



US00D703893S

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

(10) **Patent No.:** **US D703,893 S**

(45) **Date of Patent:** **** Apr. 29, 2014**

(54) **VACUUM CLEANER FILTER ADAPTER RING**

(71) Applicant: **Electrolux Home Care Products, Inc.**,
Charlotte, NC (US)

(72) Inventors: **Leiah Nhem**, Charlotte, NC (US); **Fang A. Zhang**, TianJin Province (CN);
Marble Wang, Shanghai (CN); **Shawn Xiao**, JiangSu (CN)

(73) Assignee: **Electrolux Home Care Products, Inc.**,
Charlotte, NC (US)

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

(21) Appl. No.: **29/448,862**

(22) Filed: **Mar. 14, 2013**

(51) **LOC (10) Cl.** **15-05**

(52) **U.S. Cl.**
USPC **D32/31**

(58) **Field of Classification Search**
USPC D32/38-40, 45, 50, 51, 31-33, 22, 17,
D32/30; 15/415.1-422, 1, 414, 320, 322,
15/405, 410, 353, 400, 333, 334, 335, 350,
15/327.1-327.7, 354-355, 357, 98, 403,
15/228, 231, 104.93, 49.1; 401/138, 140;
55/DIG. 2, 3, 26, 378; D30/152;
D11/231, 235; D23/259, 266
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D29,797 S * 12/1898 Pratt D23/262
2,288,904 A * 7/1942 Hudson 285/148.8
D208,388 S * 8/1967 Graham D23/265
4,921,606 A * 5/1990 Goldman 210/238
5,746,792 A * 5/1998 Clements et al. 55/341.1
5,779,745 A 7/1998 Kilström
5,803,513 A * 9/1998 Richardson 285/342
5,863,425 A * 1/1999 Herlehy et al. 210/167.17
D479,585 S * 9/2003 Mulligan et al. D23/262

D508,980 S * 8/2005 Bigelow D23/262
D513,793 S * 1/2006 Copeland et al. D23/262
D515,673 S * 2/2006 Copeland et al. D23/262
7,140,068 B1 * 11/2006 Vander Baan et al. 15/347
D593,641 S * 6/2009 Plank et al. D23/259
D594,937 S * 6/2009 Price et al. D23/259
D596,272 S * 7/2009 Price et al. D23/259
D605,734 S * 12/2009 Henry et al. D23/262
D620,086 S * 7/2010 Copeland et al. D23/266
D678,989 S * 3/2013 Zerrer D23/259

FOREIGN PATENT DOCUMENTS

EP 1571957 B1 2/2012

OTHER PUBLICATIONS

Engineering Drawings for commercial product on sale in the United States before Mar. 14, 2013 dated Jun. 15, 2011.

