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

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(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**

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Related U.S. Application Data

(62) Division of application No. 29/645,895, filed on Apr. 30, 2018, now Pat. No. Des. 878,560, which is a (Continued)

(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

D321,472 S 11/1991 Evans et al.
D443,641 S 6/2001 Mader
(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

The file of this patent contains at least one drawing/photograph executed in color. Copies of this patent with color drawing(s)/photograph(s) will be provided by the Office upon request and payment of the necessary fee.

FIG. 1 is a perspective view showing an alternative design for an autoinjector with a removable cap, showing the removable cap 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;

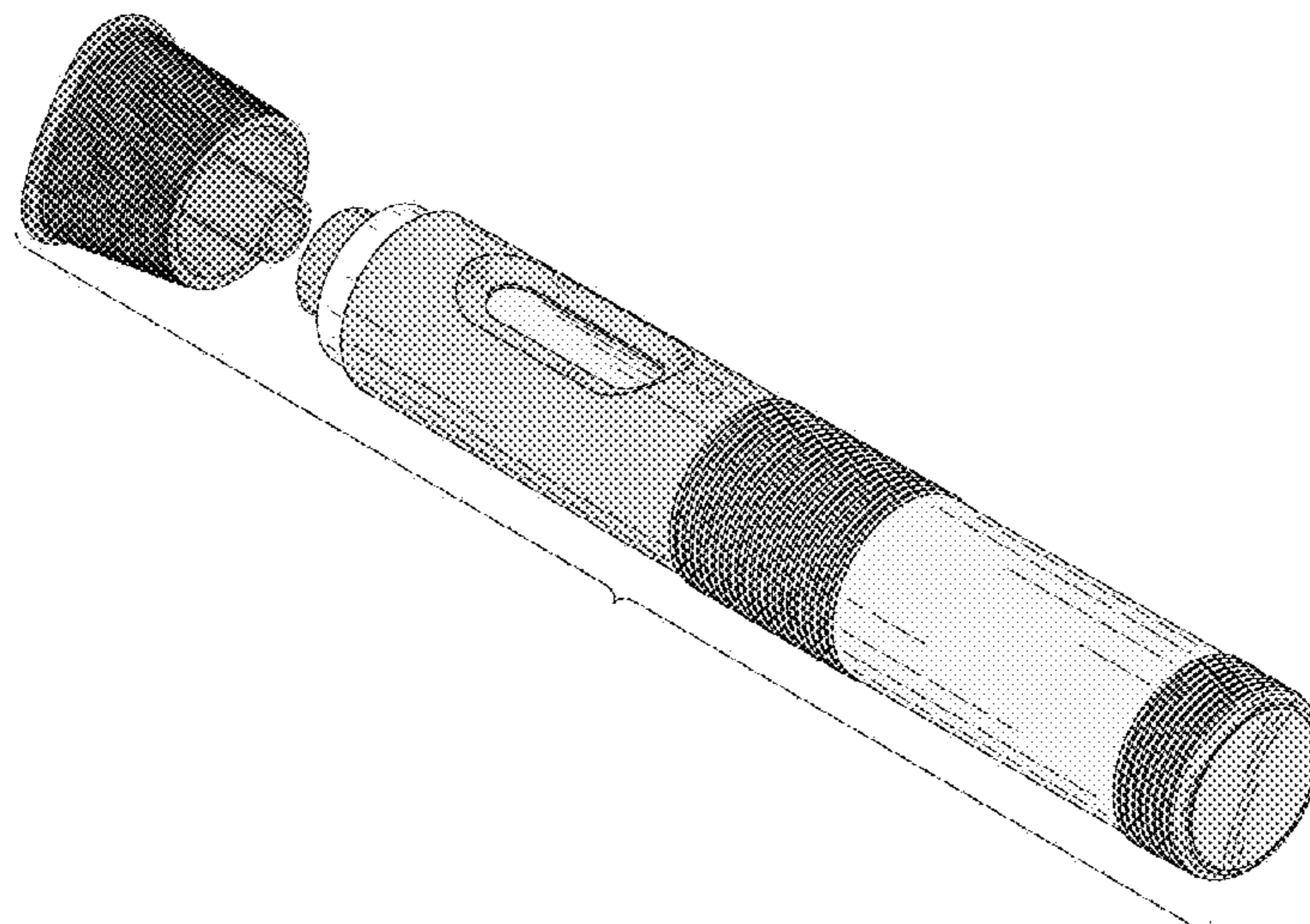
FIG. 7 is a bottom view of the autoinjector with removable cap of FIG. 1; and,

