



US00D804004S

(12) **United States Design Patent** (10) **Patent No.:** **US D804,004 S**
Madeira et al. (45) **Date of Patent:** **** Nov. 28, 2017**

- (54) **AIR FILTER ELEMENT**
- (71) Applicant: **MANN+HUMMEL GMBH**,
Ludwigsburg (DE)
- (72) Inventors: **Pedro Miguel Pereira Madeira**,
Bietigheim-Bissingen (DE); **Pascal Neef**,
Renningen (DE); **Nadine Sorger**,
Stuttgart (DE)
- (73) Assignee: **MANN+HUMMEL GMBH**,
Ludwigsburg (DE)
- (**) Term: **14 Years**
- (21) Appl. No.: **29/506,958**
- (22) Filed: **Oct. 22, 2014**

- D545,396 S * 6/2007 Casey D23/209
- D585,536 S * 1/2009 Wang D23/364
- D595,811 S * 7/2009 Stadtler D23/249
- 8,048,187 B2 * 11/2011 Merritt B01D 46/0001
55/498
- 8,088,190 B2 * 1/2012 Patel B01D 46/0005
55/487
- D657,041 S * 4/2012 Bull D23/393

(Continued)

Primary Examiner — David Muller
Assistant Examiner — Nathan Johnston
(74) *Attorney, Agent, or Firm* — James Hasselbeck

(57) **CLAIM**

We claim the ornamental design for an air filter element, as shown and described.

DESCRIPTION

FIG. 1 is a top front perspective view of an air filter showing our new design, the top rear perspective view is identical; FIG. 2 is a front elevation view thereof, the rear elevation view is identical; FIG. 3 is a right side elevation view thereof, the left side elevation view is identical; FIG. 4 is a top plan view thereof; FIG. 5 is a bottom plan view thereof; FIG. 6 is a bottom rear perspective view thereof; FIG. 7 is an enlarged view of the circled region “FIG. 7” of FIG. 6; FIG. 8 is an enlarged view of the circled region “FIG. 8” of FIG. 2; FIG. 9 is an enlarged view of the circled region “FIG. 9” of FIG. 3; and, FIG. 10 is an enlarged view of the circled region “FIG. 10” of FIG. 5.

The broken line showing of the air filter element is included for the purpose of illustrating portions of the “article” and forms no part of the claimed design.

1 Claim, 8 Drawing Sheets

Related U.S. Application Data

- (63) Continuation-in-part of application No. 14/017,767, filed on Sep. 4, 2013, and a continuation-in-part of application No. 29/467,257, filed on Sep. 17, 2013.

