



US00D878560S

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

(10) **Patent No.:** **US D878,560 S**
(45) **Date of Patent:** **** Mar. 17, 2020**

(54) **AUTOINJECTOR WITH REMOVABLE CAP**

- (71) Applicant: **AMGEN INC.**, Thousand Oaks, CA (US)
- (72) Inventors: **Margaux Frances Boyaval**, Newbury Park, CA (US); **Sigrid Moeslinger**, New York, NY (US); **Masamichi Udagawa**, New York, NY (US)
- (73) Assignee: **AMGEN INC.**, Thousand Oaks, CA (US)
- (**) Term: **15 Years**
- (21) Appl. No.: **29/645,895**
- (22) Filed: **Apr. 30, 2018**

Related U.S. Application Data

- (62) Division of application No. 29/562,742, filed on Apr. 28, 2016, now Pat. No. Des. 819,198.
- (51) **LOC (12) Cl.** **24-02**
- (52) **U.S. Cl.**
USPC **D24/113**
- (58) **Field of Classification Search**
USPC D24/112-114, 133, 186, 127-131;
606/181, 185; 604/264, 272, 115, 232,
(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

758,567 A	4/1904	Wohlfahrt et al.
D321,472 S	11/1991	Evans et al.

(Continued)

FOREIGN PATENT DOCUMENTS

CN	302858428	6/2014
CN	304223460	7/2017

(Continued)

OTHER PUBLICATIONS

Industrial Design DM/092744, Millennium Pharmaceuticals, Inc.,
Registration date Sep. 6, 2016.
(Continued)

Primary Examiner — Nathan M Johnston
(74) *Attorney, Agent, or Firm* — Marshall, Gerstein & Borun LLP