* cited by examiner

Primary Examiner — Ruth McInroy

(74) *Attorney, Agent, or Firm* — RatnerPrestia

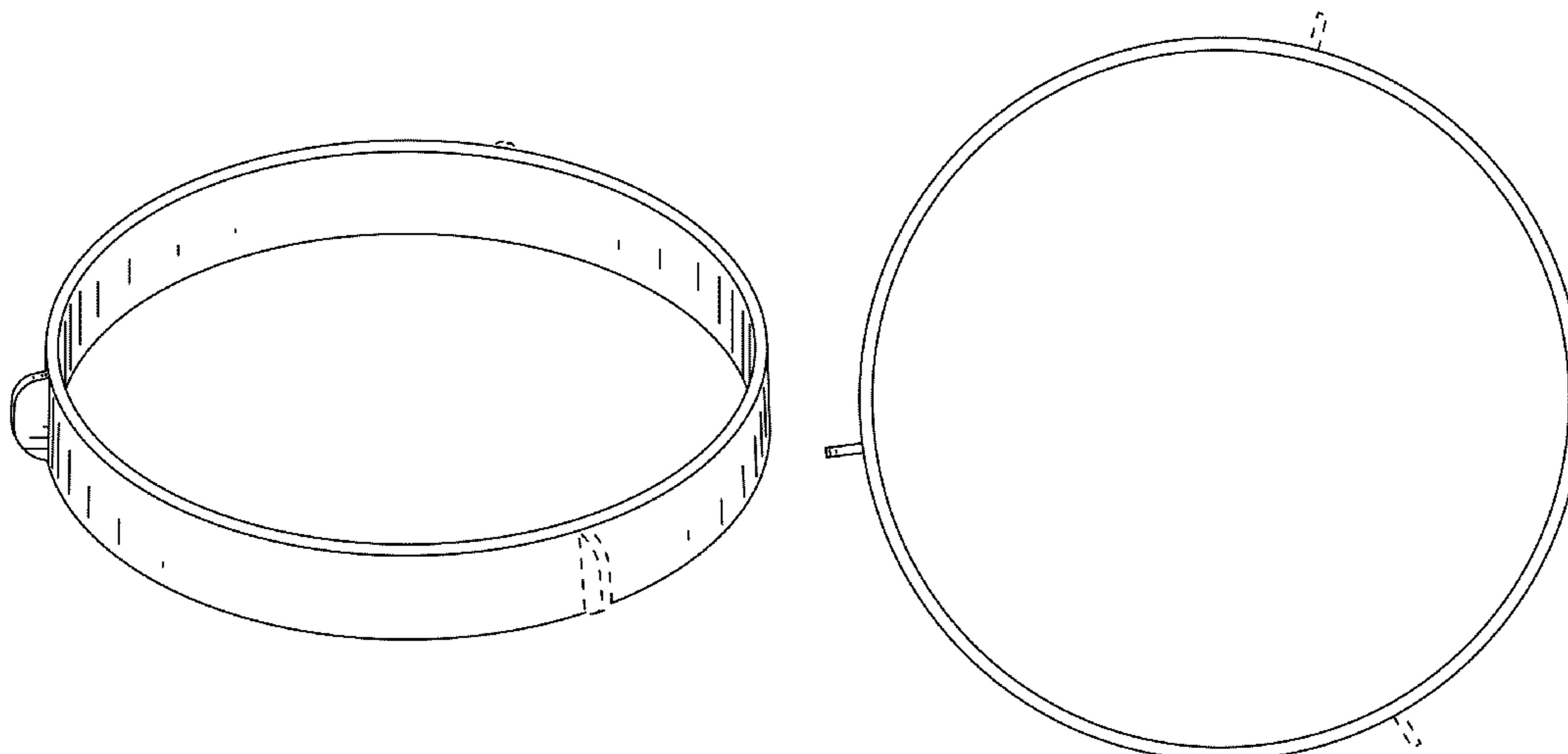
(57) **CLAIM**

The ornamental design for a vacuum cleaner filter adapter ring, as shown and described.

DESCRIPTION

FIG. 1 is an isometric view of a vacuum cleaner filter adapter ring showing our new design;
FIG. 2 is a top plan view thereof, the bottom plan view being a mirror image;
FIG. 3 is a front elevation view thereof;
FIG. 4 is a rear elevation view thereof;
FIG. 5 is a right side view thereof;
FIG. 6 is a left side view thereof; and,
FIG. 7 is an isometric view thereof, showing the filter adapter ring mounted on an exemplary filter.
In the drawings, broken lines indicate environmental structure or boundaries that form no part of the claimed design.

