



US0D1032817S

(12) **United States Design Patent** (10) **Patent No.: US D1,032,817 S**  
**Bailey et al.** (45) **Date of Patent: \*\* Jun. 25, 2024**

(54) **APPARATUS FOR RELEASING A GASEOUS CLEANING AGENT**

(71) Applicant: **NUVINAIR, LLC**, Plano, TX (US)

(72) Inventors: **Kyle Bailey**, Plano, TX (US); **Jason Bailey**, Plano, TX (US)

(73) Assignee: **NUVINAIR, LLC**, Plano, TX (US)

(\*\*) Term: **15 Years**

(21) Appl. No.: **29/886,035**

(22) Filed: **Mar. 3, 2023**

**Related U.S. Application Data**

(60) Continuation of application No. 17/989,454, filed on Nov. 17, 2022, which is a continuation of application No. 16/835,851, filed on Mar. 31, 2020, now Pat. No. 11,535,205, which is a continuation-in-part of application No. 15/895,510, filed on Feb. 13, 2018, now Pat. No. 11,420,599, which is a continuation of application No. 15/253,315, filed on Aug. 31, 2016, now Pat. No. 9,925,959, which is a division of application No. 15/063,931, filed on Mar. 8, 2016, now Pat. No. 9,446,742.

(51) **LOC (14) Cl.** ..... **23-04**

(52) **U.S. Cl.**  
USPC ..... **D23/355**  
CPC ..... **B60S 3/008** (2013.01); **A61L 2/22** (2013.01); **A61L 9/14** (2013.01); **B08B 3/02** (2013.01); **B08B 3/04** (2013.01); **B08B 9/00** (2013.01)

(58) **Field of Classification Search**  
USPC ..... D23/355-366, 352, 369, 332, 333, 335, D23/336, 342, 351  
CPC .. A61L 9/16; A61L 9/22; B01D 47/00; B01D 47/027; B01D 2221/02; B01D 2259/4508; B03C 3/155; B03C 3/368; F24F 3/16; F24F 13/20; F24F 13/28

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,420,509 A 1/1969 Katzman et al.  
D262,821 S \* 1/1982 Poore ..... D23/369  
(Continued)

FOREIGN PATENT DOCUMENTS

CN 1582661 A 2/2005  
CN 101495190 A 7/2009

(Continued)

OTHER PUBLICATIONS

“CLo2 Efficiency System Demo 8 2015” YouTube Aug. 19, 2015 by ACES Environmental Svcs, LLC.

(Continued)

*Primary Examiner* — David G Muller

(74) *Attorney, Agent, or Firm* — Stephen Y. Liu; J. Miguel Hernandez; Carstens, Allen & Gourley, LLP

(57) **CLAIM**

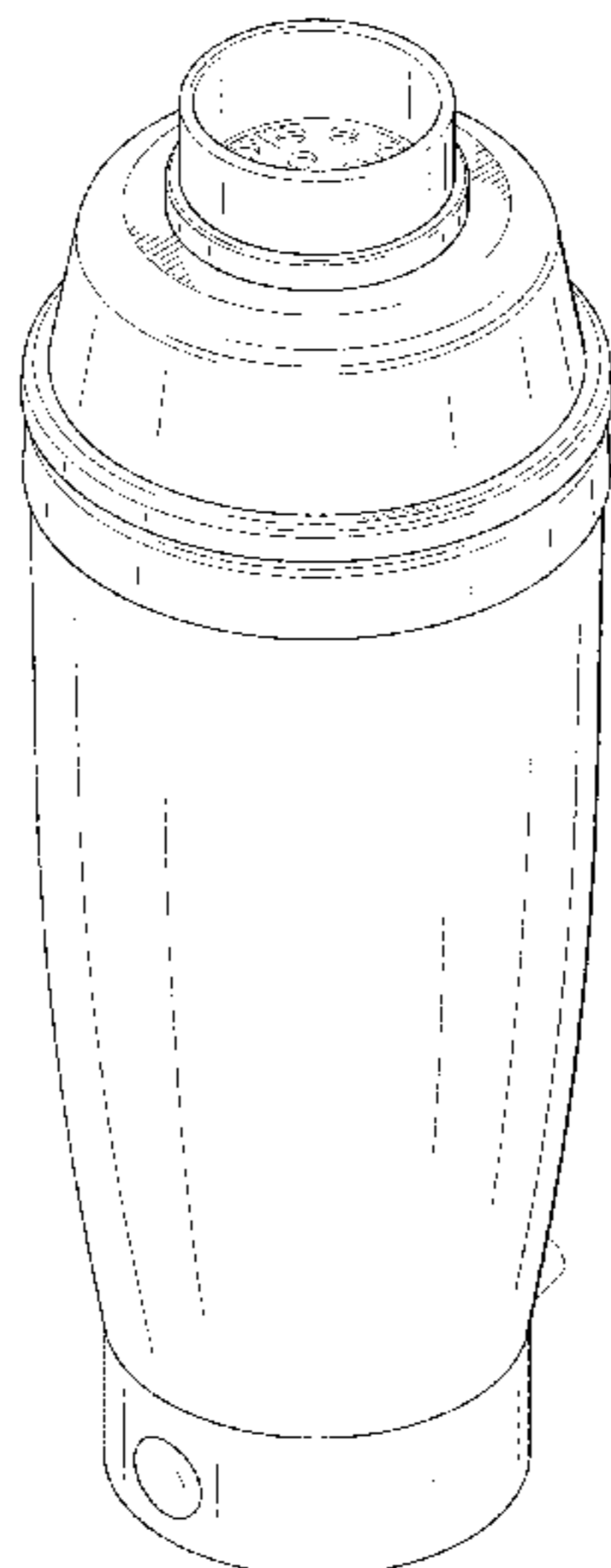
The ornamental design for an apparatus for releasing a gaseous cleaning agent, as shown and described.