(51) **LOC (10) Cl.** **23-04**

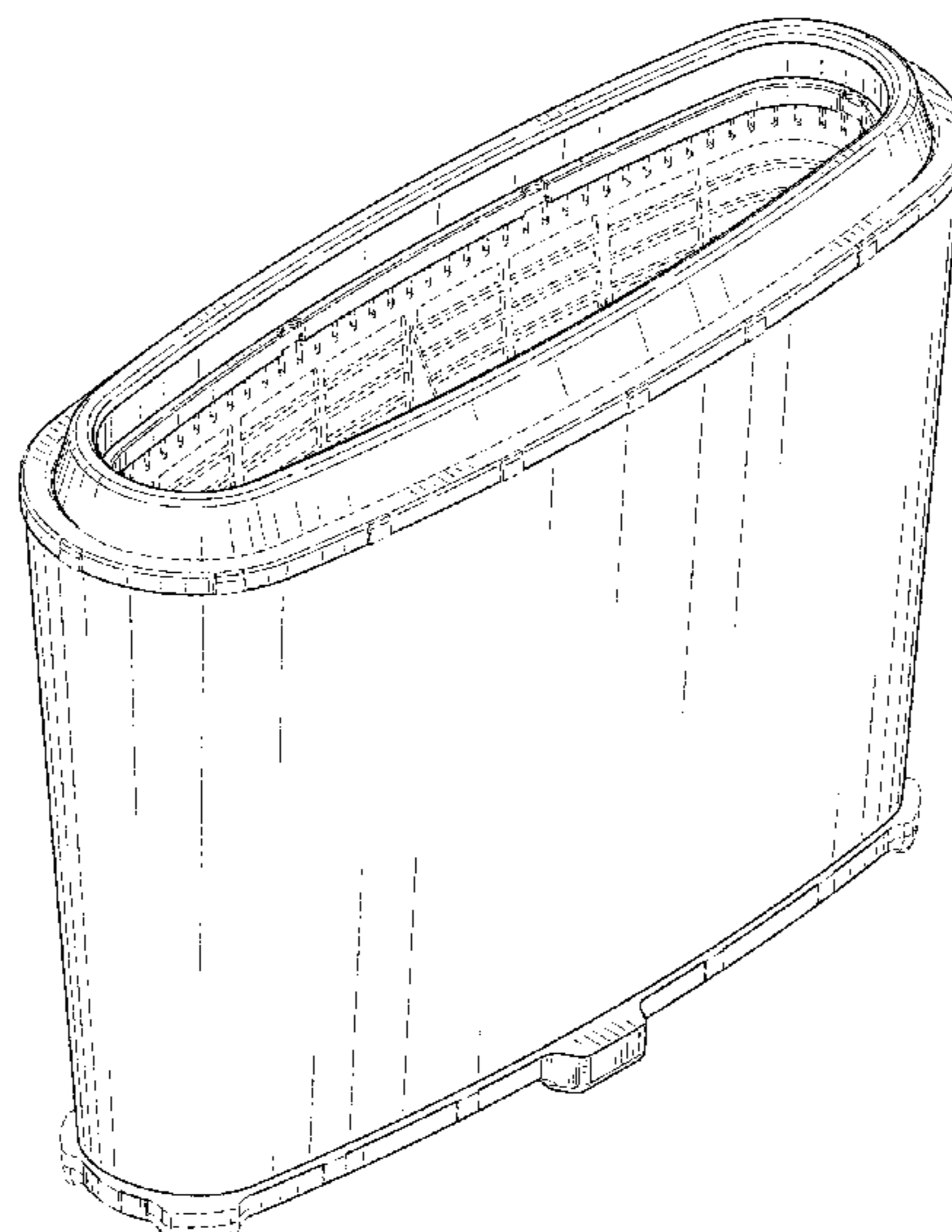
(52) **U.S. Cl.**
USPC **D23/365**

(58) **Field of Classification Search**
USPC D23/365, 209, 363, 358, 386, 354, 341,
D23/364; 55/385.3, 502, 497, 506, 505,
55/521, 495, 422, 493, DIG. 30;
210/435, 130, 136, 248, 339, 448, 452,
210/497.1; D15/5
CPC B01D 46/00
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

- D437,402 S * 2/2001 Gieseke D23/365
- D484,584 S * 12/2003 Anderson D23/365
- D506,539 S * 6/2005 Bishop D23/365



(56)

References Cited

U.S. PATENT DOCUMENTS

8,246,702 B2 * 8/2012 Ackermann B01D 46/0021
123/198 E
D690,407 S * 9/2013 Williams D23/365
2010/0252495 A1 * 10/2010 Reid B01D 29/012
210/339
2014/0373495 A1 * 12/2014 Madeira F02M 35/0204
55/502