1 Claim, 4 Drawing Sheets



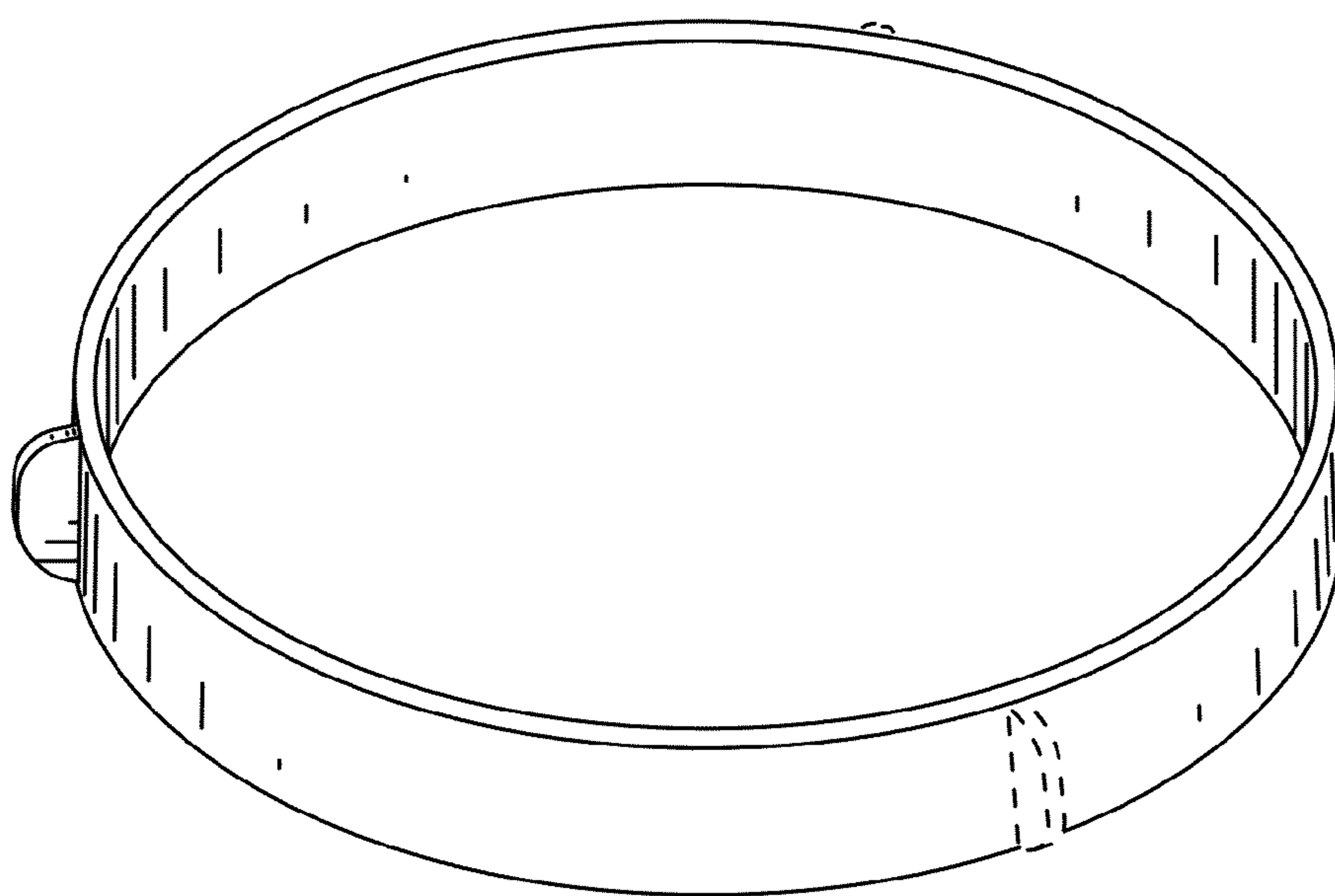


FIG. 1