**DESCRIPTION**

FIG. 1 is a front perspective view of an apparatus for releasing a gaseous cleaning agent;  
FIG. 2 is a front elevation view thereof;  
FIG. 3 is a rear elevation view thereof;  
FIG. 4 is a right side elevation view thereof;  
FIG. 5 is a left side elevation view thereof;  
FIG. 6 is a top plan view thereof;  
FIG. 7 is a bottom plan view thereof;  
FIG. 8 is a rear perspective view thereof; and,  
FIG. 9 is an exploded view thereof.

The portions of the Figures shown in broken lines in the view are for illustrative purposes only and form no part of the claimed design.

**1 Claim, 8 Drawing Sheets**



(56)

References Cited

U.S. PATENT DOCUMENTS

4,482,365 A 11/1984 Roach  
 5,549,854 A 8/1996 Hulthom et al.  
 6,273,402 B1 8/2001 Cheng  
 6,764,661 B1 7/2004 Girard  
 D588,687 S \* 3/2009 Drucker ..... D23/366  
 7,846,227 B2 12/2010 Gotoh et al.  
 D635,403 S \* 4/2011 Conway ..... D23/355  
 D648,016 S \* 11/2011 Choi ..... D23/364  
 8,221,678 B2 7/2012 Hedman  
 D711,523 S \* 8/2014 Hsiao ..... D23/366  
 D711,524 S \* 8/2014 Hsiao ..... D23/366  
 9,433,695 B2 9/2016 Aamodt et al.  
 9,446,742 B1 9/2016 Bailey et al.  
 D795,407 S \* 8/2017 Skoda ..... D23/362  
 9,925,959 B2 3/2018 Bailey et al.  
 D952,824 S \* 5/2022 Yang ..... D23/364  
 D997,327 S \* 8/2023 Xing ..... D23/356  
 2004/0009094 A1 1/2004 Adiga et al.  
 2005/0031486 A1 2/2005 Mole et al.  
 2005/0074359 A1 4/2005 Krieger et al.  
 2006/0067854 A1 3/2006 Andino et al.  
 2008/0283626 A1 11/2008 Aldana et al.  
 2008/0292507 A1 11/2008 Dee et al.  
 2009/0148342 A1 6/2009 Bromberg et al.  
 2012/0174792 A1 7/2012 Chang

2013/0028787 A1 1/2013 Takeuchi et al.  
 2013/0079733 A1 3/2013 Burt et al.  
 2013/0136685 A1 5/2013 Baselli et al.  
 2013/0189153 A1 7/2013 Carson et al.  
 2014/0115765 A1 5/2014 Carpenter et al.  
 2014/0271355 A1 9/2014 Mason  
 2023/0398250 A1 12/2023 Bailey et al.

FOREIGN PATENT DOCUMENTS

CN 101537203 A 9/2009  
 CN 104321137 A 1/2015  
 JP 2003040712 A 2/2003  
 JP 2009051018 A 3/2009  
 JP 2009234887 A 10/2009  
 KR 101457648 B1 10/2014  
 WO 2006076033 A1 7/2006  
 WO 2009114962 A1 9/2009  
 WO 2017091354 A2 6/2017

OTHER PUBLICATIONS

“How to Use a Biocide Systems Car Deoderizer” YouTube Jun. 16, 2014 by StreetsideAuto.com.  
 “Odor Removal & Ozone Generator Usage” YouTube Mar. 12, 2009 by Detail King.

