5

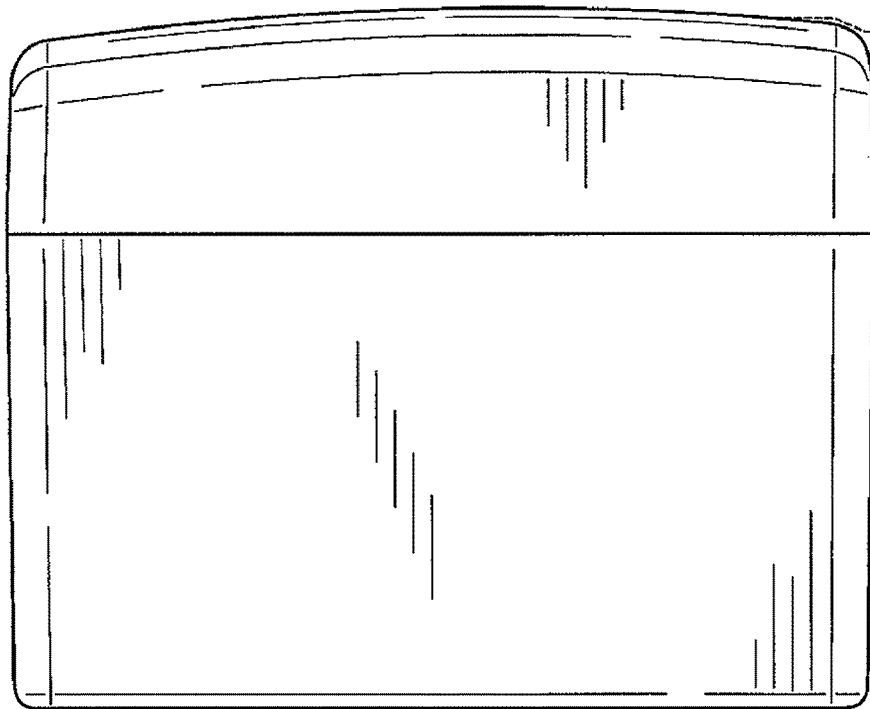


FIG. 6

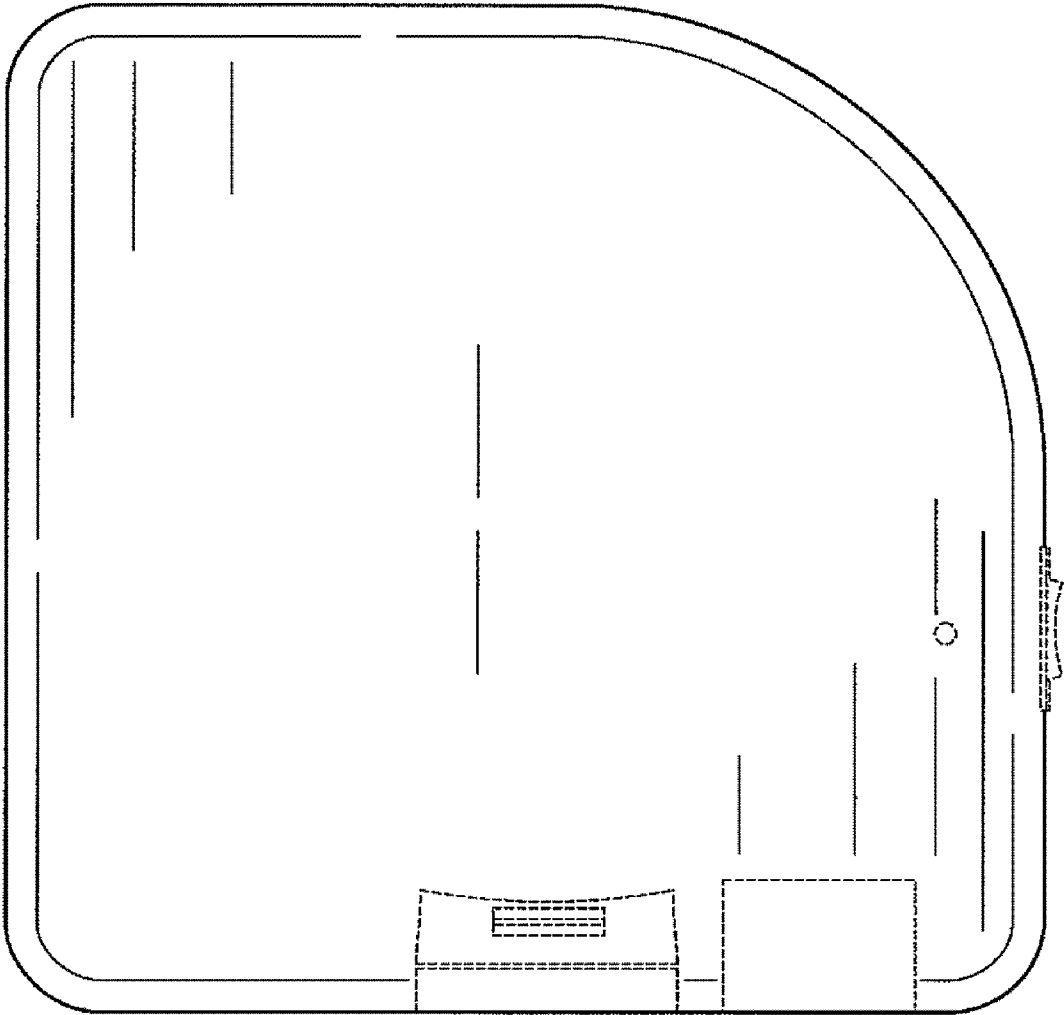