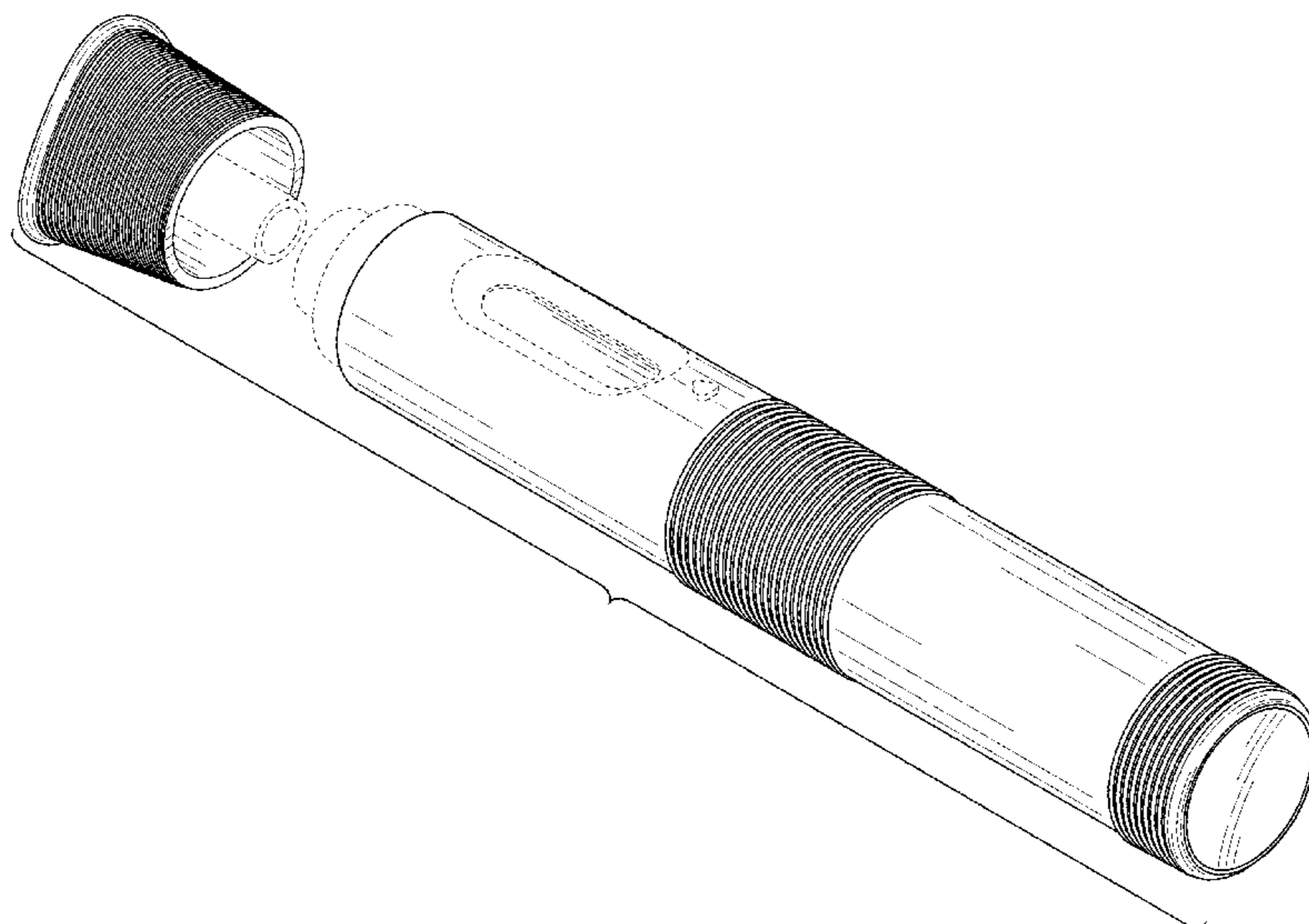
(57) **CLAIM**

The ornamental design for an autoinjector with removable cap, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view showing a new design for an autoinjector with a removable cap, showing a removable cylindrical cap having a triangular shaped side profile disposed on the autoinjector;
 FIG. 2 is a front view of the autoinjector of FIG. 1;
 FIG. 3 is a rear view of the autoinjector with removable cap of FIG. 1;
 FIG. 4 is a left-side view of the autoinjector with removable cap of FIG. 1;
 FIG. 5 is a right-side view of the autoinjector with removable cap of FIG. 1;
 FIG. 6 is a top view of the autoinjector with removable cap of FIG. 1;
 FIG. 7 is a bottom view of the autoinjector with removable cap of FIG. 1; and,
 FIG. 8 is a perspective view showing the autoinjector with removable cap of FIGS. 1-7 with the removable cap removed.
 The broken lines show portions of the design that form no part of the claimed design.

1 Claim, 4 Drawing Sheets



(58) **Field of Classification Search**

USPC .. 604/187, 158, 164.08, 192, 263, 163, 181,
604/184, 198, 227; 600/101, 139, 143;
128/200.24, 207.14, 207.15;
D19/115-123, 177, 193
CPC A61M 5/3156; A61M 5/31591; A61M
5/3155; A61M 5/3157; A61M 5/24;
A61M 5/31501; A61M 5/31551; A61M
5/31585; A61M 2005/2407; A61M
2005/2492; A61M 2205/581; A61M
2205/582

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D443,641 S 6/2001 Mader
D497,806 S * 11/2004 Nichols D9/417
D545,895 S 7/2007 Okutani
D612,486 S * 3/2010 Van der Stappen D24/113
D619,244 S * 7/2010 Van der Stappen D24/113
D622,374 S 8/2010 Julian et al.
D626,994 S 11/2010 Gerules
D627,061 S * 11/2010 Van der Stappen D24/113
D628,690 S * 12/2010 Galbraith D24/114
D629,509 S 12/2010 Julian et al.
D640,786 S 6/2011 Sato et al.
D696,397 S * 12/2013 Guarraia D24/113
D696,773 S * 12/2013 Schneider D24/113
D696,774 S * 12/2013 Guarraia D24/113
D696,775 S * 12/2013 Guarraia D24/113
D697,205 S 1/2014 Schneider et al.
D708,317 S * 7/2014 Schneider D24/113
D714,932 S * 10/2014 Hall D24/112
D715,422 S 10/2014 Hall et al.
D717,428 S 11/2014 Sendatzki et al.
D721,802 S 1/2015 Ohashi
D722,158 S 2/2015 Magome et al.
D728,782 S 5/2015 Dubuc et al.
D732,161 S 6/2015 Ohashi
D739,011 S * 9/2015 Morrison, Jr. D24/114
D757,255 S 5/2016 Wohlfahrt et al.
D758,566 S 6/2016 Chen
D758,567 S * 6/2016 Wohlfahrt D24/113
D758,569 S * 6/2016 Wohlfahrt D24/113
D758,570 S 6/2016 Wohlfahrt et al.
D758,571 S 6/2016 Geert-Jensen et al.
D759,813 S * 6/2016 Newman D24/130
D759,814 S 6/2016 Newman et al.
D765,240 S 8/2016 Hauck et al.
D766,425 S 9/2016 Hauck et al.
D767,119 S 9/2016 Hauck et al.
D770,610 S 11/2016 Saussaye et al.
D773,648 S 12/2016 Wohlfahrt et al.