\* cited by examiner

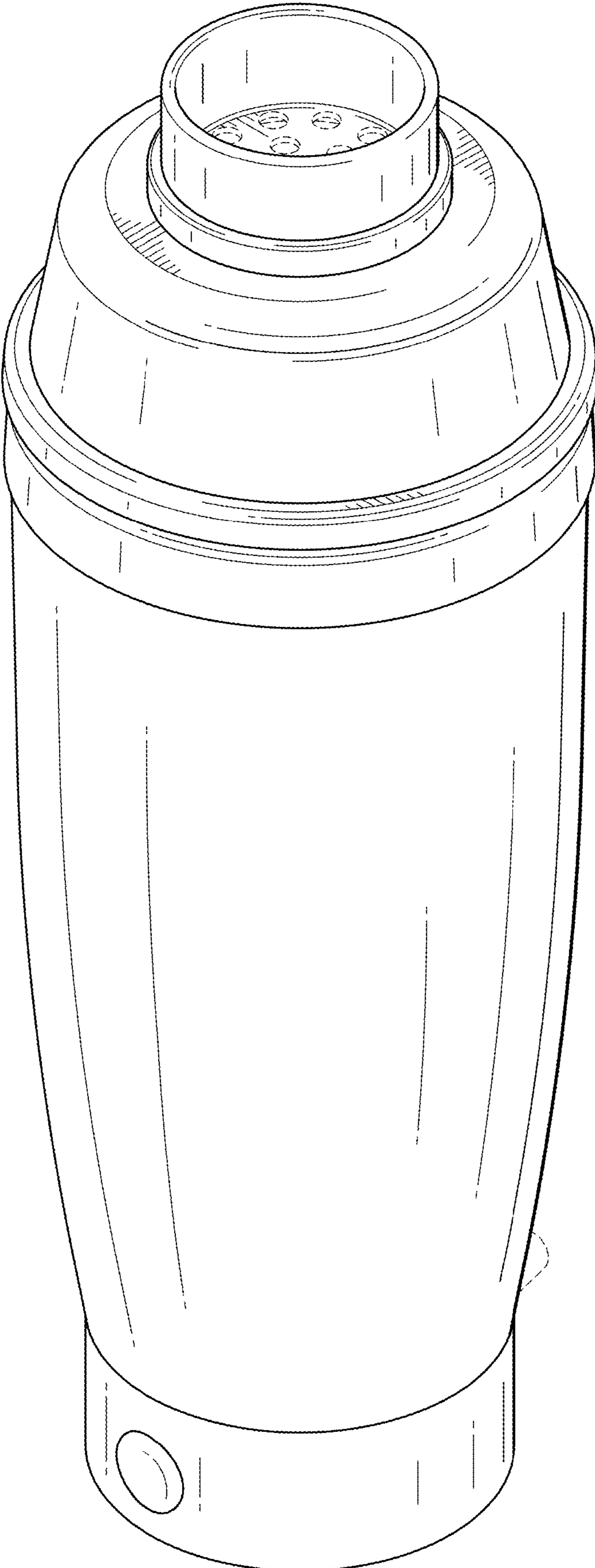


FIG. 1