* cited by examiner

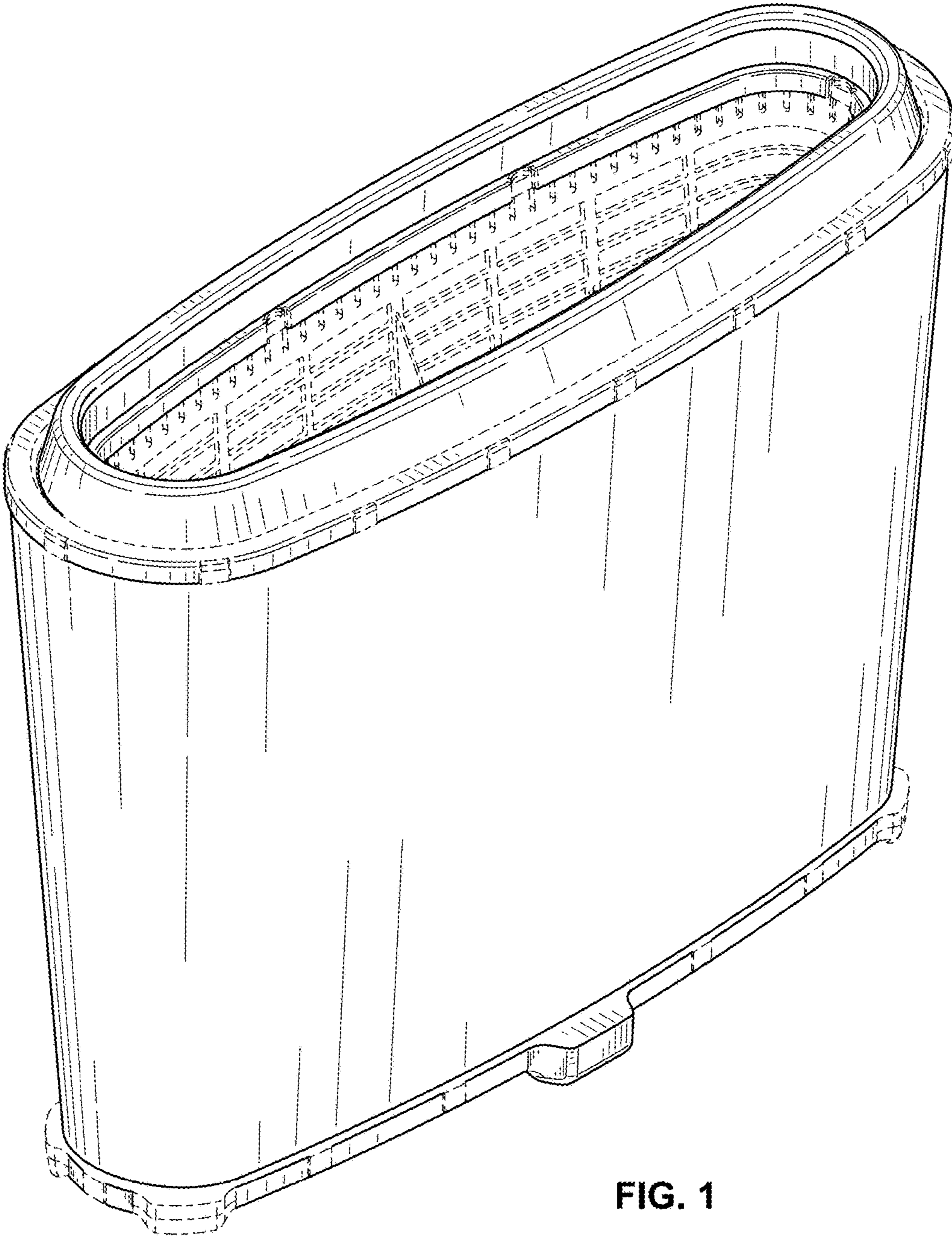


FIG. 1