D774,641 S 12/2016 Miggels et al.
D775,279 S 12/2016 Shen
D780,909 S 3/2017 Burkett et al.
D783,816 S 4/2017 Wohlfahrt et al.
D793,547 S 8/2017 Burkett et al.
D794,178 S 8/2017 Daniel et al.
D794,777 S * 8/2017 Daniel A61M 5/2033
D24/113
D799,026 S 10/2017 Jones et al.
D802,748 S 11/2017 Mills et al.
D814,022 S * 3/2018 Boyaval D24/113
D819,198 S * 5/2018 Boyaval D24/113
D819,200 S * 5/2018 Stonecipher D24/114
D822,198 S 7/2018 Stonecipher et al.
D827,128 S 8/2018 Boyaval et al.
D830,539 S 10/2018 Boyaval et al.
D851,754 S 6/2019 Boyaval et al.
2004/0068283 A1 4/2004 Fukuzawa et al.
2008/0269682 A1 10/2008 Kavazov et al.
2008/0269692 A1 10/2008 James et al.
2013/0060231 A1 * 3/2013 Adlon A61M 5/3234
604/506
2013/0211330 A1 * 8/2013 Pedersen A61M 5/2033
604/111
2014/0207073 A1 * 7/2014 Shang A61M 5/2033
604/189
2014/0221916 A1 * 8/2014 Kramer A61M 5/2066
604/70
2014/0221936 A1 8/2014 Edhouse et al.
2014/0330216 A1 * 11/2014 Weaver A61M 5/31513
604/198
2014/0343507 A1 11/2014 Karlsson et al.
2014/0364812 A1 * 12/2014 Lumme A61M 5/2033
604/198
2014/0371684 A1 12/2014 Holmqvist
2015/0190577 A1 7/2015 Shaanan et al.
2015/0335829 A1 11/2015 Giambattista et al.
2016/0263325 A1 9/2016 Huthmacher et al.
2016/0303327 A1 * 10/2016 Moren A61M 5/2033
2017/0128668 A1 5/2017 Miller et al.
2017/0182242 A1 6/2017 Galitz et al.

FOREIGN PATENT DOCUMENTS

RU 100256 U1 12/2010
RU 100299 U1 12/2010
TW D179360 11/2016
TW D179362 11/2016

OTHER PUBLICATIONS

Internet publication <https://www.youtube.com/watch?v=VbGb5lt9n80>, dated Sep. 30, 2014.

