US00D922567S

(12) United States Design Patent

Boyaval et al.

(10) Patent No.: US D922,567 S
(45) Date of Patent: ** Jun. 15, 2021

(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.: **29/748,308**

(22) Filed: **Aug. 28, 2020**

Related U.S. Application Data

(62) Division of application No. 29/723,028, filed on Feb. 4, 2020, now Pat. No. Des. 898,189, which is a (Continued)

(51) **LOC (13) 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

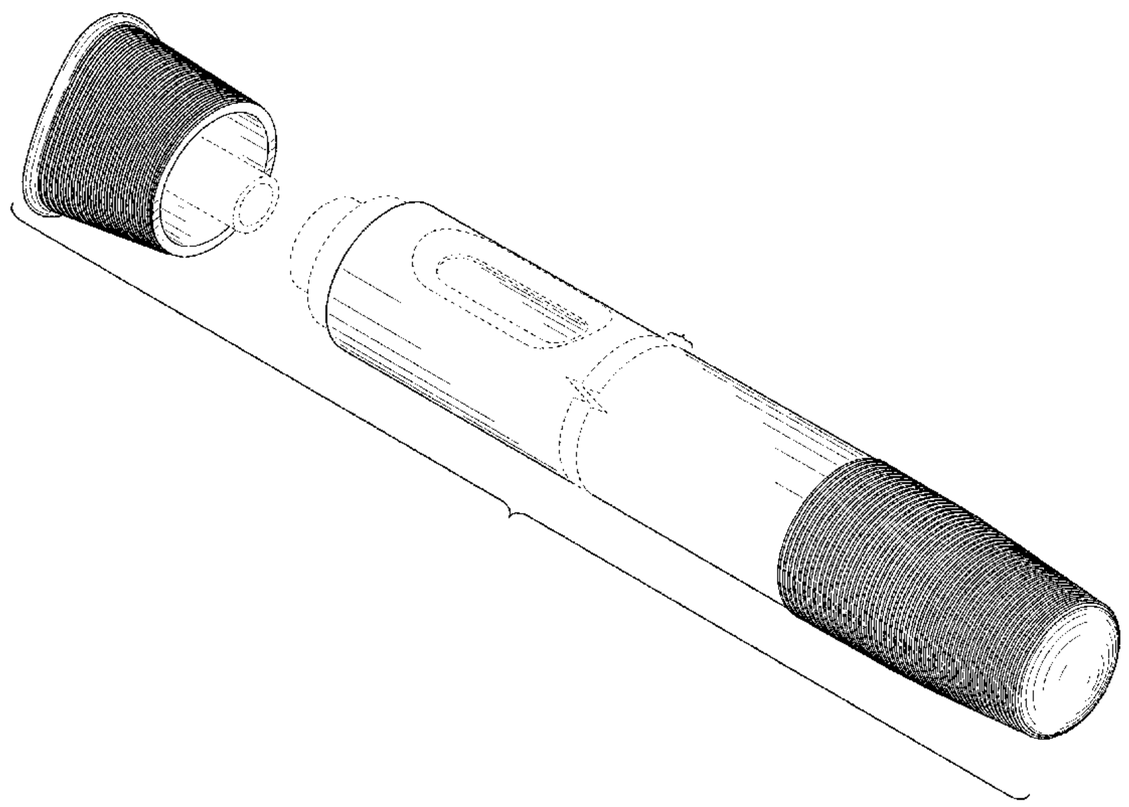
(57) **CLAIM**

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

DESCRIPTION

FIG. **1** is a perspective view showing a new 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 drug with removable cap of FIGS. **1-7** with the removable cap removed.
The autoinjector is shown with symbolic breaks in its length. The appearance of any portion of the article between the break lines forms no part of the claimed design.
The dashed lines immediately adjacent to the shaded areas in the figures represent the boundaries of the claimed design. The dashed lines in the figures illustrate the portions of the design that form no part of the claimed design. None of the broken lines form any part of the claimed design.

1 Claim, 4 Drawing Sheets



Related U.S. Application Data

division of application No. 29/645,895, filed on Apr. 30, 2018, now Pat. No. Des. 878,560, which is a 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 et al.	
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 et al.	
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. et al.	
D757,255	S	5/2016	Wohlfahrt et al.	
D758,566	S	6/2016	Chen	
D758,567	S	6/2016	Wohlfahrt et al.	
D758,568	S	6/2016	Wohlfahrt et al.	
D758,569	S	6/2016	Wohlfahrt et al.	
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 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.	
D773,650	S	12/2016	Fourt et al.	
D774,639	S	12/2016	Saussaye 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.	
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 et al.	
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 et al.	
D886,282	S *	6/2020	Stonecipher	D24/114
D892,311	S *	8/2020	Nicholas	D24/113
D892,312	S *	8/2020	Nicholas	D24/113
10,780,256	B2 *	9/2020	Cordoba	A61M 5/001
D898,900	S *	10/2020	Atterbury	D24/113
2004/0068283	A1	4/2004	Fukuzawa et al.	
2006/0100655	A1	5/2006	Leong et al.	
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.	
2014/0228769	A1 *	8/2014	Karlsson	A61M 5/31505 604/197
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.	
2020/0179612	A1 *	6/2020	Wei	A61M 5/31578
2020/0258425	A1 *	8/2020	Foley	A61M 5/31543

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, Mar. 4, 2018.