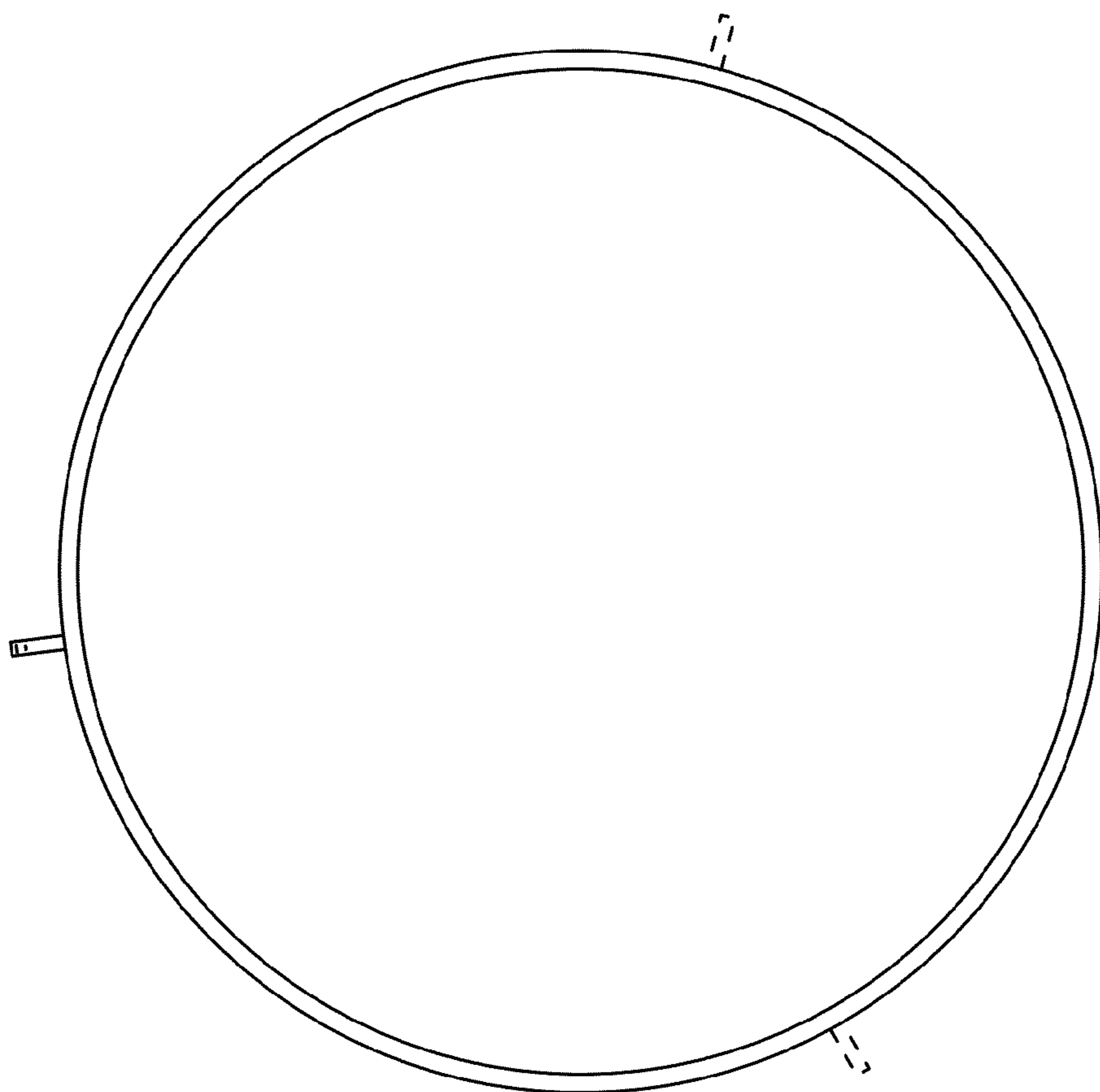


FIG. 2

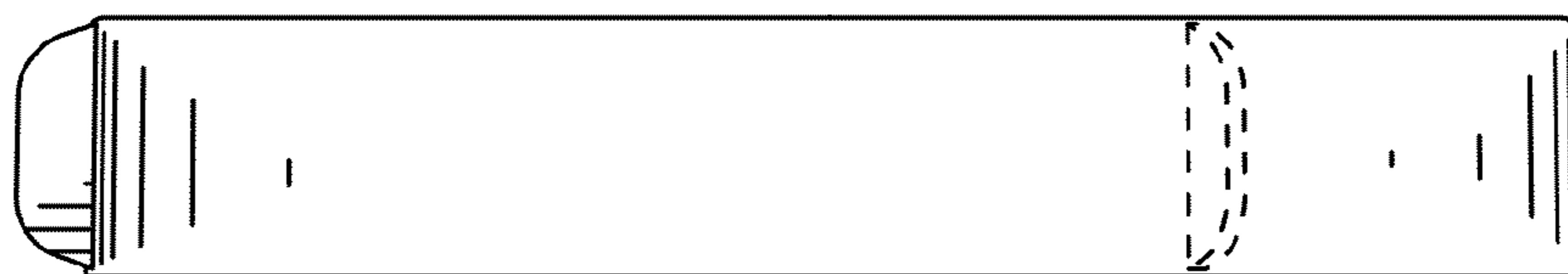


FIG. 3