* cited by examiner

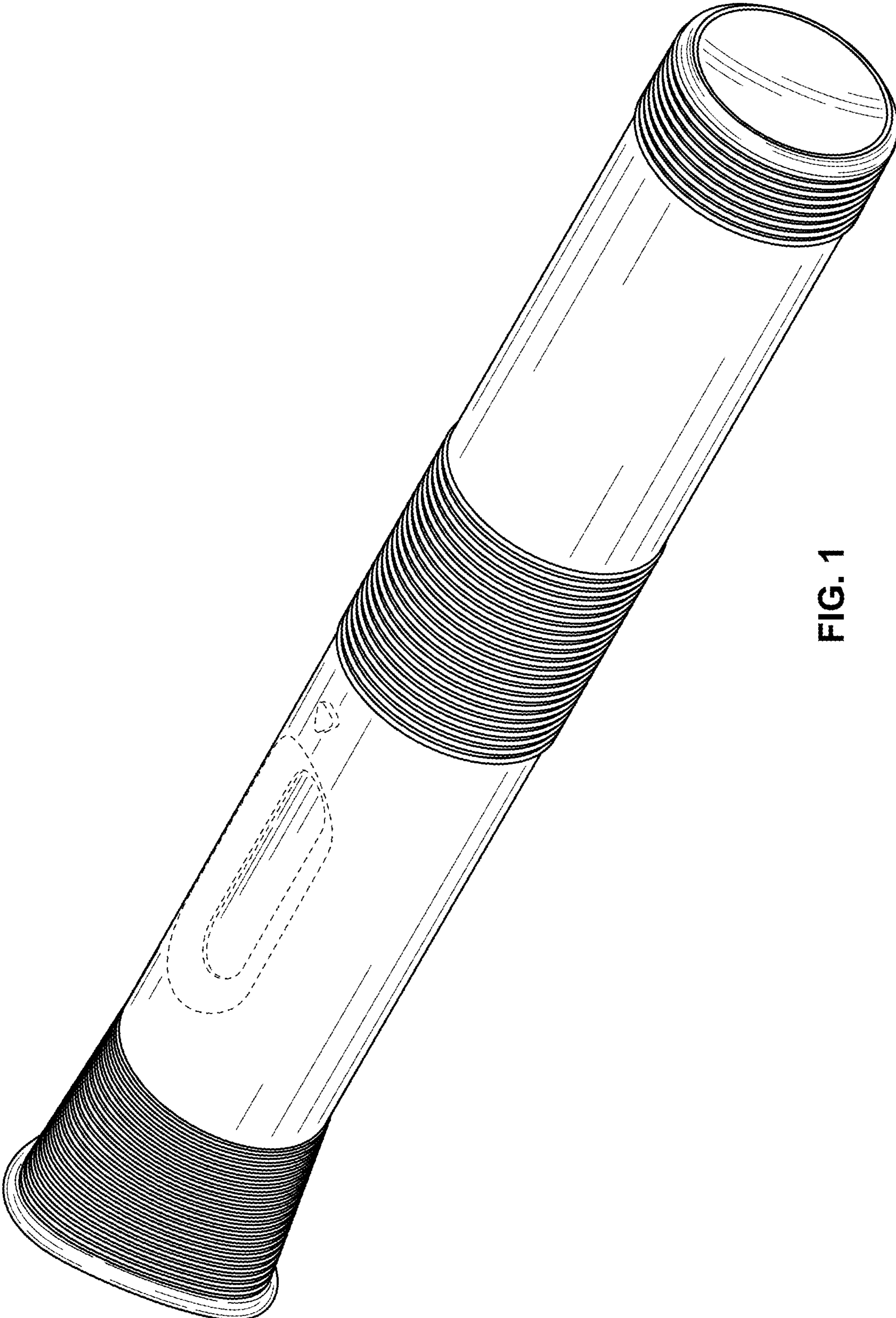


FIG. 1

