



US00D749225S

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

(10) **Patent No.:** **US D749,225 S**
(45) **Date of Patent:** **** Feb. 9, 2016**

(54) **TOPICAL SPREADING APPLICATOR**

3,887,115 A 6/1975 Petterson
4,264,586 A 4/1981 Callingham
4,483,636 A 11/1984 Meyer

(71) Applicant: **Acrux DDS Pty Ltd**, West Melbourne,
Victoria (AU)

(Continued)

(72) Inventors: **Shu Kuen Chang**, Evanston, IL (US);
Alain Regard, Beynost (FR);
Anastasios G. Karahalios, Chicago, IL
(US); **Mark LaFever**, Indianapolis, IN
(US)

FOREIGN PATENT DOCUMENTS

DE 28 36 752 8/1978
DE 35 26 109 A1 1/1987

(Continued)

(73) Assignee: **ACRUX DDS PTY LTD**, Victoria (AU)

OTHER PUBLICATIONS

Overall Learnings. Clarification on Current Concept Safety Level.

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

(Continued)

(21) Appl. No.: **29/473,900**

Primary Examiner — Robert M Spear
Assistant Examiner — Darcey E Heflin

(22) Filed: **Nov. 26, 2013**

(74) *Attorney, Agent, or Firm* — Foley & Lardner LLP

(51) **LOC (10) Cl.** **24-02**

(57) **CLAIM**

(52) **U.S. Cl.**

We claim the ornamental design for a topical spreading applicator, as shown and described.

USPC **D24/188**; D9/723

(58) **Field of Classification Search**

DESCRIPTION

USPC D9/435, 436, 440, 447, 667, 723-729;
D24/119, 127, 133, 185-192, 197, 200,
D24/206, 207, 211, 231; D28/7; 222/1;
401/11, 172, 174, 227, 242, 261, 265;
604/82

CPC A45D 34/04; A61M 35/003
See application file for complete search history.

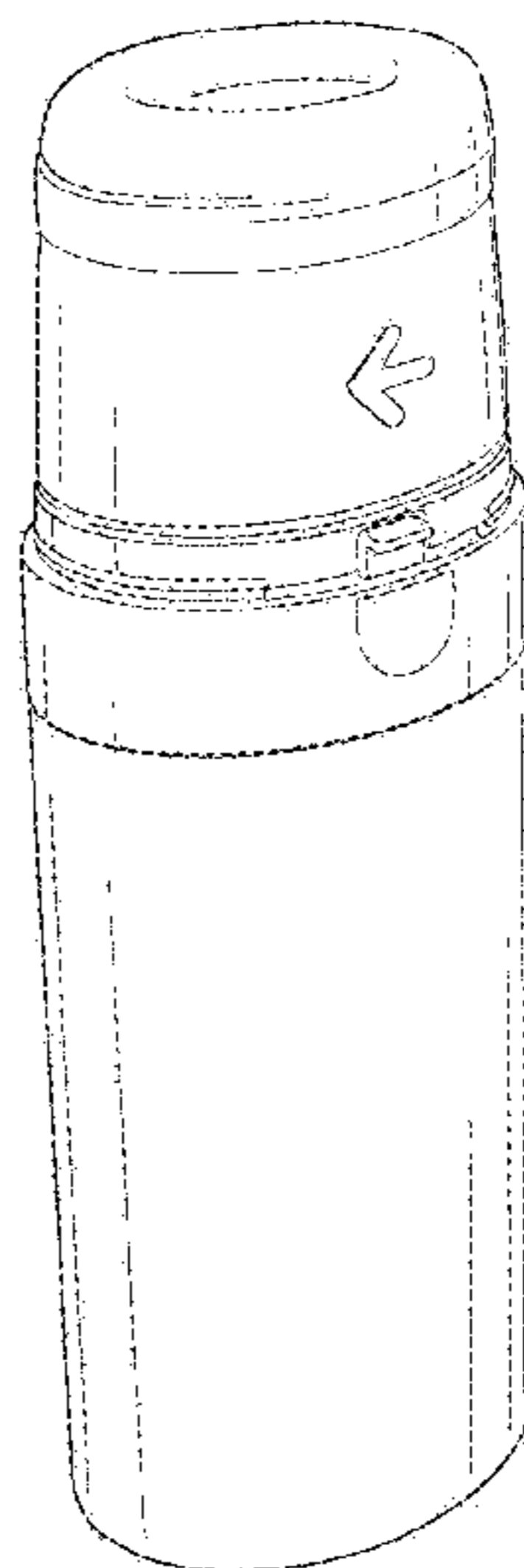
FIG. 1 is an isometric view of a topical spreading applicator of the claimed design;
FIG. 2 is a front view of the topical spreading applicator shown in FIG. 1;
FIG. 3 is a back view of the topical spreading applicator shown in FIG. 1;
FIG. 4 is a left side view of the topical spreading applicator shown in FIG. 1;
FIG. 5 is a right side view of the topical spreading applicator shown in FIG. 1;
FIG. 6 is a top view of the topical spreading applicator shown in FIG. 1; and,
FIG. 7 is a bottom view of the topical spreading applicator shown in FIG. 1.
In the drawings, the broken lines depict environmental subject matter only and form no part of the claimed design.