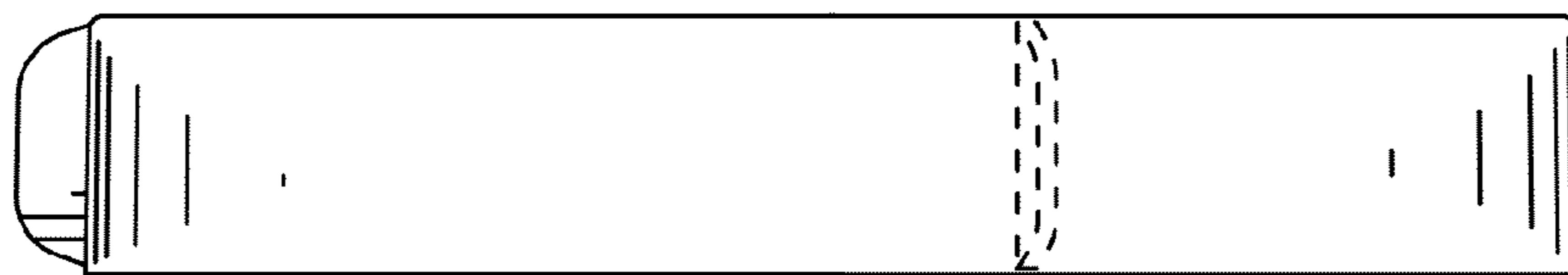


FIG. 4

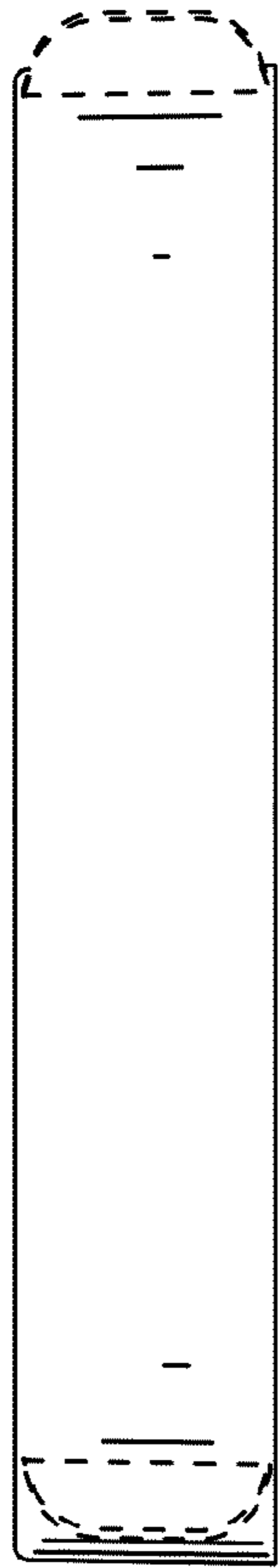


FIG. 5