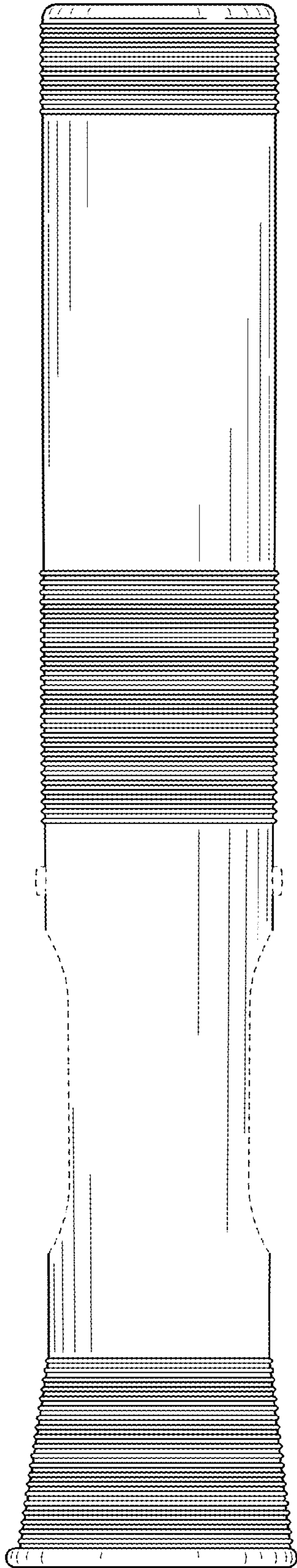


FIG. 2

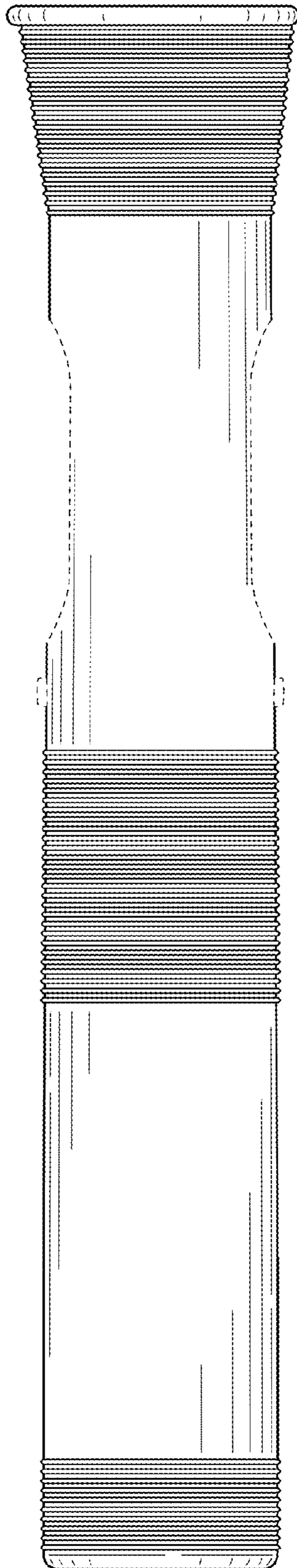


FIG. 3