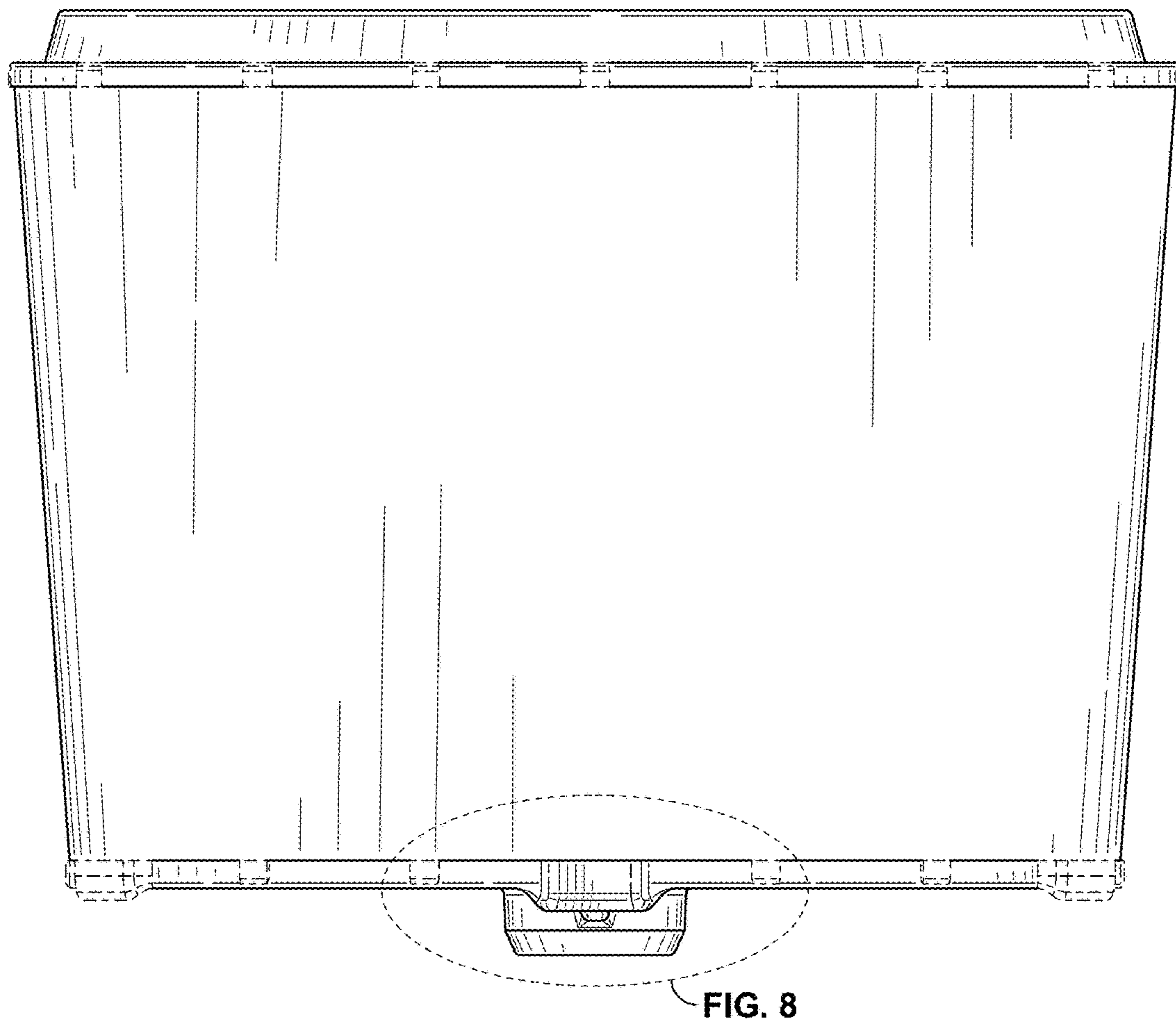


FIG. 2

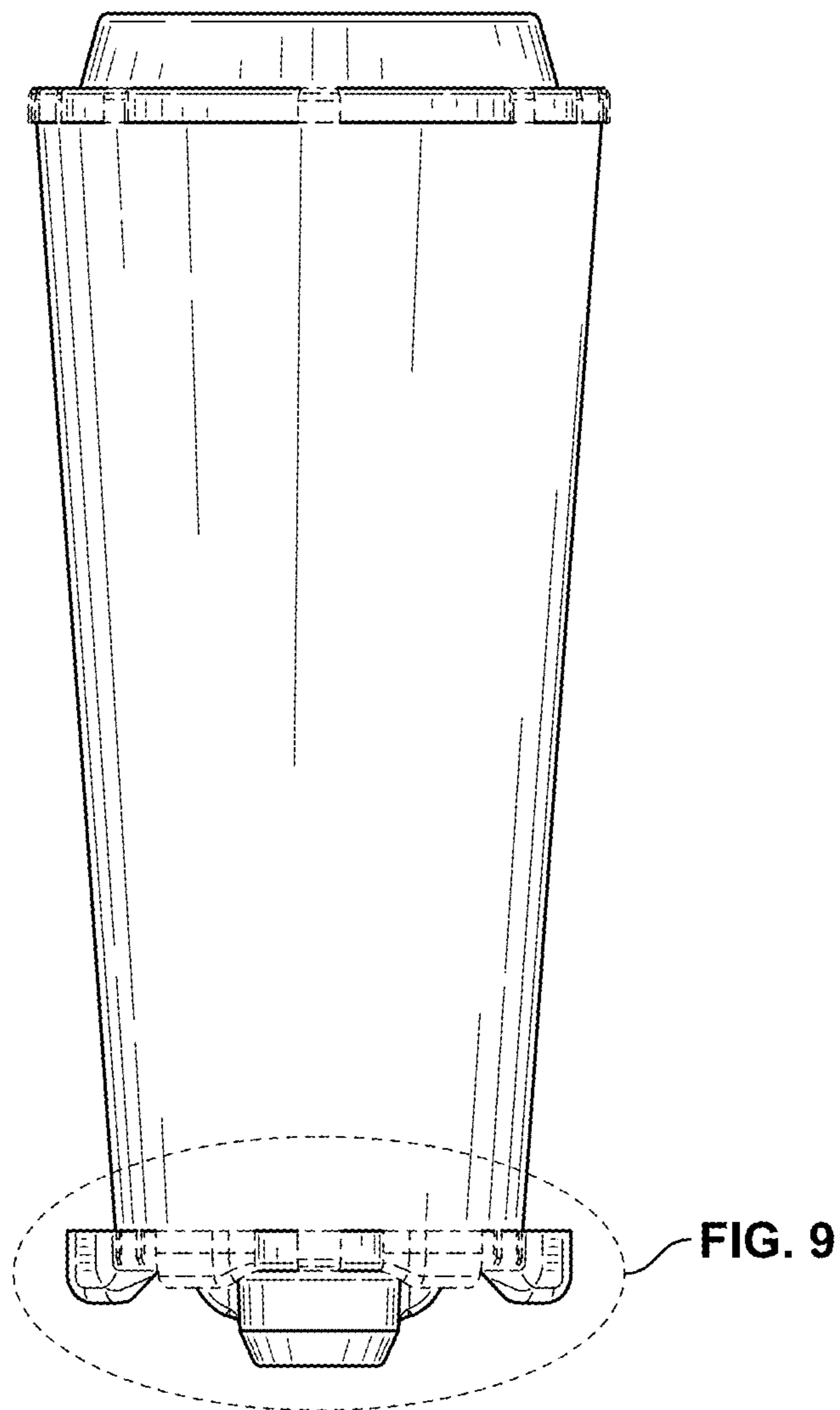


FIG. 3