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.

Where the figures show the article broken away, they are understood to indicate unclaimed length or width.

1 Claim, 4 Drawing Sheets
(4 of 4 Drawing Sheet(s) Filed in Color)



Related U.S. Application Data

division of application No. 29/562,742, filed on Apr. 28, 2016, now Pat. No. Des. 819,198.

(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

D497,806 S	11/2004	Nichols et al.	
D509,296 S *	9/2005	Minshull	D24/110
D545,895 S	7/2007	Okutani	
D612,486 S	3/2010	Van der Stappen	
D619,244 S	7/2010	Van der Stappen	
D622,374 S	8/2010	Julian et al.	
D626,994 S	11/2010	Gerules	
D627,061 S	11/2010	Van der Stappen	
D628,690 S	12/2010	Galbraith	
D629,509 S	12/2010	Julian et al.	
D640,786 S	6/2011	Sato et al.	
D660,958 S	5/2012	McLoughlin et al.	
8,298,194 B2	10/2012	Moller	
D696,397 S	12/2013	Guarraia et al.	
D696,772 S *	12/2013	Schneider	D24/113
D696,773 S	12/2013	Schneider et al.	
D696,774 S	12/2013	Guarraia et al.	
D696,775 S	12/2013	Guarraia et al.	
8,608,709 B2	12/2013	Moller et al.	
D697,205 S	1/2014	Schneider et al.	
D708,317 S	7/2014	Schneider et al.	
D714,932 S	10/2014	Hall et al.	
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
D758,568 S	6/2016	Wohlfahrt et al.	
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 et al.	
D759,814 S	6/2016	Newman et al.	
D765,239 S	8/2016	Hauck et al.	
D765,240 S *	8/2016	Hauck	D24/113
D766,425 S *	9/2016	Hauck	D24/113
D767,119 S	9/2016	Hauck et al.	
D770,610 S *	11/2016	Saussaye	D24/113
D773,648 S	12/2016	Wohlfahrt et al.	
D773,650 S *	12/2016	Fourt	D24/113
D774,639 S *	12/2016	Saussaye	D24/113
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.	
9,623,199 B2	4/2017	Richter et al.	
D793,547 S	8/2017	Burkett et al.	
D794,178 S	8/2017	Daniel et al.	
D794,777 S	8/2017	Daniel et al.	
D794,778 S	8/2017	Daniel et al.	
D799,026 S	10/2017	Jones et al.	
D802,748 S	11/2017	Mills et al.	
D814,022 S	3/2018	Boyaval et al.	
D819,198 S	5/2018	Boyaval et al.	
D819,200 S	5/2018	Stonecipher et al.	
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.	
D857,192 S	8/2019	Burkett et al.	
D861,859 S	10/2019	Rapp et al.	
D866,751 S *	11/2019	Rogge	D24/113
D866,757 S	11/2019	Diluzio et al.	
D868,245 S	11/2019	Holmqvist et al.	
D868,961 S	12/2019	Stewart et al.	
D870,270 S	12/2019	Burkett et al.	
D878,560 S *	3/2020	Boyaval	D24/113
2004/0068283 A1	4/2004	Fukuzawa et al.	
2006/0100655 A1 *	5/2006	Leong	A61B 5/15186 606/181
2008/0269682 A1	10/2008	Kavazov et al.	
2008/0269692 A1	10/2008	James et al.	
2012/0123350 A1	5/2012	Giambattista et al.	
2013/0060231 A1	3/2013	Adlon et al.	
2013/0211330 A1	8/2013	Pedersen et al.	
2014/0207073 A1	7/2014	Shang et al.	
2014/0221916 A1	8/2014	Kramer et al.	
2014/0221936 A1	8/2014	Edhouse et al.	
2014/0330216 A1	11/2014	Weaver et al.	
2014/0343507 A1	11/2014	Karlsson et al.	
2014/0364812 A1	12/2014	Lumme et al.	
2014/0371684 A1	12/2014	Holmqvist	
2015/0190577 A1	7/2015	Shaanan et al.	
2015/0335829 A1	11/2015	Giambattista et al.	
2016/0106929 A1	4/2016	Fournier et al.	
2016/0151586 A1	6/2016	Kemp	
2016/0193413 A1	7/2016	Gabrielsson	
2016/0263325 A1	9/2016	Huthmacher et al.	
2016/0303327 A1	10/2016	Moren	
2017/0128668 A1	5/2017	Miller et al.	
2017/0182242 A1	6/2017	Galitz et al.	
2018/0043101 A1	2/2018	Weaver et al.	
2019/0266921 A1	8/2019	Chang	
2019/0298924 A1	10/2019	Gibson 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