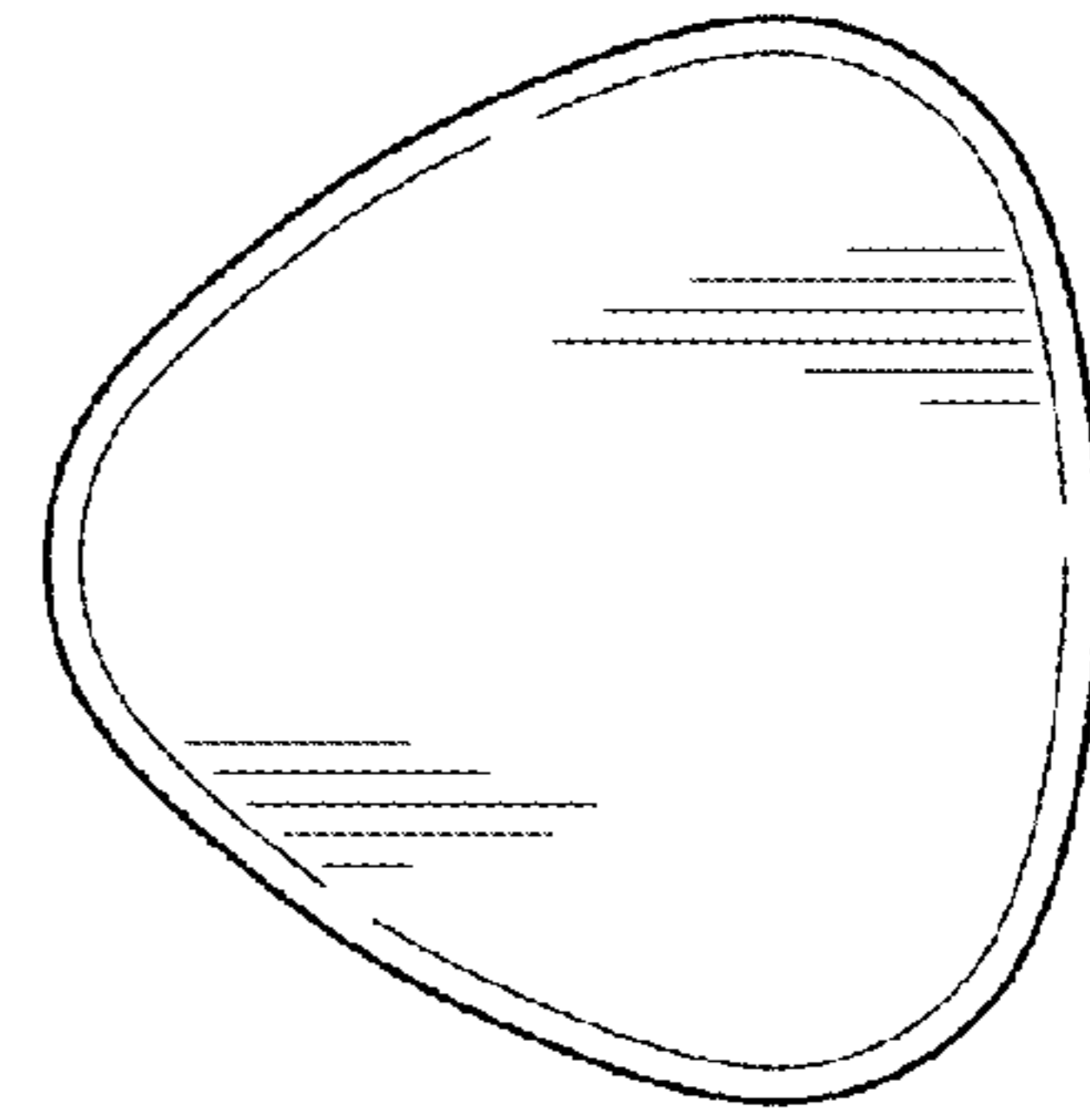


FIG. 5

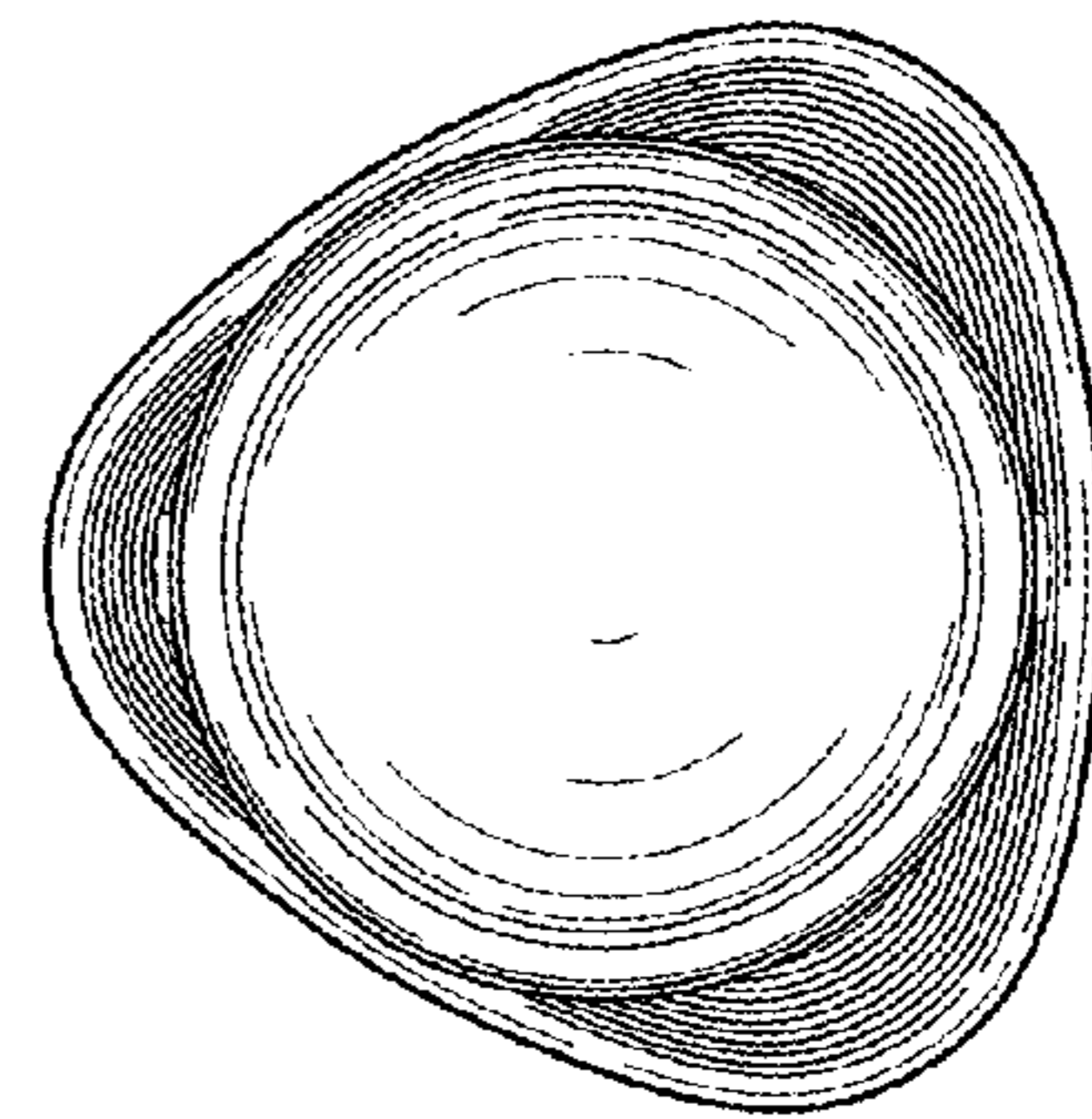