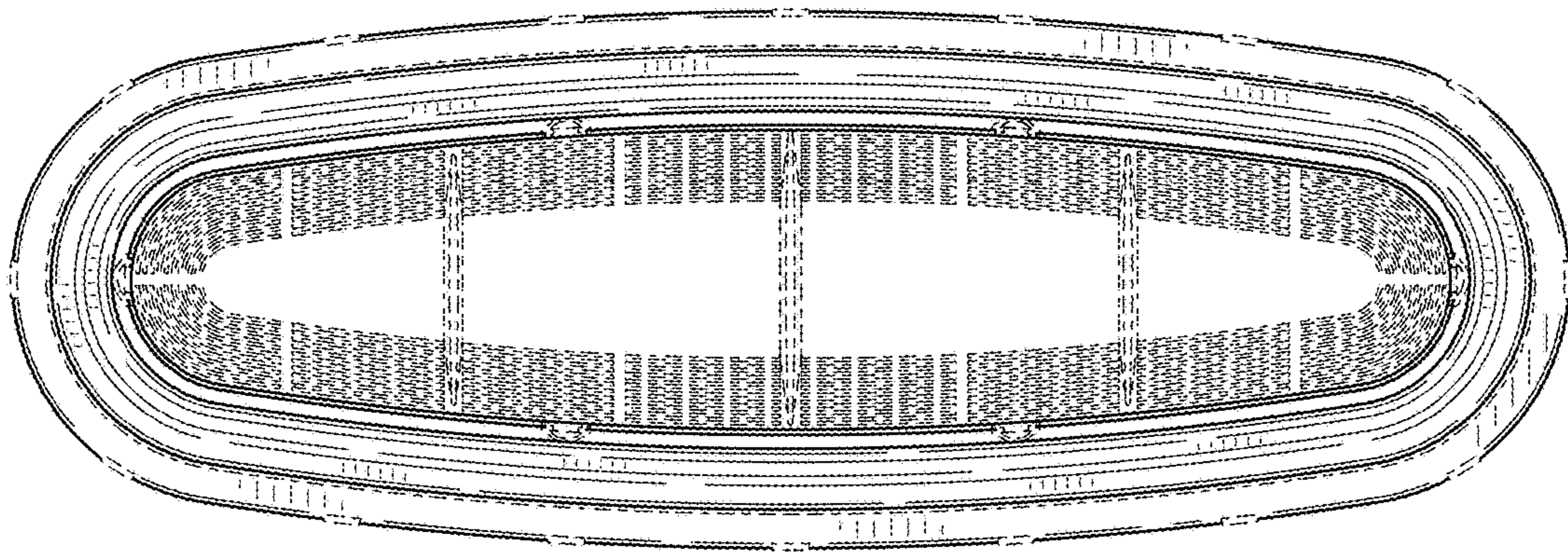


FIG. 4

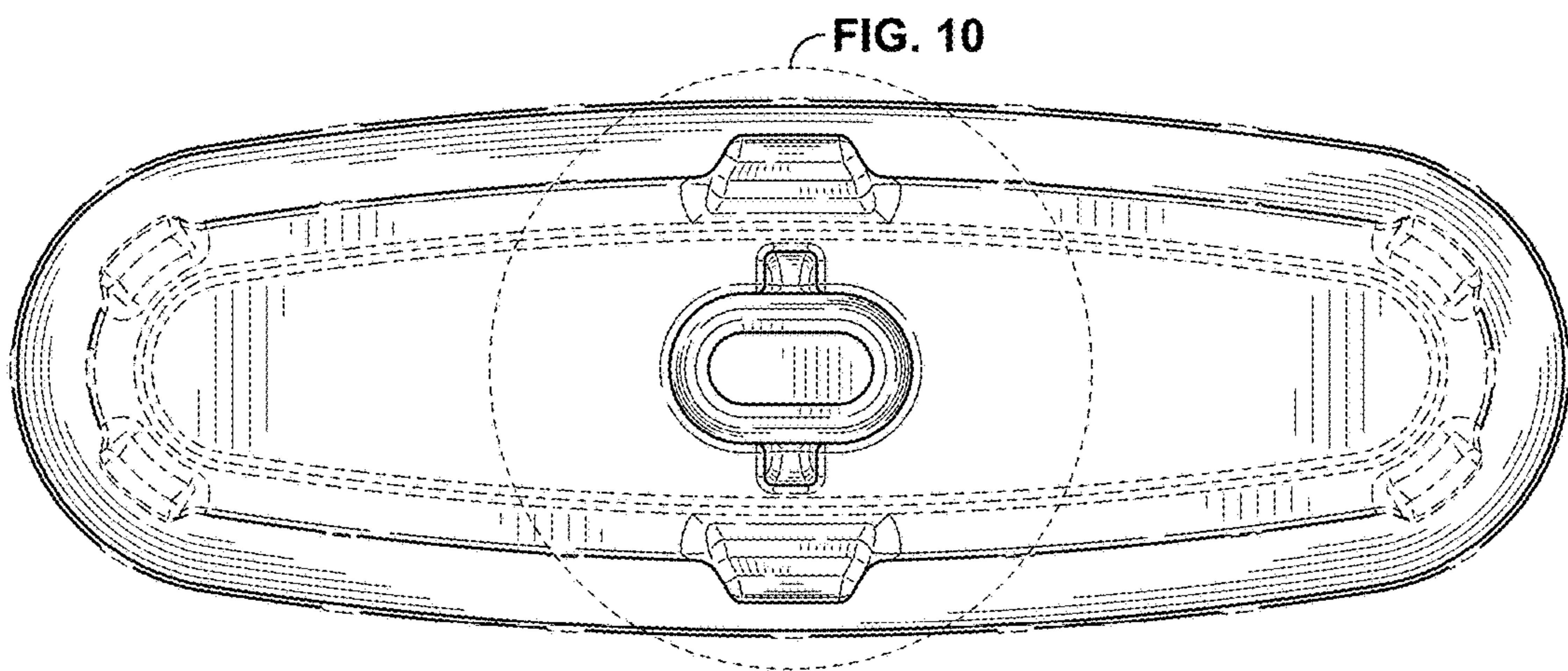