(56) **References Cited**

U.S. PATENT DOCUMENTS

1,573,224 A 3/1924 Condit
1,710,816 A 6/1928 Evans
1,925,019 A 8/1933 Wilson
1,982,833 A 12/1934 Schmerler
2,361,407 A 10/1944 McNair
2,608,705 A 8/1946 Duff
3,462,230 A 8/1969 Chester
3,685,913 A 8/1972 Pass

1 Claim, 6 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

4,726,700 A 2/1988 Gray
 4,739,778 A 4/1988 Christie
 4,787,374 A 11/1988 De Yarman
 5,122,383 A 6/1992 Heiber et al.
 5,186,358 A * 2/1993 McVay 222/1
 5,254,338 A 10/1993 Sakai et al.
 5,558,874 A 9/1996 Haber et al.
 5,567,073 A 10/1996 De Laforcade et al.
 5,568,669 A 10/1996 Godown
 5,613,958 A 3/1997 Kochinke et al.
 5,772,347 A 6/1998 Gueret
 5,780,050 A 7/1998 Jain et al.
 5,788,983 A 8/1998 Chien et al.
 5,792,469 A 8/1998 Tipton et al.
 D399,744 S * 10/1998 Gross D9/447
 5,847,363 A 12/1998 Debourg et al.
 5,904,151 A 5/1999 Gueret
 5,968,919 A 10/1999 Samour et al.
 6,010,716 A 1/2000 Saunal et al.
 6,211,250 B1 4/2001 Tomilinson et al.
 6,238,284 B1 5/2001 Dittgen et al.
 6,299,900 B1 10/2001 Reed et al.
 6,309,128 B1 10/2001 Griebel et al.
 6,315,482 B1 11/2001 Girardot et al.
 6,325,565 B1 12/2001 Girardot et al.
 6,503,894 B1 1/2003 Dudley et al.
 6,562,790 B2 5/2003 Chein et al.
 D477,664 S 7/2003 Wong
 D478,809 S * 8/2003 Cummings D9/729
 D483,258 S * 12/2003 Cummings D9/729
 6,666,216 B2 12/2003 Bourjal
 6,681,945 B1 1/2004 Harrold
 6,682,757 B1 1/2004 Wright
 D492,592 S * 7/2004 Palomino, Jr. D9/504
 6,773,187 B2 8/2004 Gueret
 6,818,226 B2 11/2004 Reed et al.
 6,902,741 B1 6/2005 Grawe et al.
 6,916,486 B2 7/2005 Klose et al.
 6,916,487 B2 7/2005 Klose et al.
 6,923,983 B2 8/2005 Morgan et al.
 6,945,723 B1 9/2005 Gueret
 6,964,777 B2 11/2005 Klose et al.
 6,998,138 B2 2/2006 Chew et al.
 7,094,422 B2 8/2006 Chew et al.
 D535,893 S * 1/2007 Shurtleff D9/726
 7,344,328 B2 3/2008 McAuley
 7,387,789 B2 6/2008 Klose et al.
 7,438,203 B2 10/2008 Reed et al.
 7,441,974 B2 10/2008 Gueret
 7,828,166 B1 11/2010 Sprick
 7,927,034 B2 4/2011 Staniforth et al.
 7,955,016 B2 6/2011 Gueret
 D649,456 S * 11/2011 Baker et al. D9/435
 8,071,075 B2 12/2011 Reed et al.
 8,177,449 B2 5/2012 Bayly et al.
 D661,200 S * 6/2012 Subler D9/667
 D667,309 S * 9/2012 Delaney et al. D9/667
 8,357,393 B2 1/2013 Morgan et al.
 8,419,307 B2 4/2013 Bayly et al.
 8,435,944 B2 5/2013 Di Pietro et al.
 D693,059 S * 11/2013 Tani D28/7
 D693,919 S * 11/2013 Miu D24/107
 D708,784 S * 7/2014 Kim D28/7
 D727,567 S * 4/2015 Bunkley D28/7
 2004/0009214 A1 1/2004 Klose et al.
 2004/0126355 A1 7/2004 Childers
 2005/0181032 A1 8/2005 Wilkins et al.
 2005/0186141 A1 8/2005 Gonda et al.
 2006/0116694 A1 * 6/2006 Hogan et al. 606/131
 2006/0280783 A1 12/2006 Di Pietro et al.
 2007/0071803 A1 3/2007 Reed et al.
 2007/0275943 A1 11/2007 Morgan et al.
 2008/0131494 A1 6/2008 Reed et al.
 2008/0170904 A1 * 7/2008 Bayly et al. 401/265
 2009/0098081 A1 * 4/2009 MacDonald et al. 424/78.07