FIG. 4

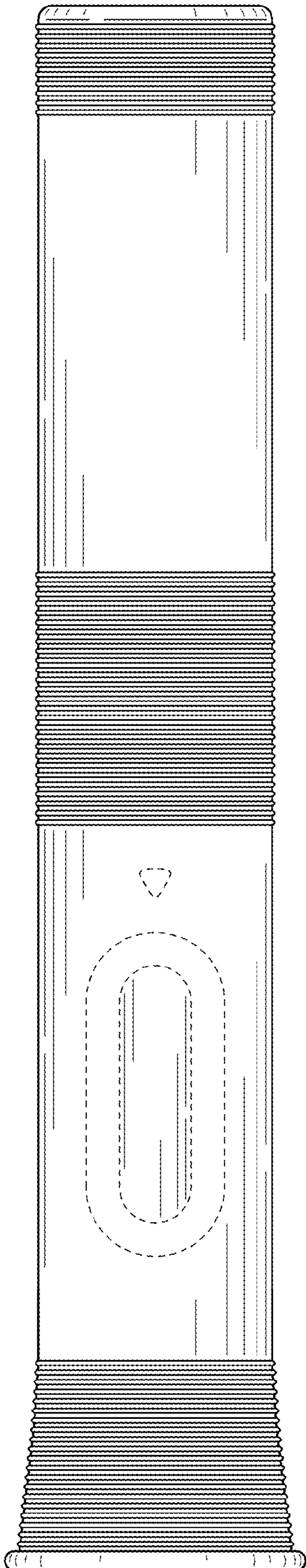


FIG. 6