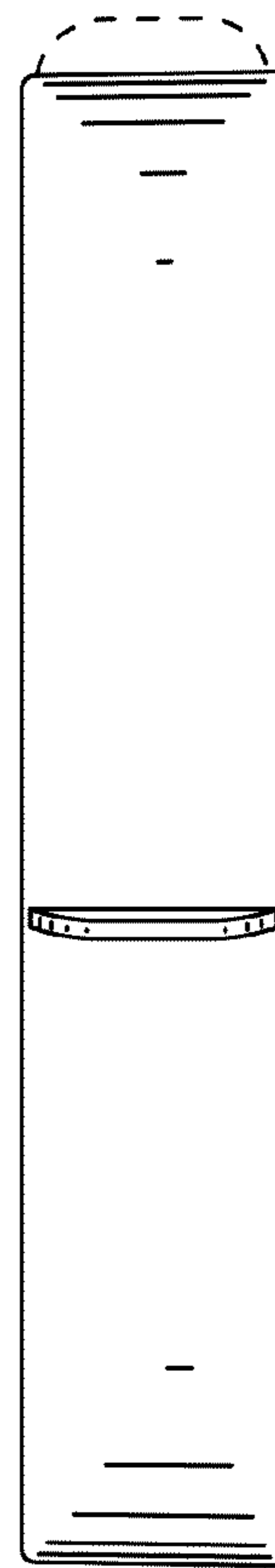


FIG. 6

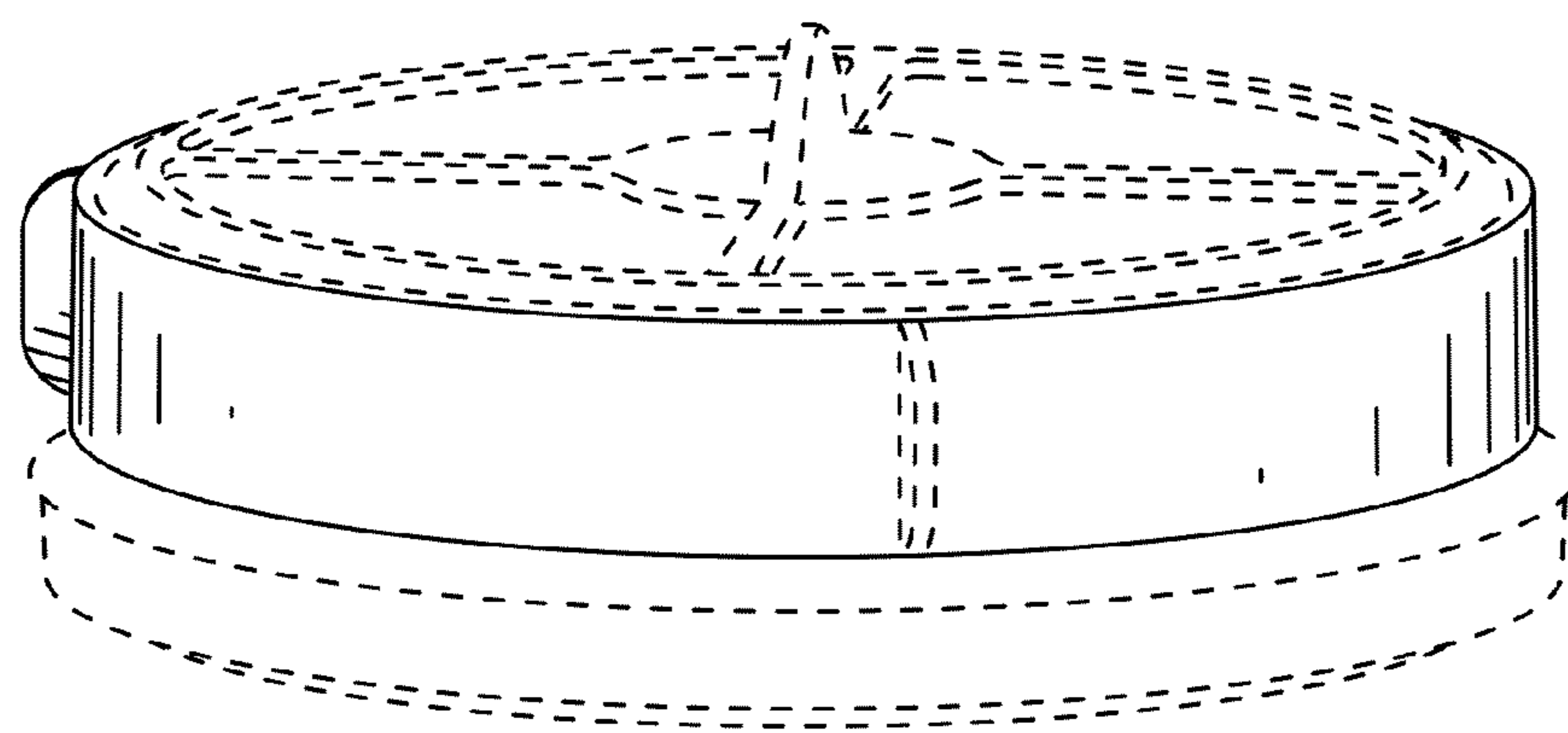


FIG. 7