Office Action and Search Report for Taiwan application No. 1066305338, dated Mar. 26, 2018.
 Internet publication <https://www.youtube.com/watch?v=VbGb5lt9n80>, dated Sep. 30, 2014.
 Office Action, Israel Design Office, Application No. 60912, dated Mar. 4, 2018.

* cited by examiner

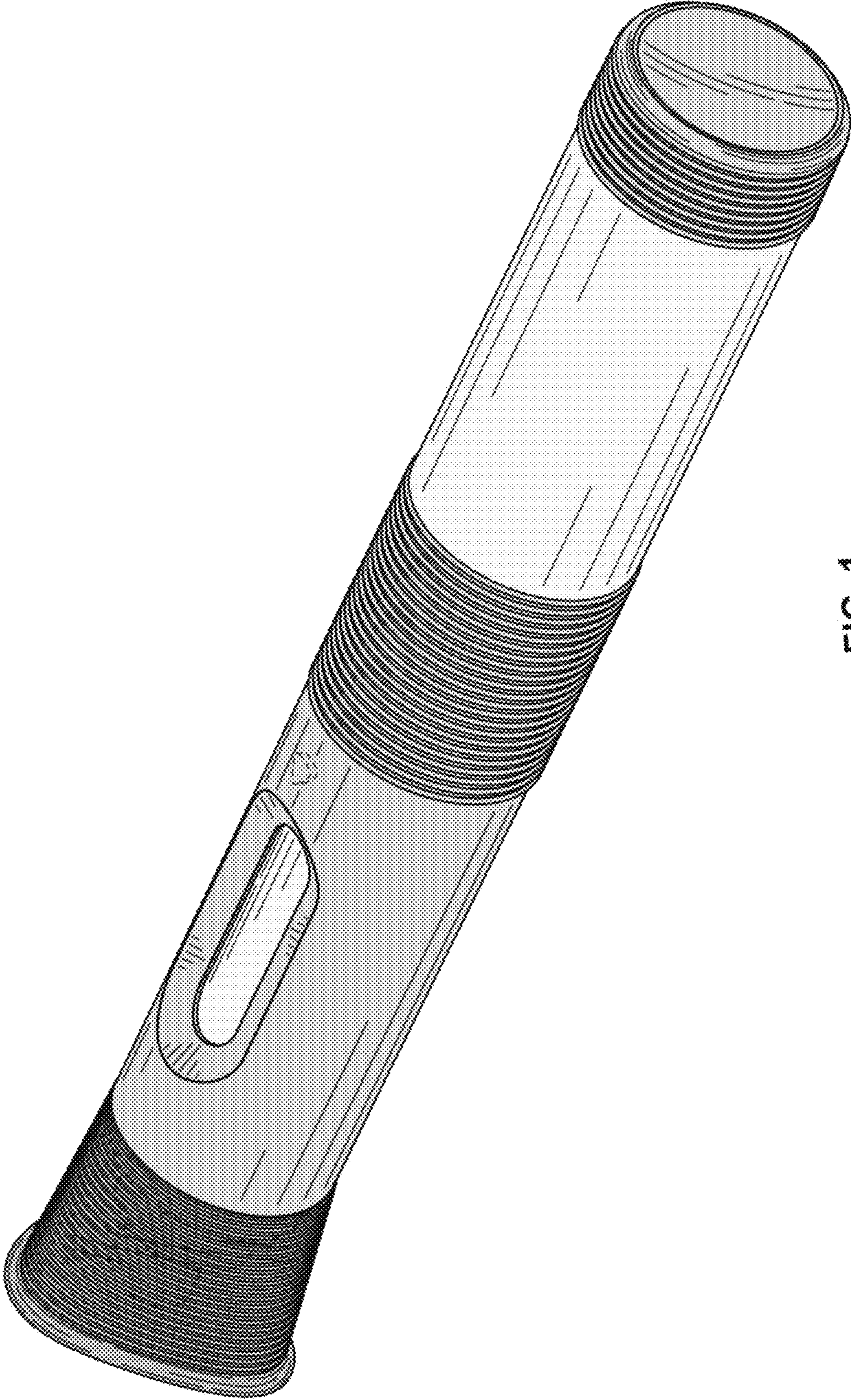


FIG. 1