2010/0166674 A1 7/2010 Morgan et al.
 2010/0322884 A1 12/2010 Di Pietro et al.
 2015/0023721 A1 * 1/2015 Gieux et al. 401/265

FOREIGN PATENT DOCUMENTS

DE 197 28 447 7/1997
 EP 0 549 049 5/1996
 FR 2 581 569 11/1986
 GB 1110824 4/1968
 GB 1 158 412 7/1969
 WO WO 91/18535 12/1991
 WO WO 93/25168 A1 12/1993
 WO WO 99/24041 A1 5/1999
 WO WO 00/06464 2/2000
 WO WO 00/45795 A2 8/2000
 WO WO 01/76972 A1 10/2001
 WO WO 2004/009457 A1 1/2004
 WO WO 2005/039531 A1 5/2005
 WO WO 2005/051771 6/2005
 WO WO 2006/005135 A1 1/2006
 WO WO 2006/027278 A1 3/2006
 WO WO-2013/000778 A1 1/2013

OTHER PUBLICATIONS

Standard Child Safety Features To Leverage.
 Physicians' Desk Reference, Thomson PDR, 58th ed., pp. 711-713 and 3239-3241, 2004.
 Physicians' Desk Reference, Thomson PDR, 60th ed., pp. 722-724 and 3330-3334, 2006.
 Supplementary European Search Report issued on Mar. 29, 2011 in application No. 07701469.
 Notice of Allowance issued on Jan. 23, 2012 in U.S. Appl. No. 11/678,673 (U.S. Pat. No. 8,177,449).
 Office Action issued on Oct. 12, 2011 in U.S. Appl. No. 11/678,673 (U.S. Pat. No. 8,177,449).
 Office Action issued on Apr. 4, 2011 in U.S. Appl. No. 11/678,673 (U.S. Pat. No. 8,177,449).
 Office Action issued on Dec. 9, 2010 in U.S. Appl. No. 11/678,673 (U.S. Pat. No. 8,177,449).
 Office Action issued on Jul. 3, 2012 in U.S. Appl. No. 13/464,556 (U.S. Pat. No. 8,419,307).
 Notice of Allowance issued on Sep. 7, 2012 in U.S. Appl. No. 13/464,556 (U.S. Pat. No. 8,419,307).
 Notice of Allowance issued on Jan. 15, 2013 in U.S. Appl. No. 13/464,556 (U.S. Pat. No. 8,419,307).
 Maibach et al., "Regional Variation in Percutaneous Penetration in Man: Pesticides," Arch. Environ. Health, vol. 23, pp. 208-211, Sep. 1971.
 Wester et al., "Regional Variation in Percutaneous Absorption," Percutaneous Absorption Drugs-Cosmetics-Mechanisms-Methodology, 3rd Ed., 1999, pp. 107-116.
 E. Ben-Galim et al., "Topically Applied Testosterone and Phallic Growth. Its Effects in Male Children With Hypopituitarism and Microphallus", American Journal of Disease and Children (1960), (1980), vol. 134, pp. 296-298.
 Berti et al., "Transcutaneous drug delivery: a practical review," Mayo Clin. Proc., vol. 70, No. 6, pp. 581-586, Jun. 1995.
 Morgan et al., "Enhanced Transdermal Delivery of Sex Hormones with Metered-Dose Topical Aerosols from Discovery to Clinical Evaluation," Pharm. Res., vol. 14, p. S-101, Nov. 1997.
 Finnin et al., "Enhancement of Epidermal Penetration of NSAIDs by Padimate O, Octyl Slicylate and Octyl Methoxycinnamate," Pharm. Res., vol. 14, p. S-304, Abstract, Nov. 1997.
 Lee et al., "The Role of Corticosteroids in Dermatology," Austr. Prescr. vol. 21, pp. 9-11, Jan. 1998.
 Morgan et al., "Enhanced Skin Permeation of Sex Hormones with Novel Topical Spray Vehicles," J. Pharm. Sci., vol. 87, pp. 1213-1218, Oct. 1998.
 Wang et al., "Transdermal Testosterone Gel Improves Sexual Function Mood, Muscle Strength, and Body Composition Parameters in Hypogonadal Men," J. Clin. Endocrinology & Metabolism, vol. 85, pp. 2839-2853, Aug. 2000.

(56)

References Cited

OTHER PUBLICATIONS

Morgan, Timothy M., "Enhanced Transdermal Delivery of Sex Hormones in Swine with a Novel Topical Aerosol", *Journal of Pharmaceutical Sciences*, vol. 87, No. 10, pp. 1219-1225 (1998).