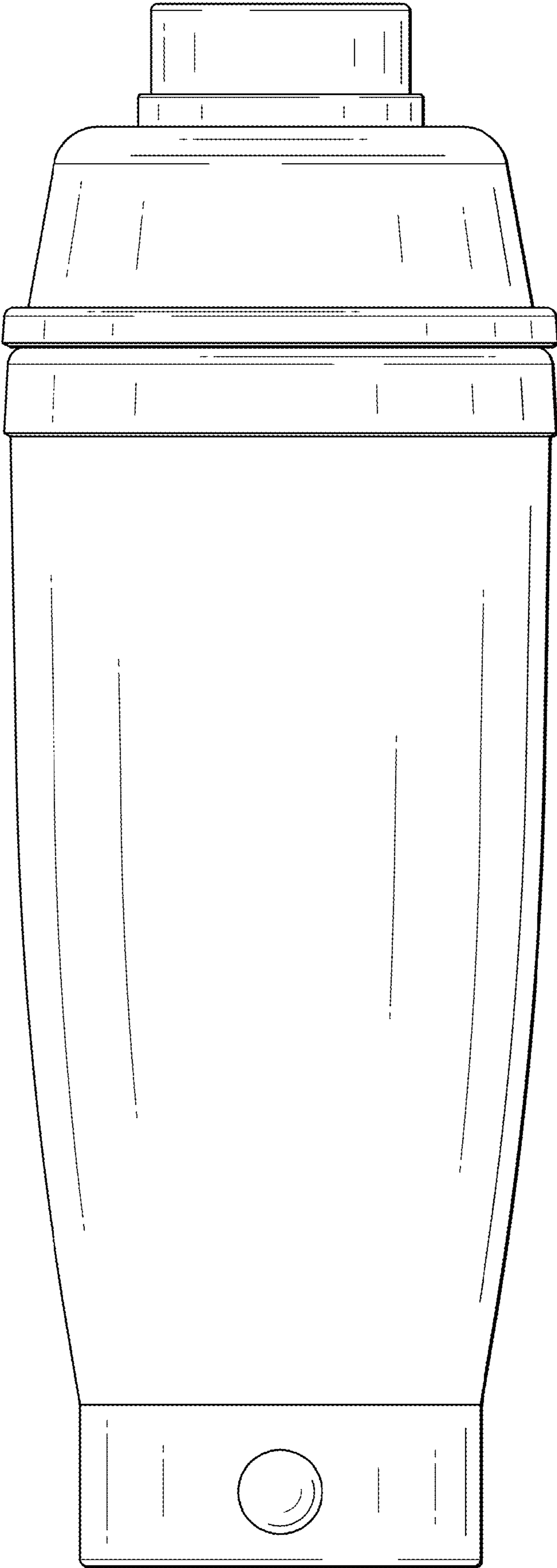


FIG. 2

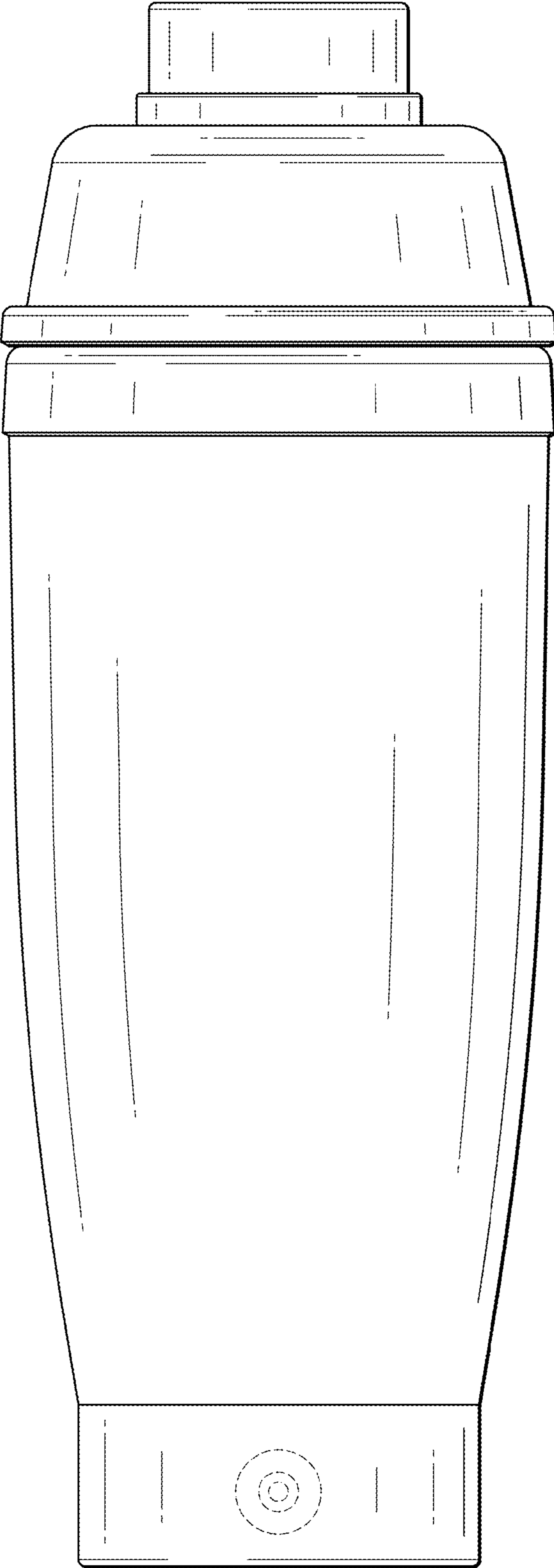