FIG. 5

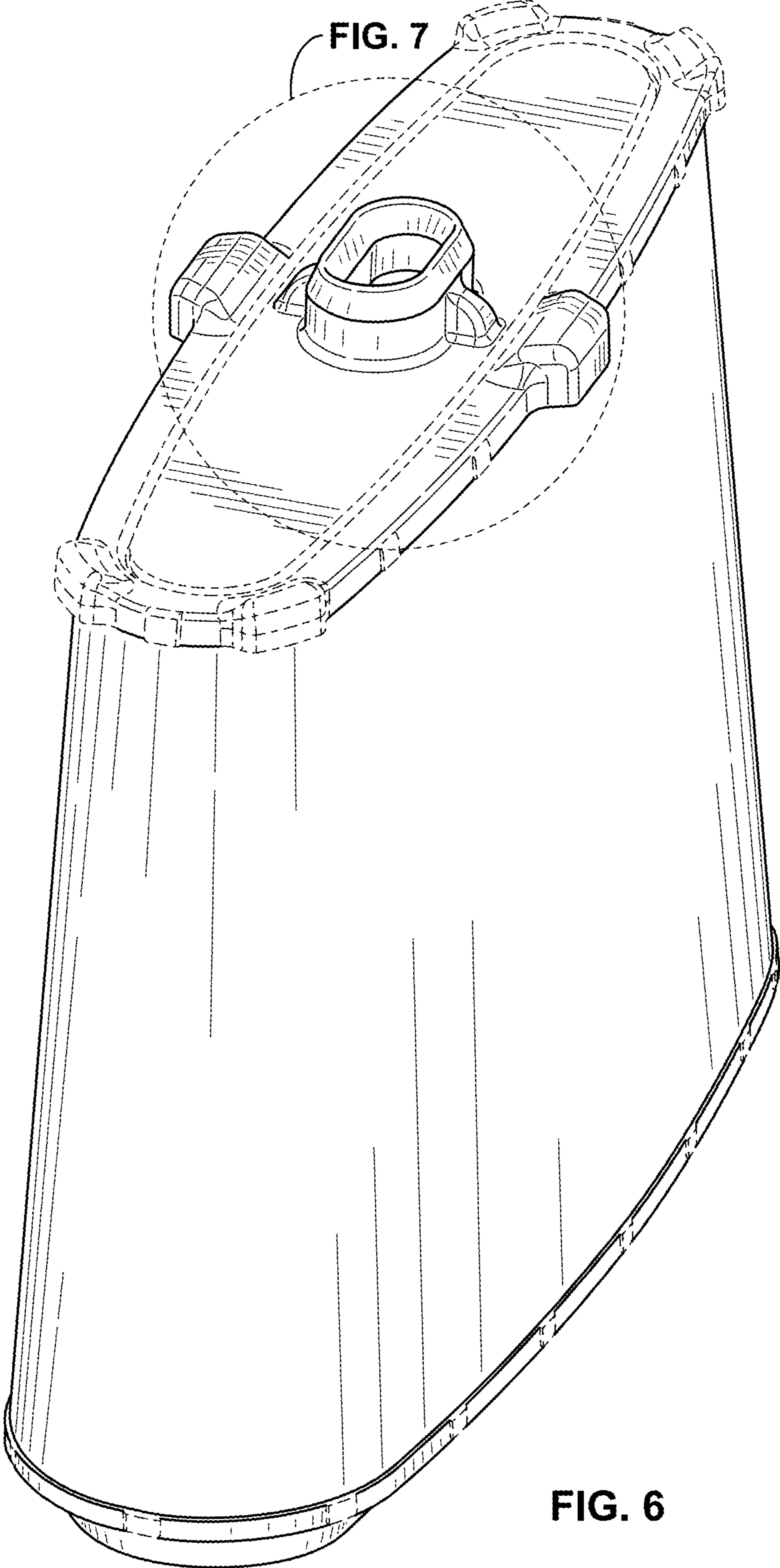


FIG. 7

FIG. 6

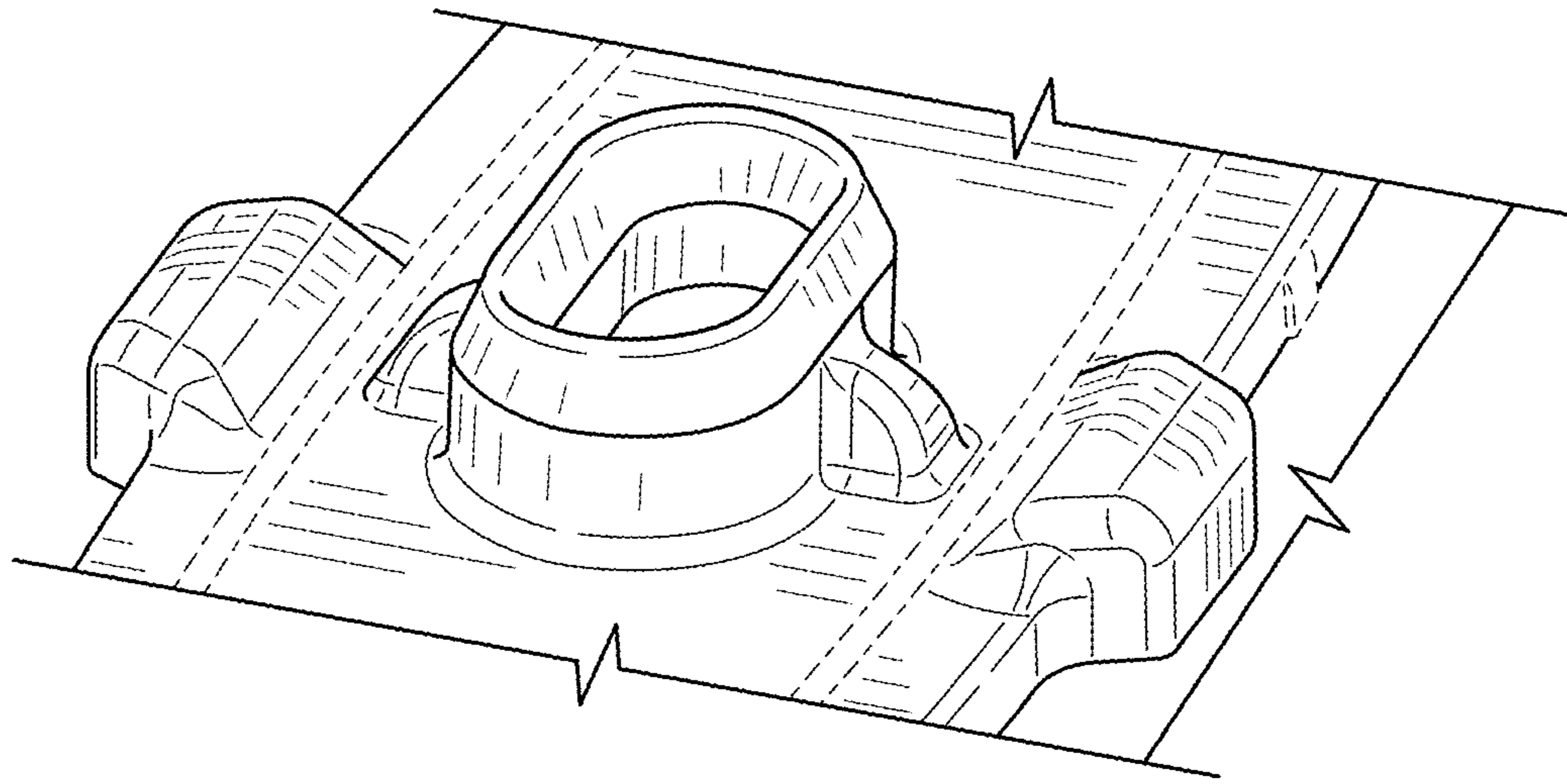