Wang et al., "Pharmacokinetics of Transdermal Testosterone Gel in Hypogonadal Men: Application of Gel at One Site Versus Four Sites: A General Clinical Research Center Study," *The Journal of Clinical Endocrinology & Metabolism*, vol. 85, No. 3, pp. 964-969, 2000.

Solvay Pharmaceuticals, "AndroGel® testosterone gel," prescribing information, Sep. 2009.

Solvay Pharmaceuticals, "AndroGel® testosterone gel," medication guide, Sep. 2009.

Auxilium Pharmaceuticals, "Testim® testosterone gel," prescribing information, Sep. 2009.

Auxilium Pharmaceuticals, "Testim® testosterone gel," medication guide, Sep. 2009.

Cutter, "Compounded Percutaneous Testosterone Gel: Use and Effects in Hypogonadal Men," *JABFP*, vol. 14, No. 1, pp. 22-32, Feb. 2001.

Swerdloff et al., "Long-Term Pharmacokinetics of Transdermal Testosterone Gel in Hypogonadal Men," *J. Endocrinology and Metabolism*, vol. 85, pp. 4500-4510, Dec. 2000.

US Office Action in U.S. Appl. No. 29/473,895 dated May 27, 2015.

Notice of Allowance And Issue Fee(s) Due dated Oct. 15, 2015 in related U.S. Appl. No. 29/473,895.