FIG. 3



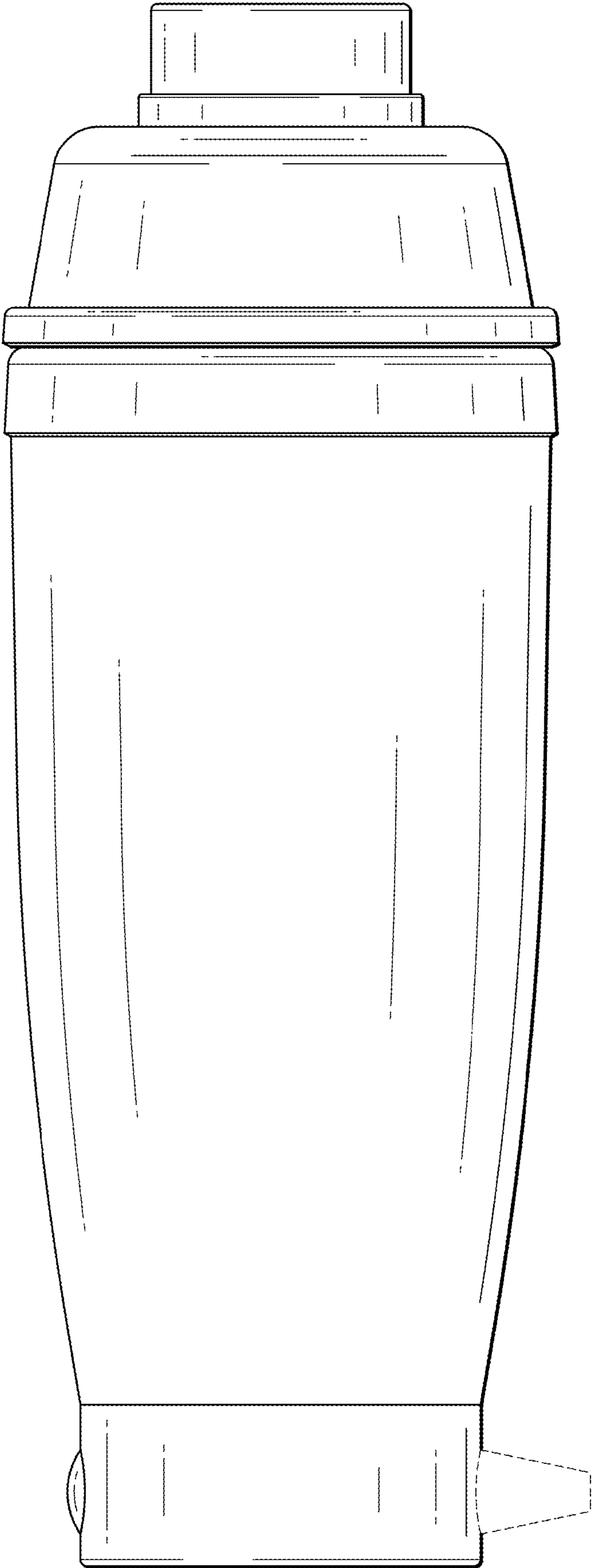


FIG. 4