FIG. 7

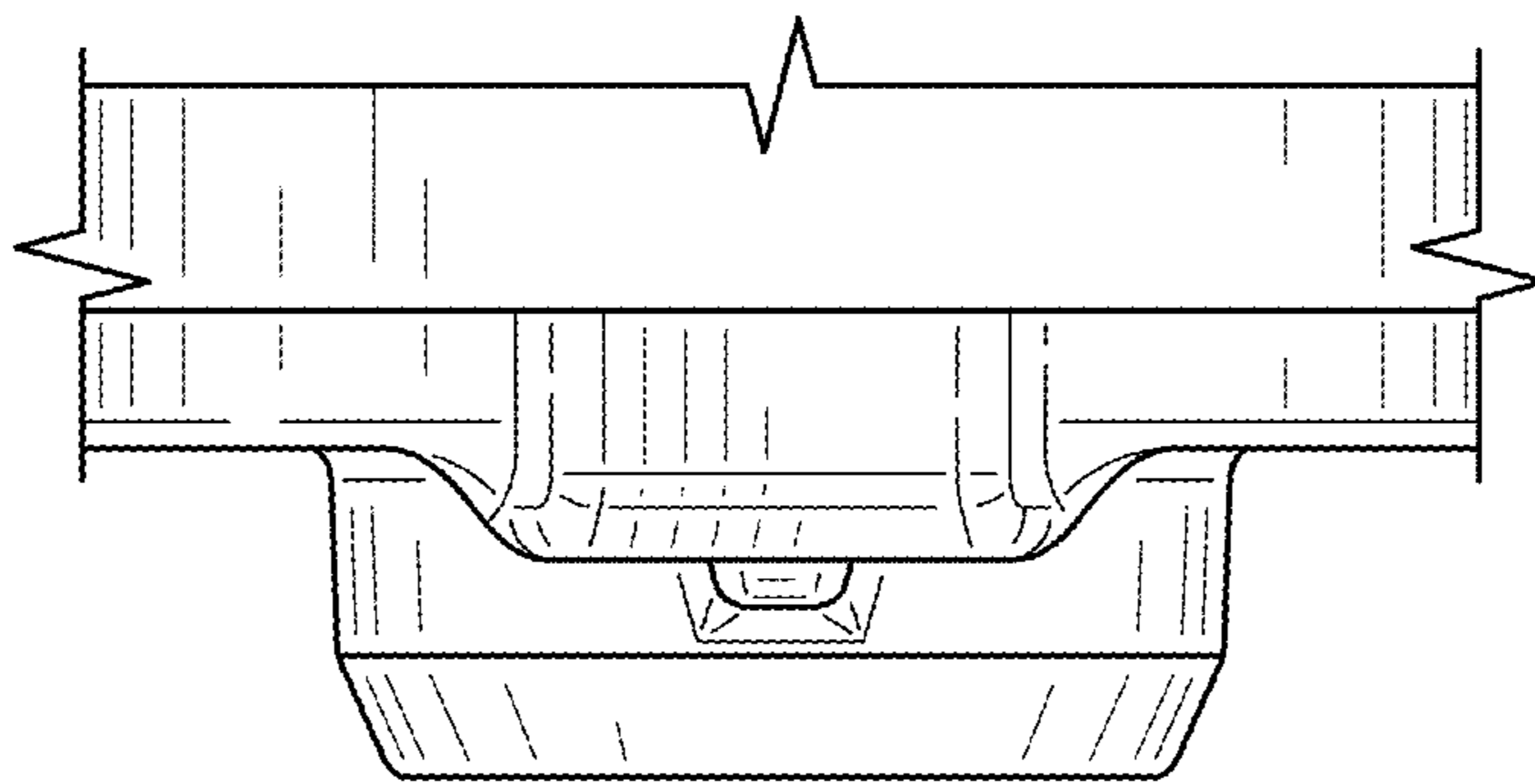


FIG. 8