* cited by examiner

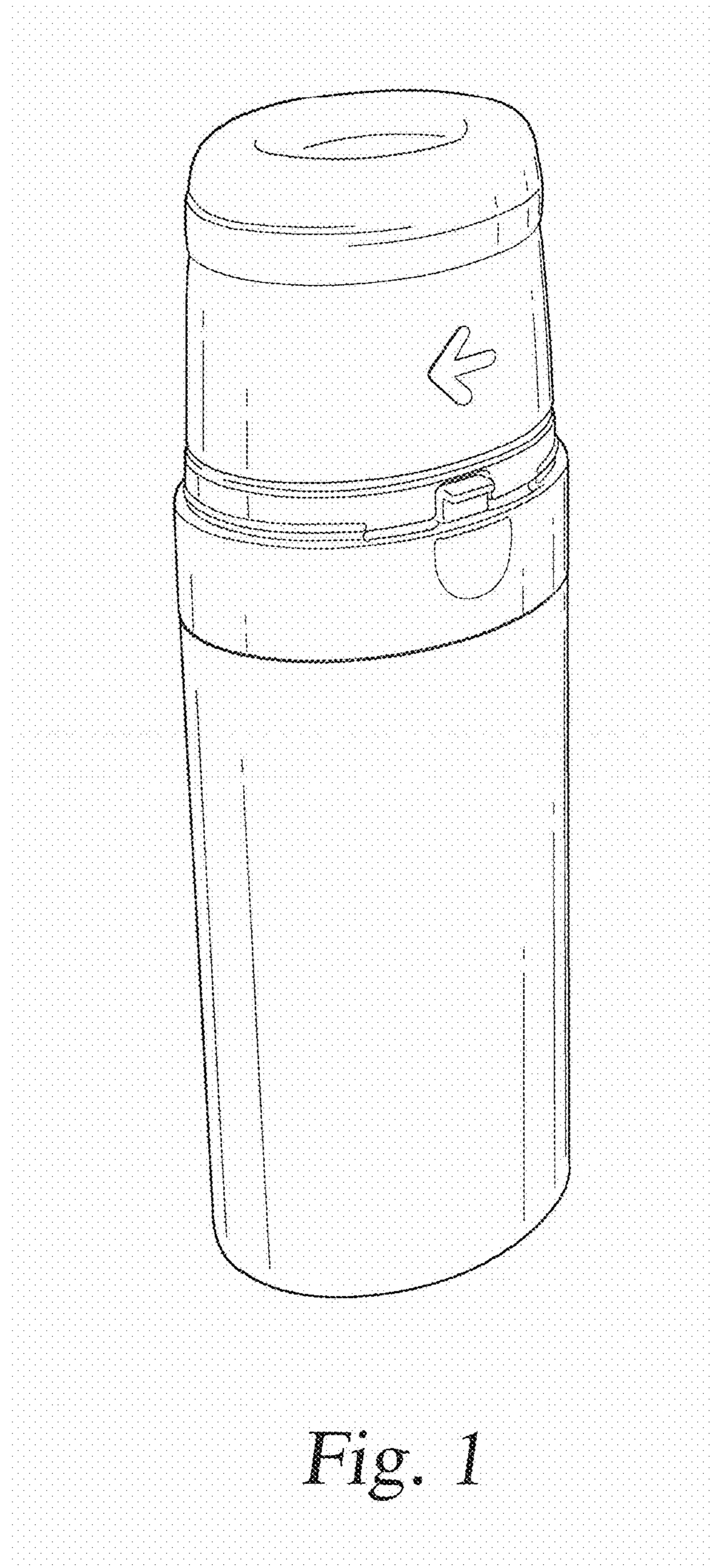


Fig. 1