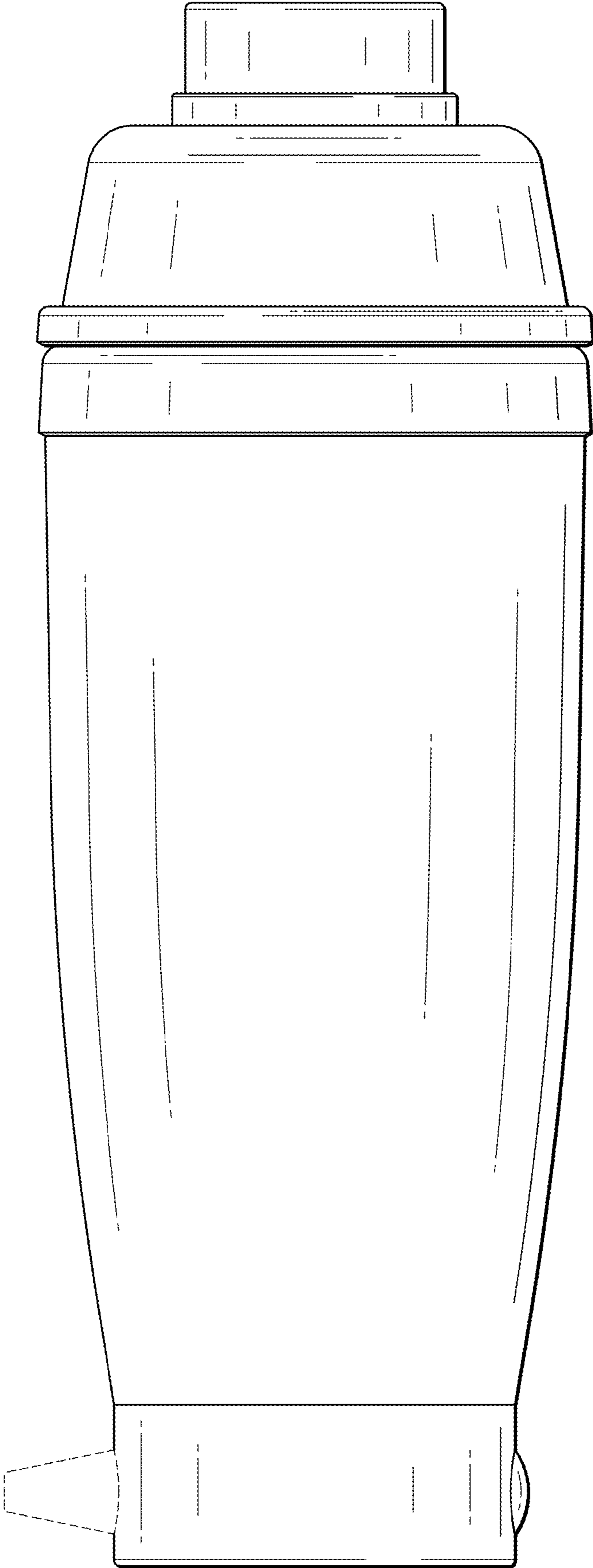


FIG. 5

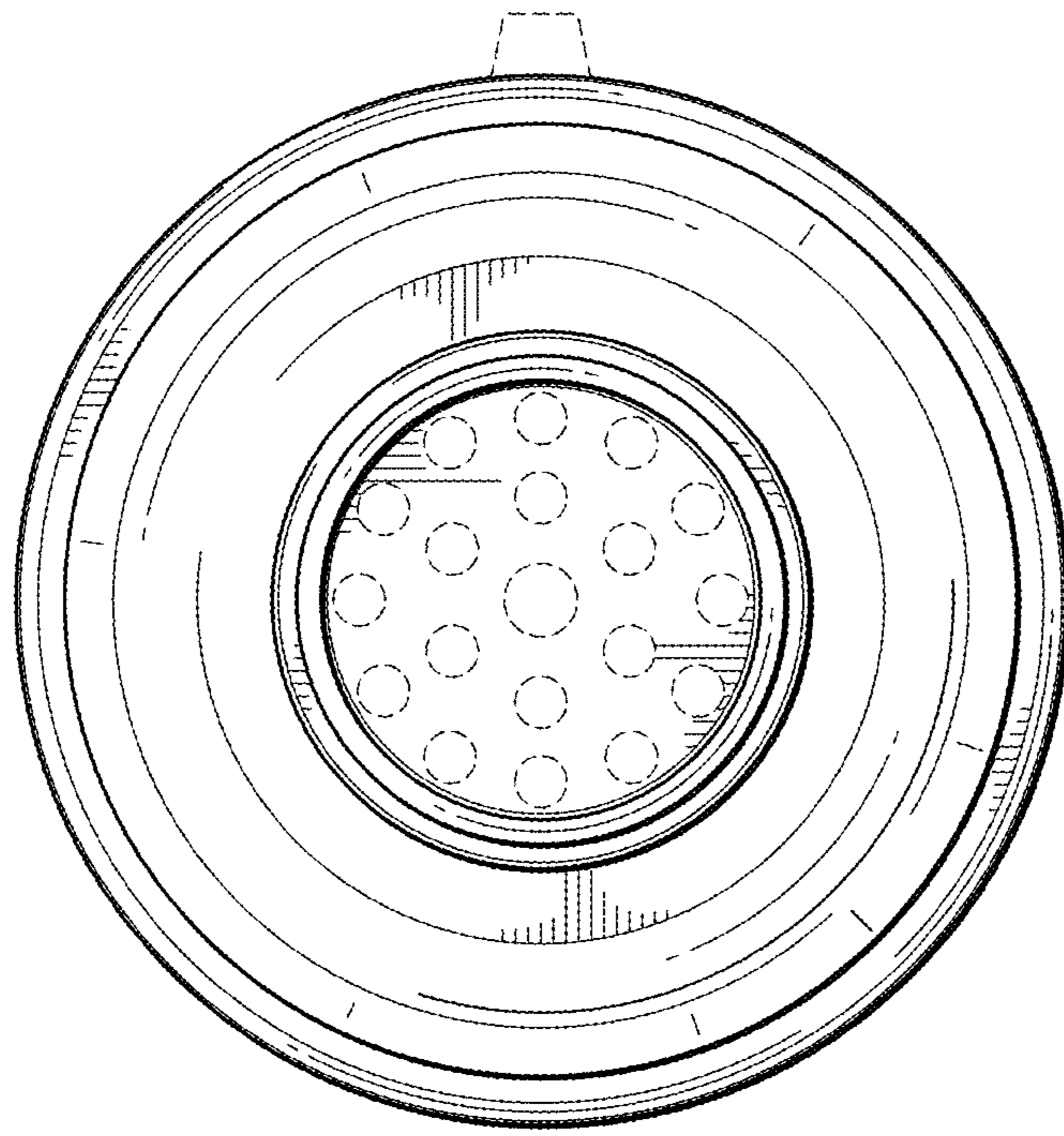