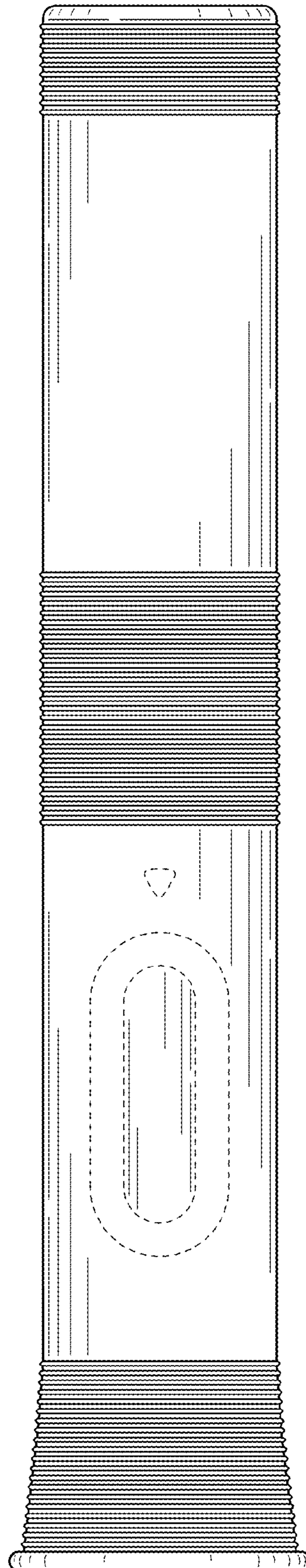


FIG. 7

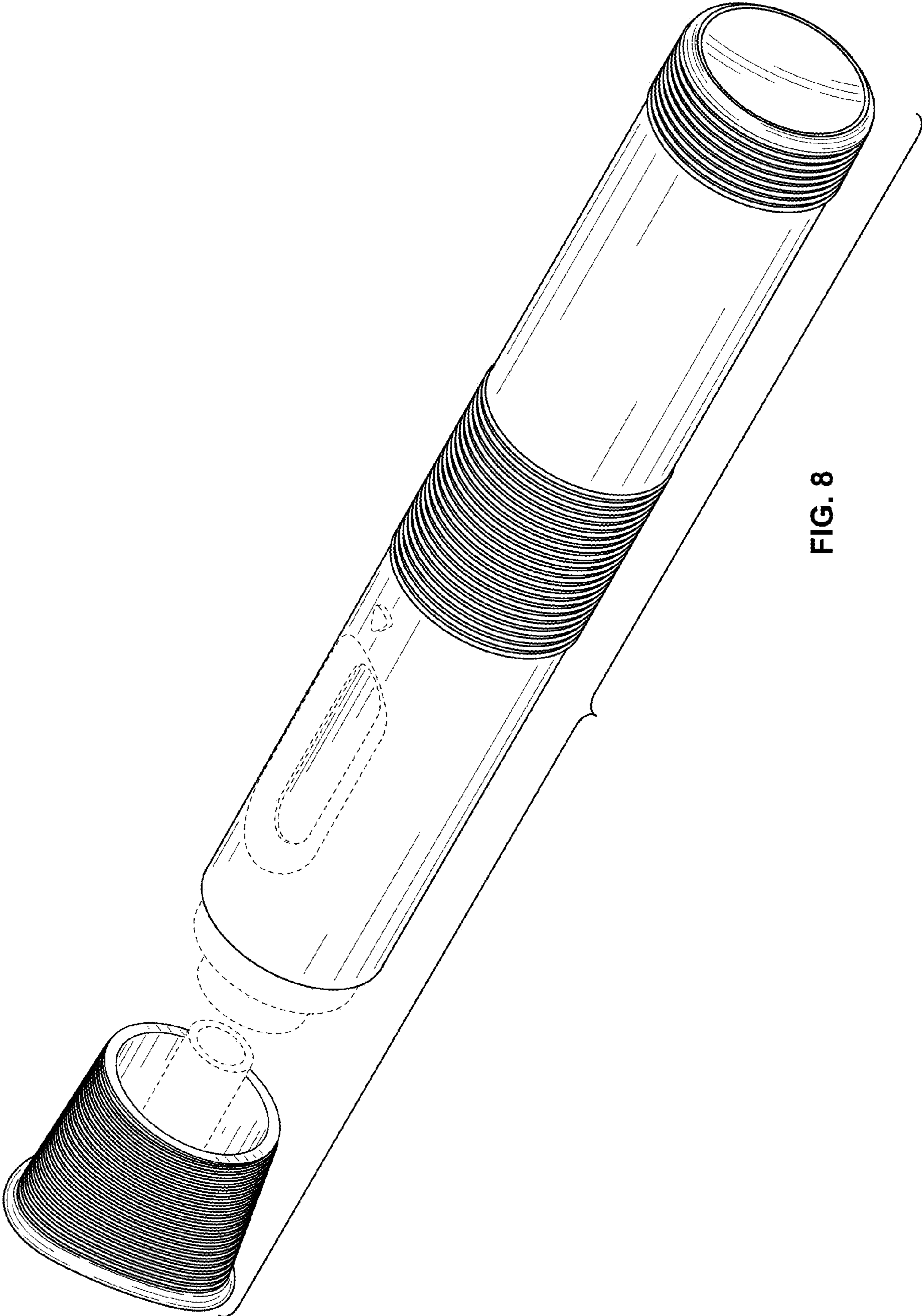


FIG. 8