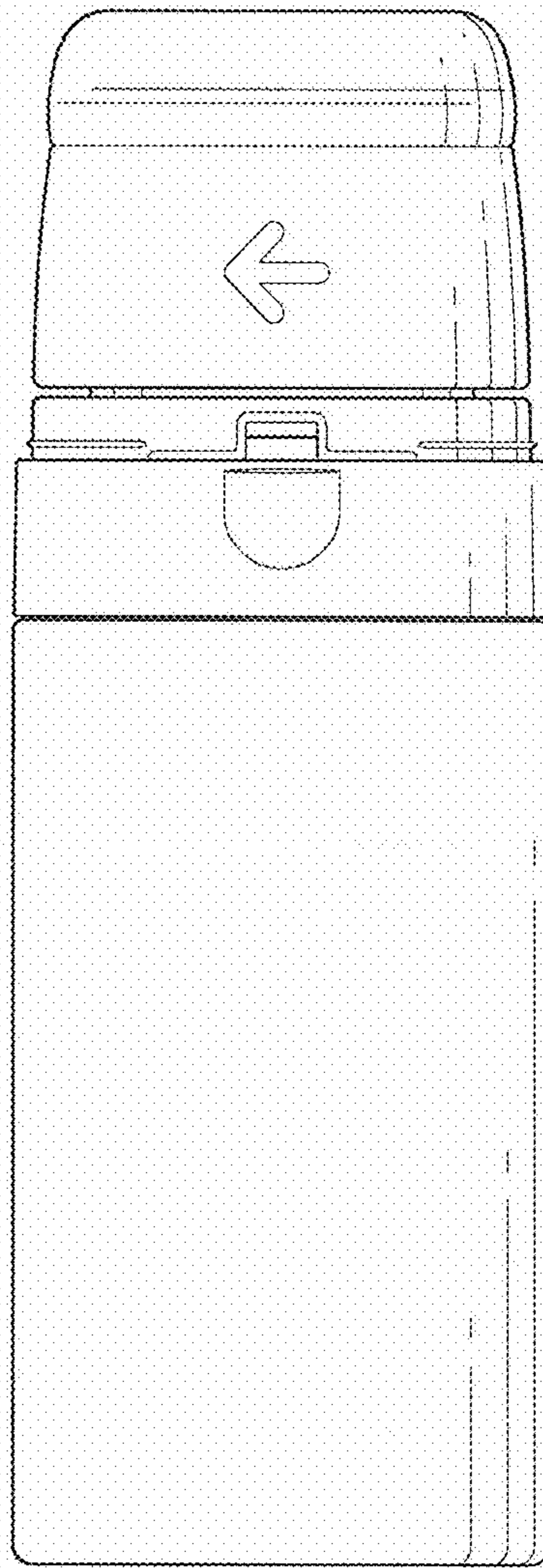


Fig. 2

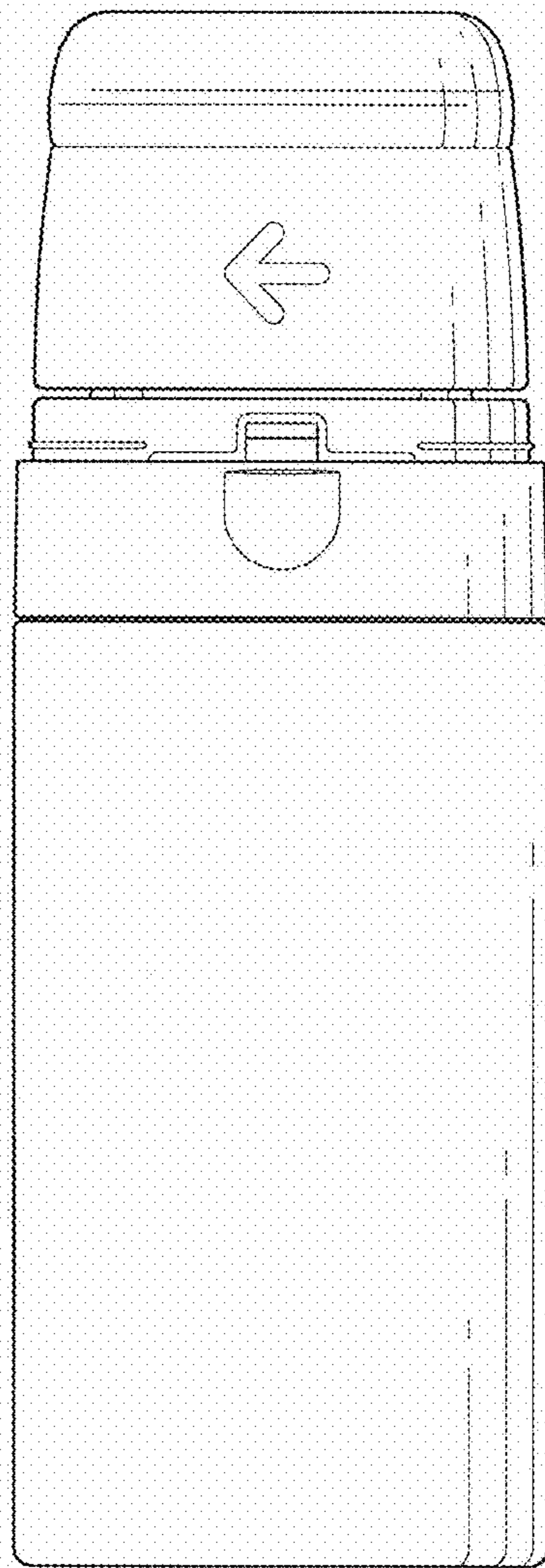


Fig. 3