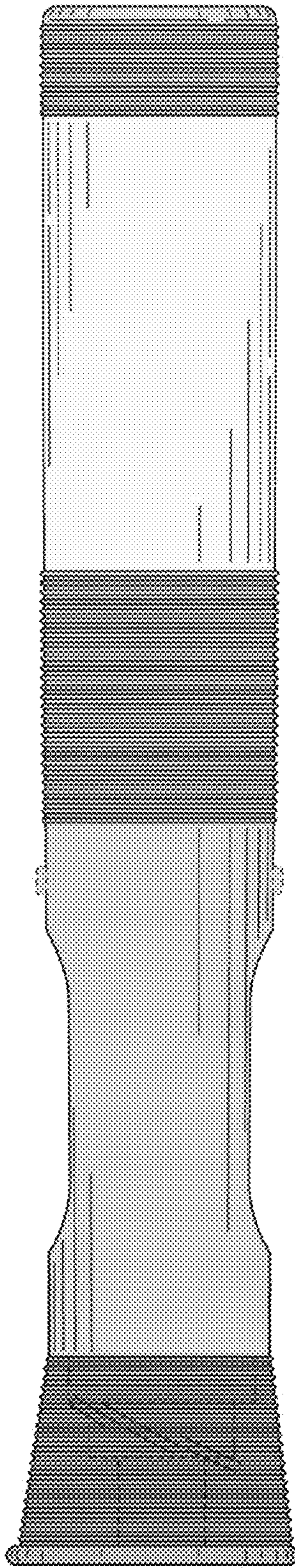


FIG. 2

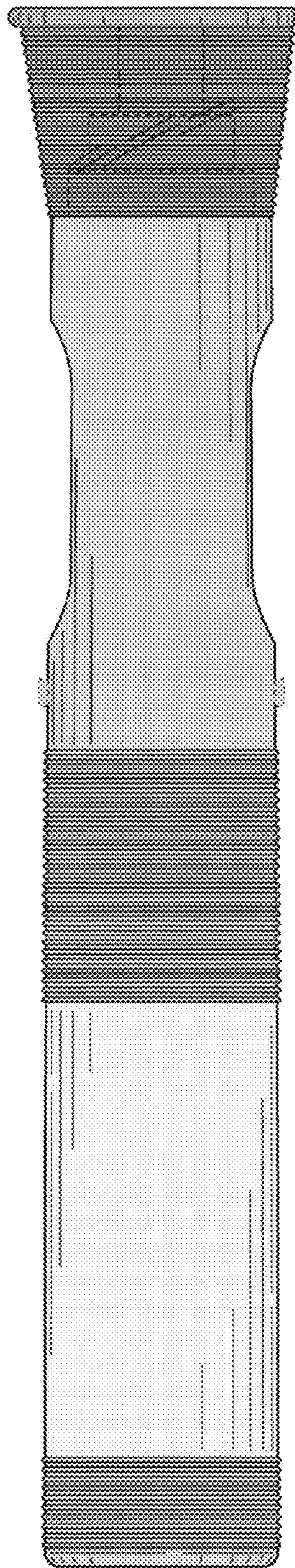


FIG. 3

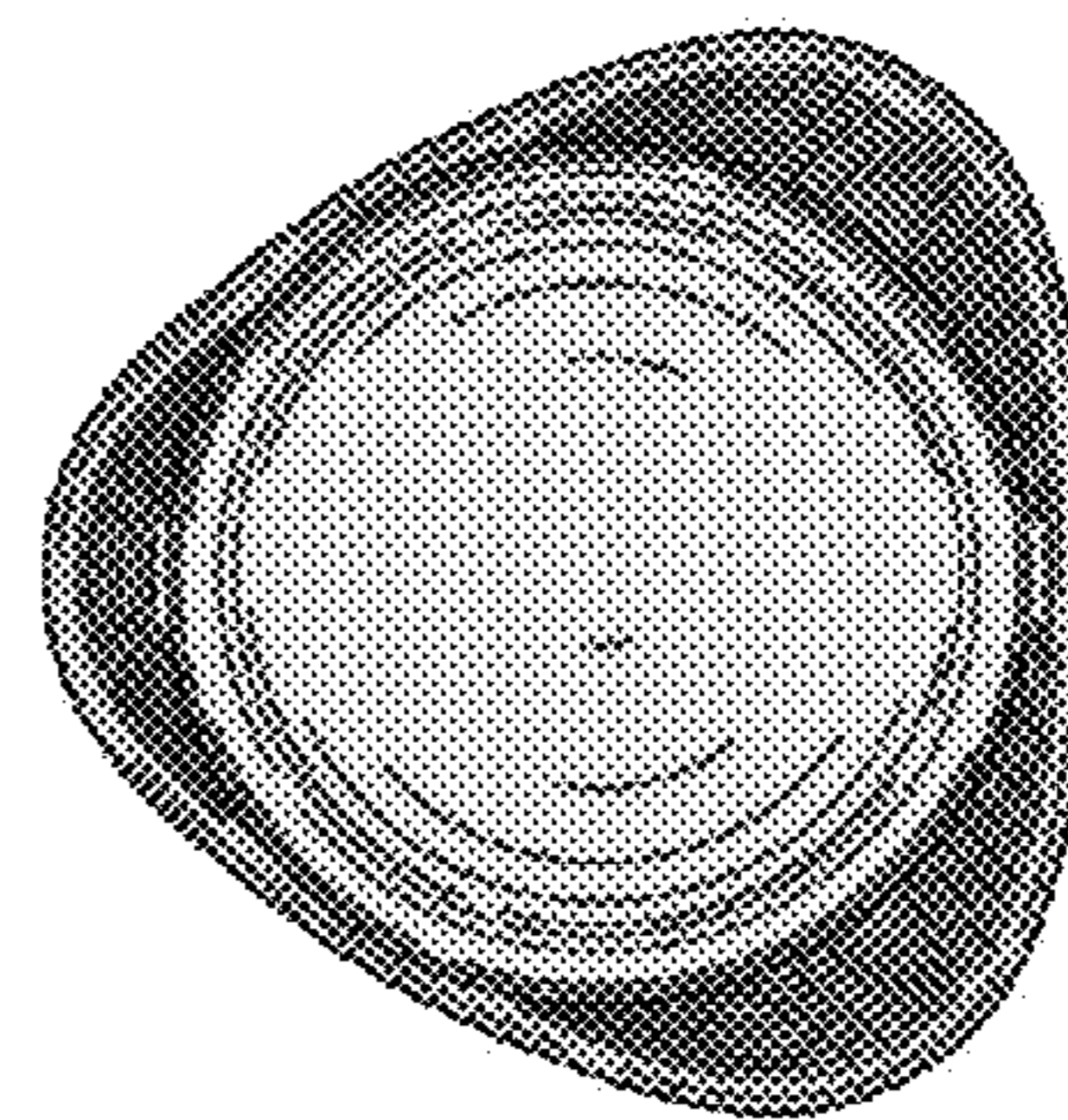