FIG. 6

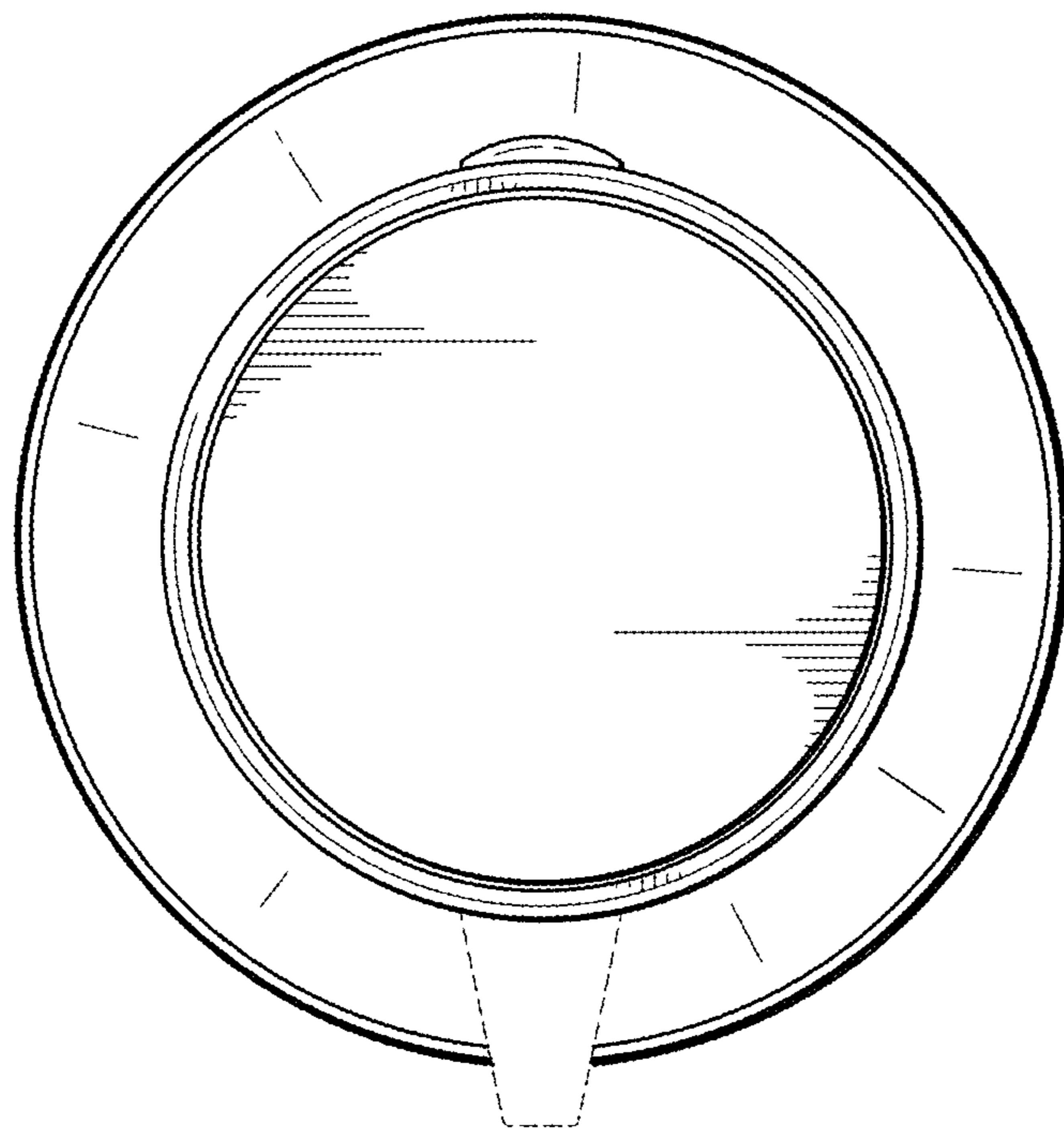


FIG. 7