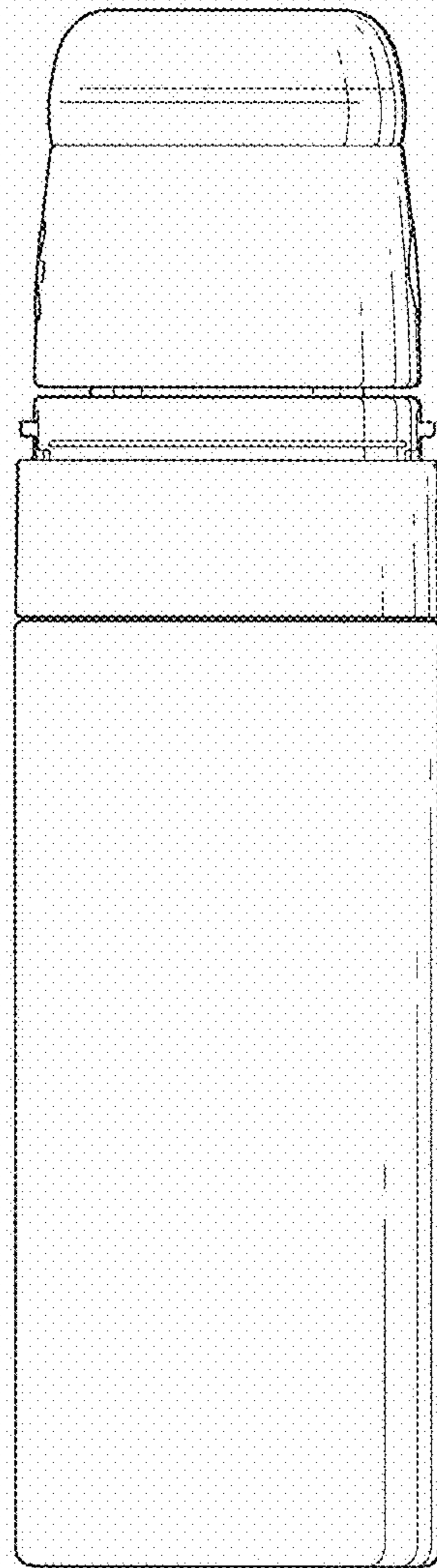
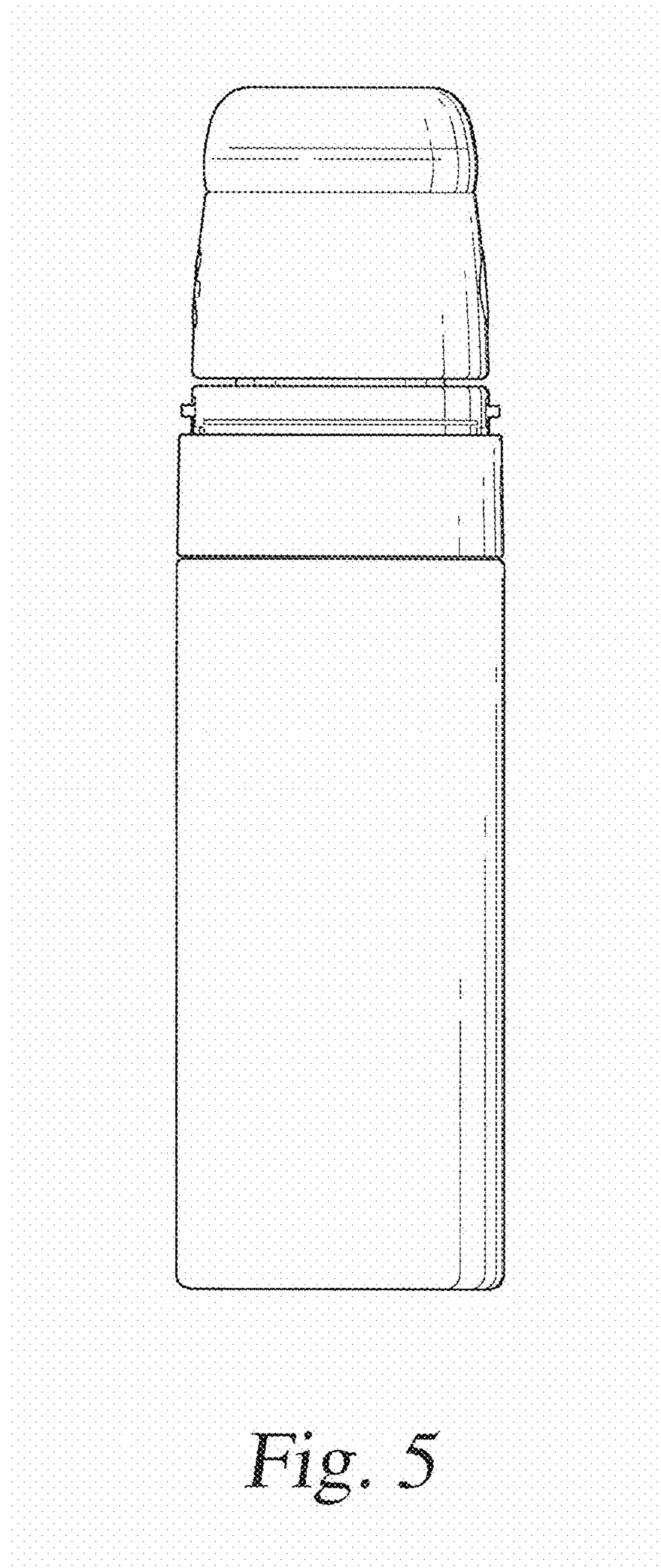