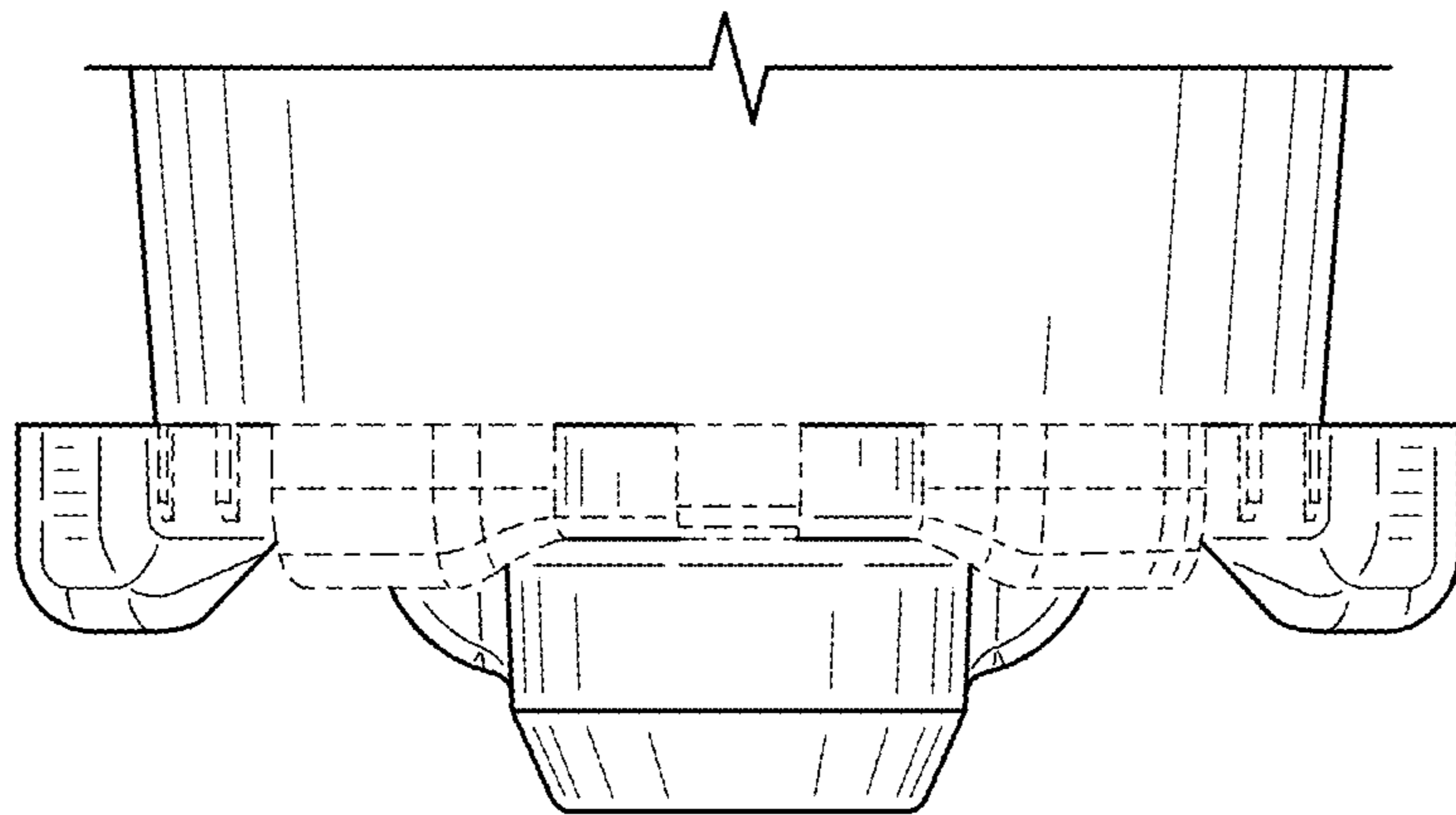


FIG. 9

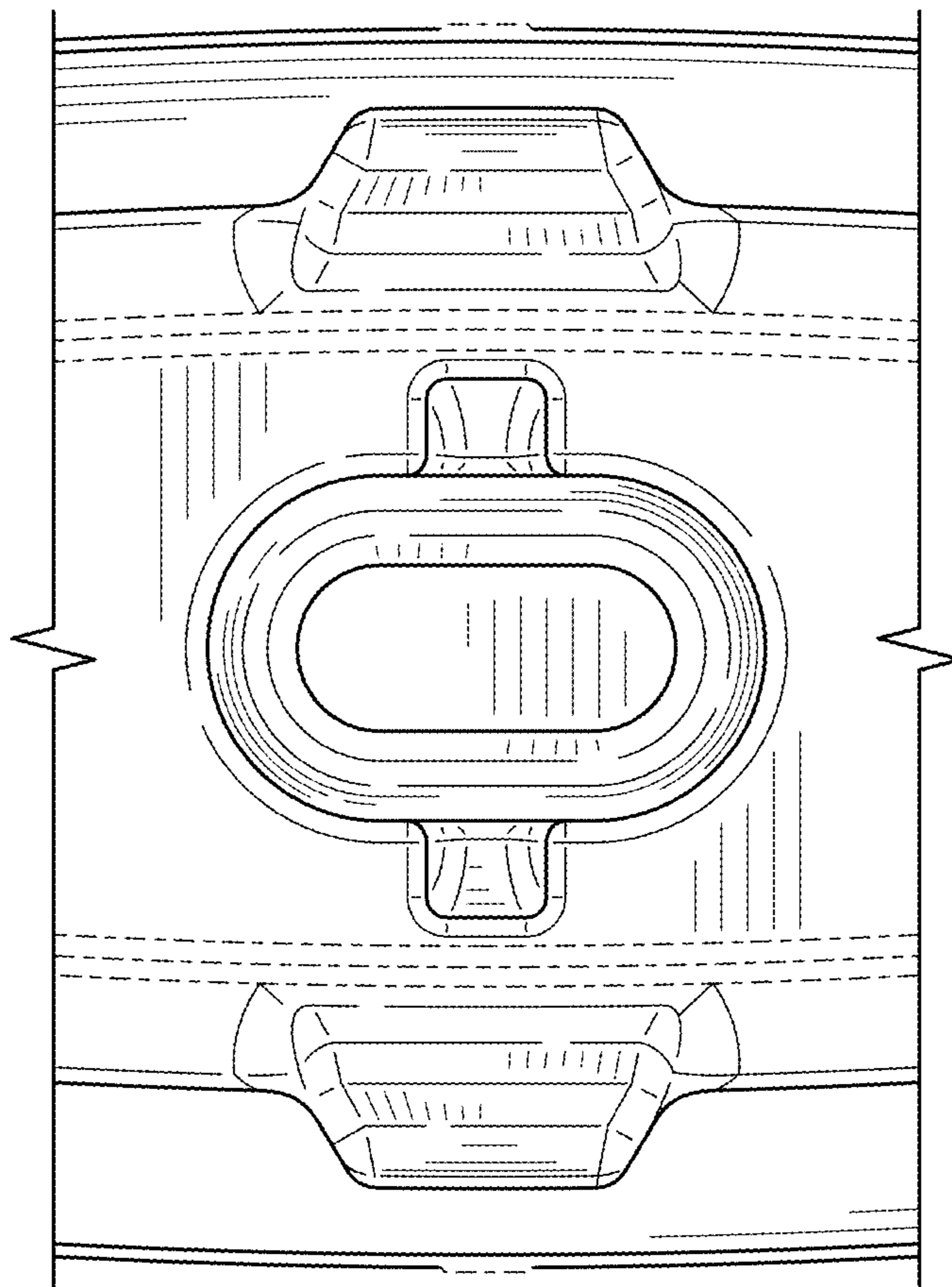


FIG. 10