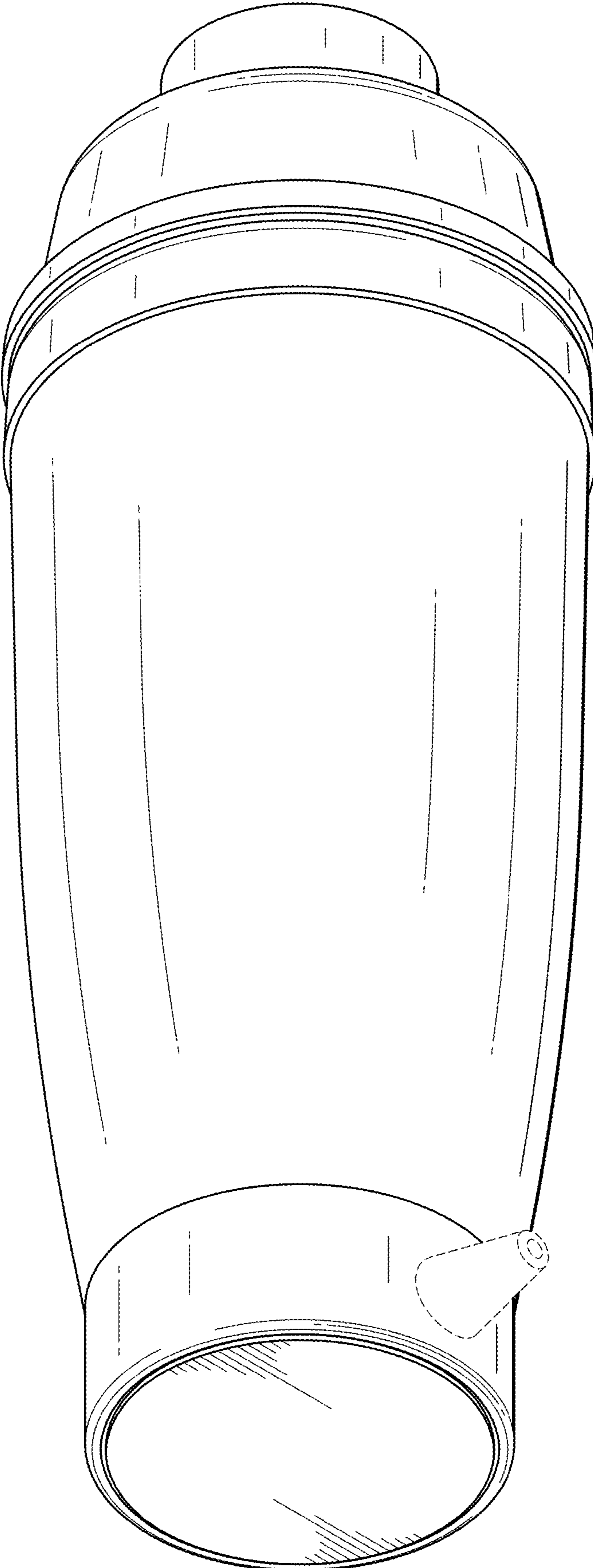


FIG. 8

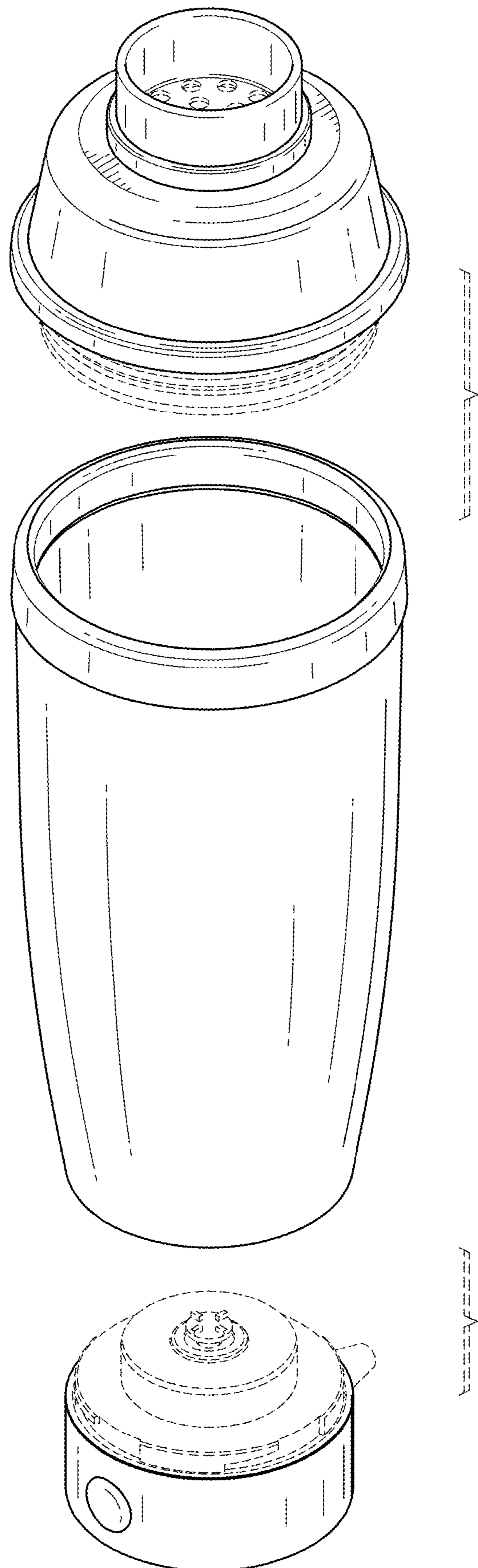


FIG. 9