FIG. 7

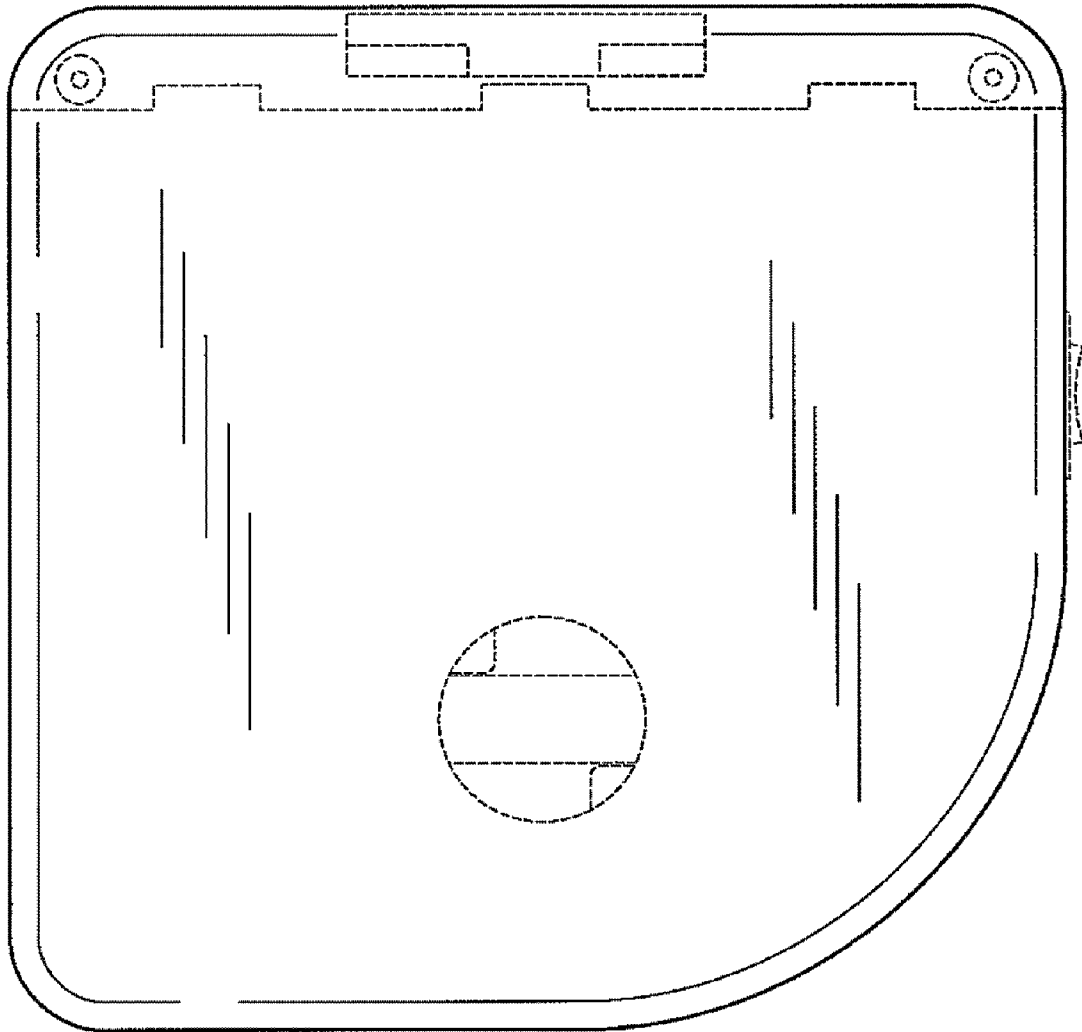


FIG. 8