FIG. 4

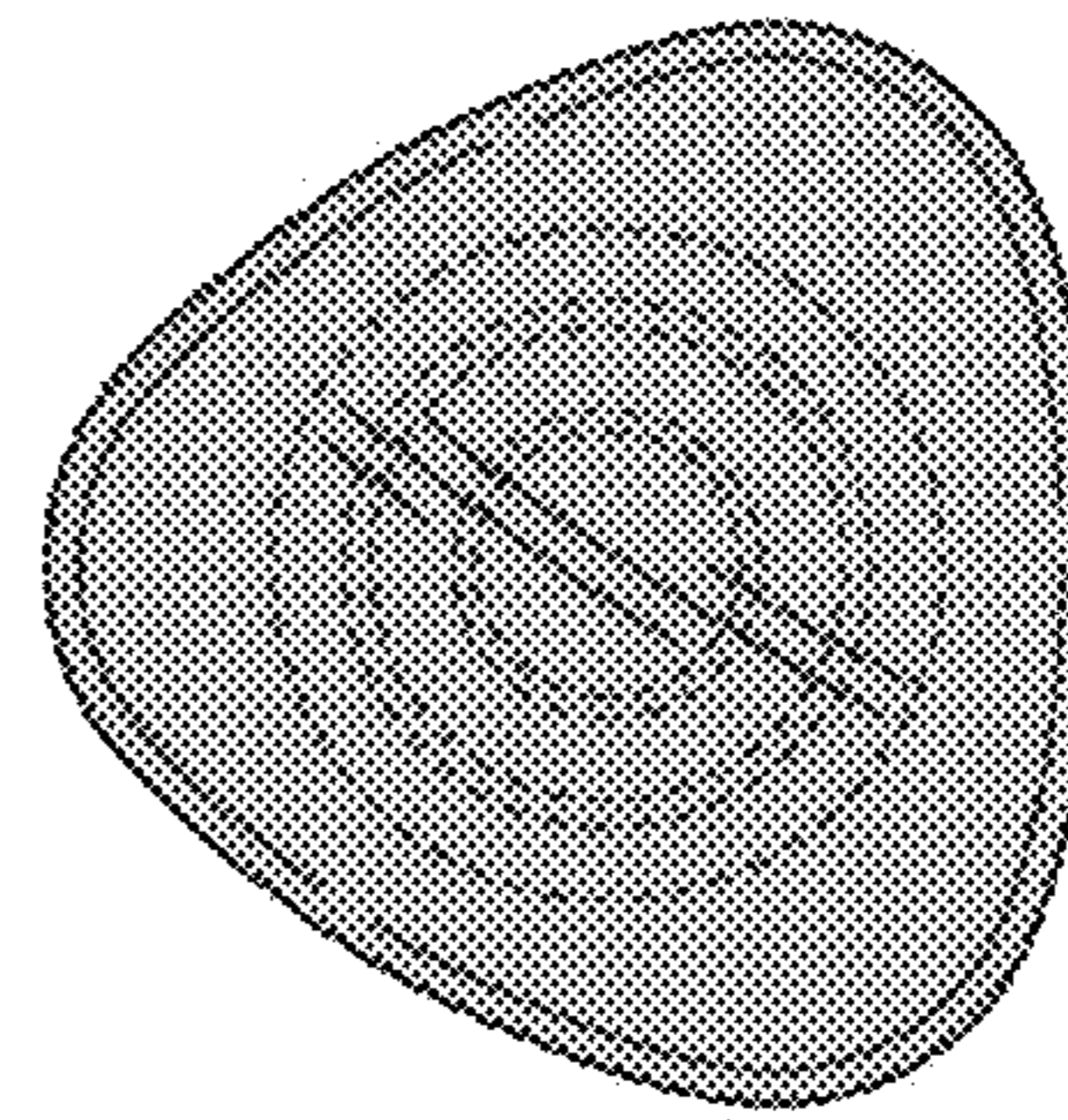


FIG. 5

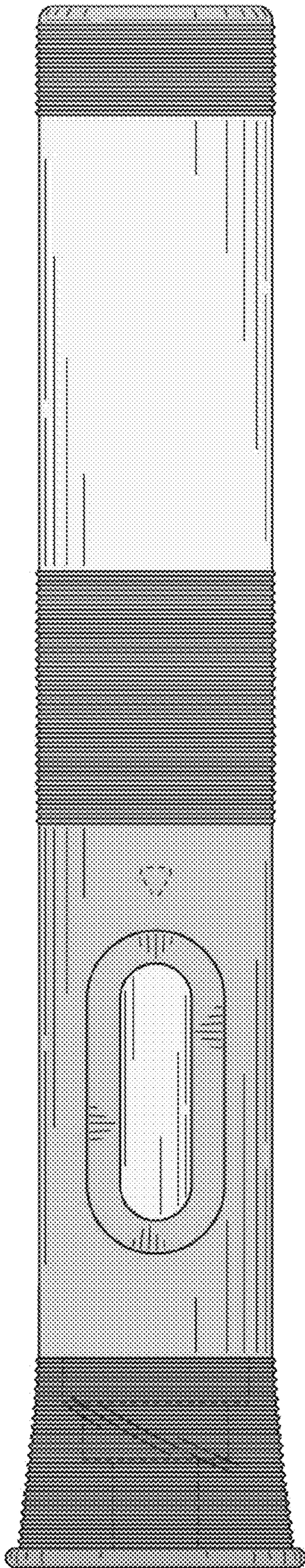