Fig. 4



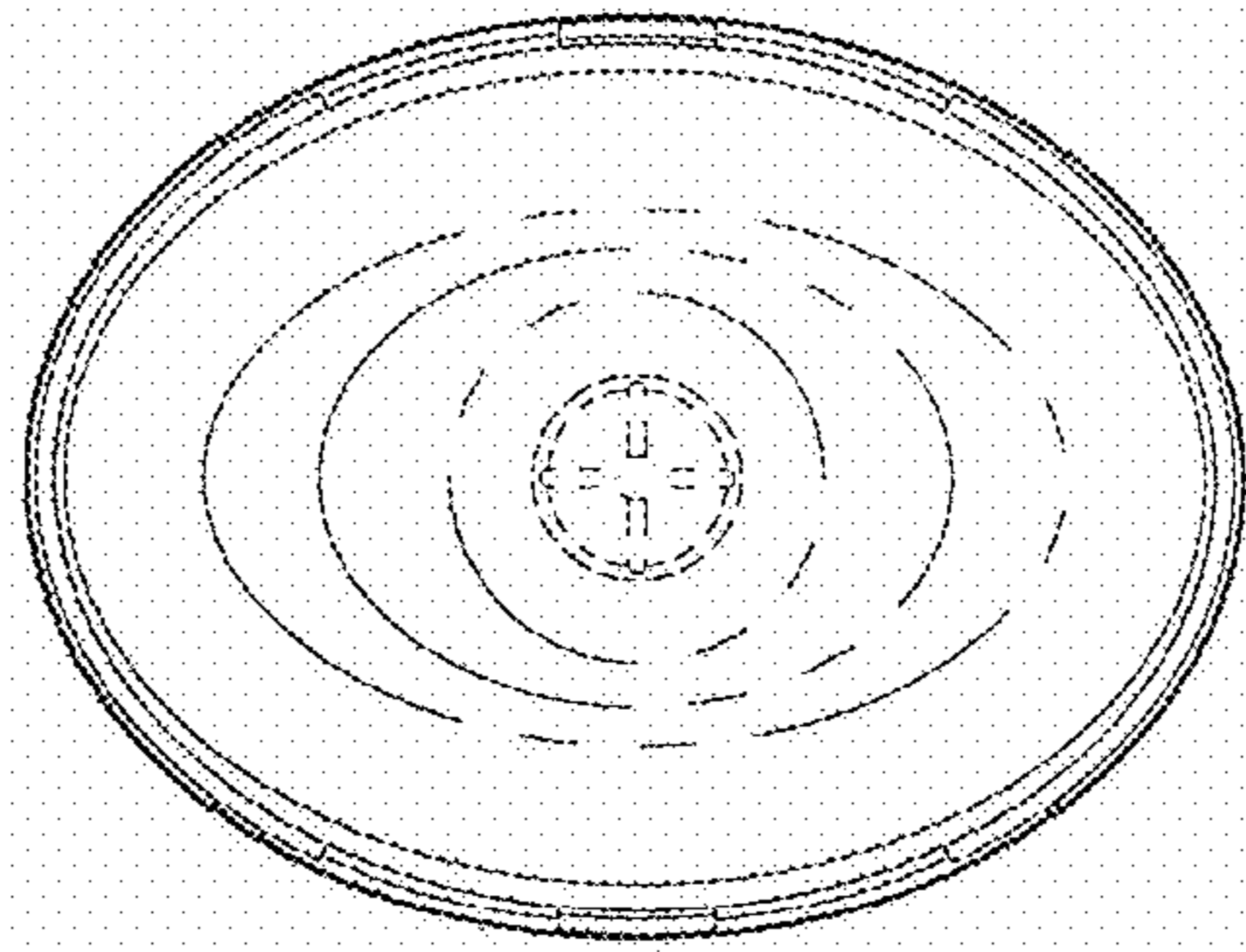


Fig. 6

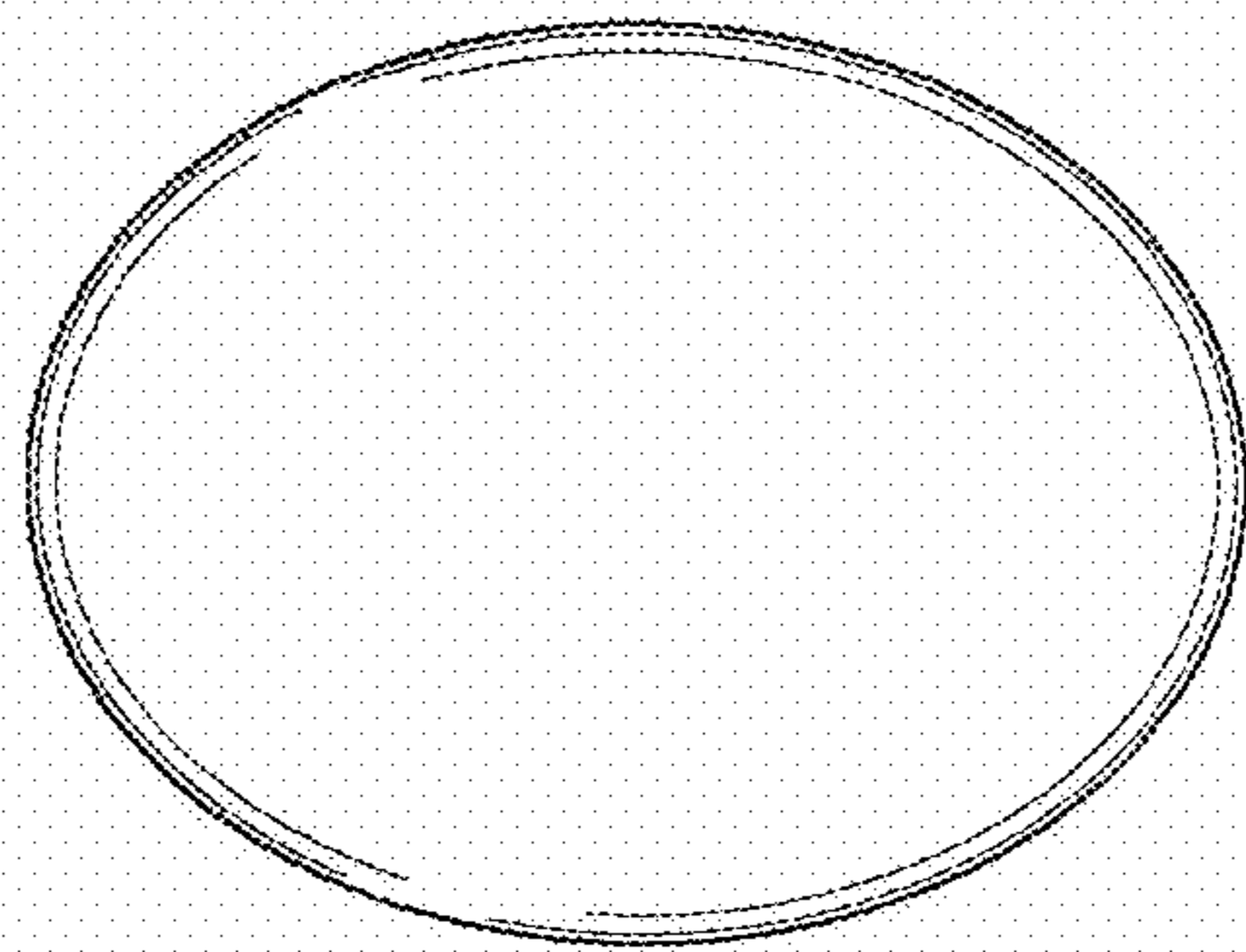


Fig. 7