FIG. 6

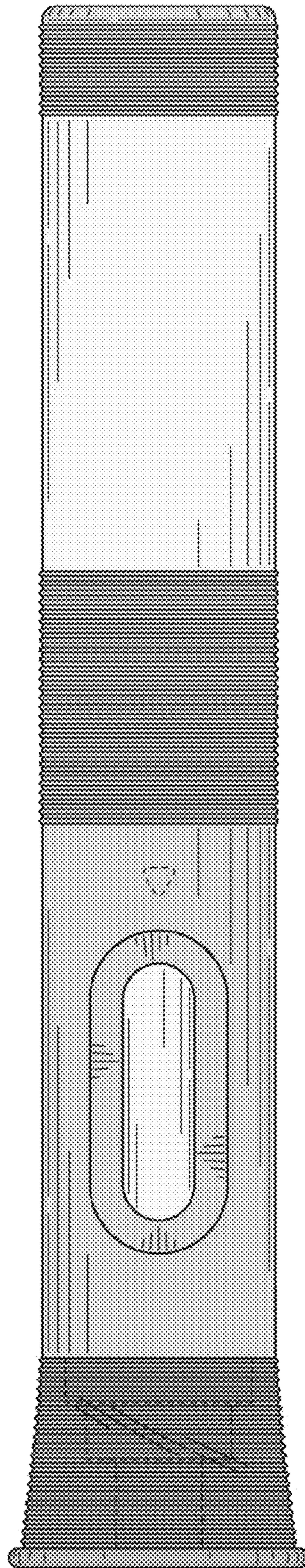


FIG. 7

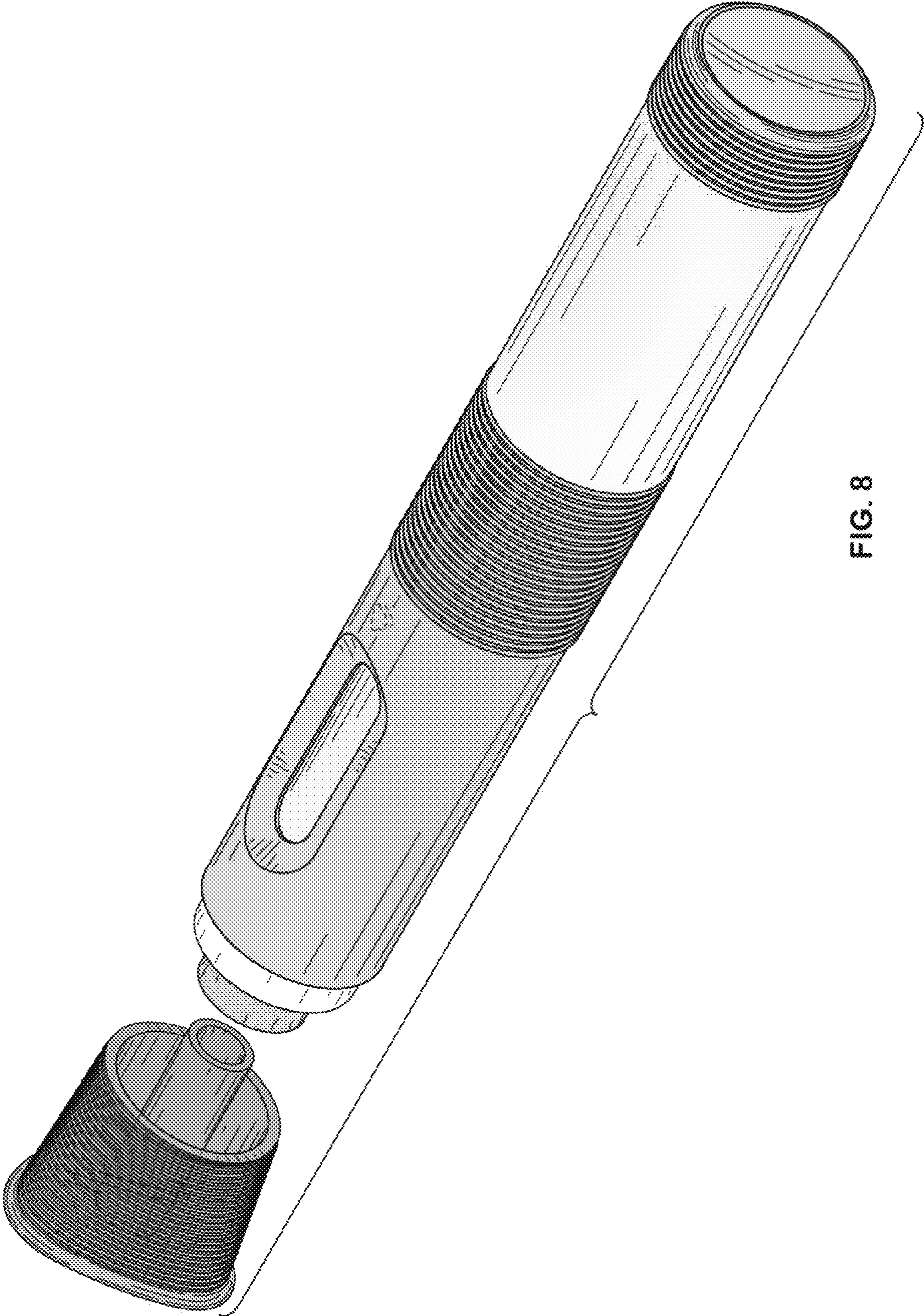


FIG. 8