* cited by examiner

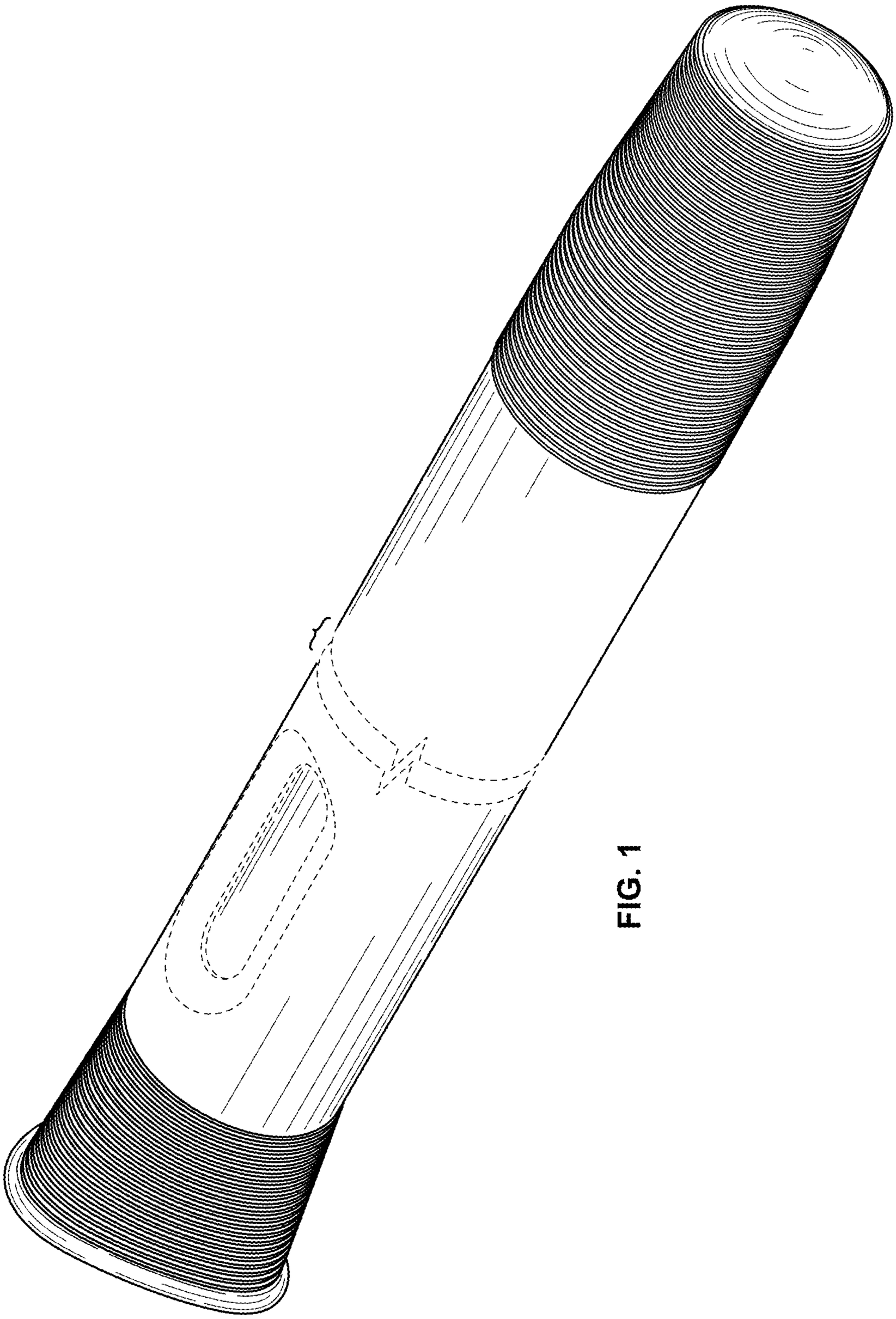


FIG. 1

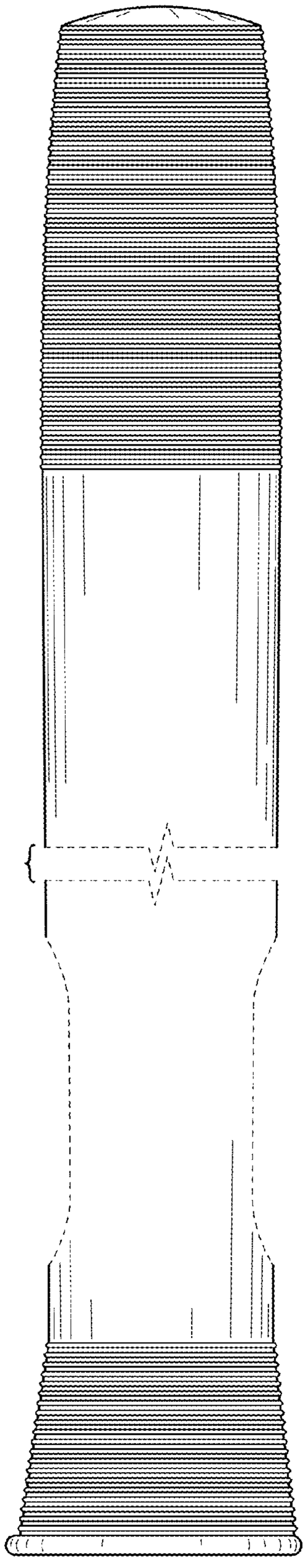


FIG. 2

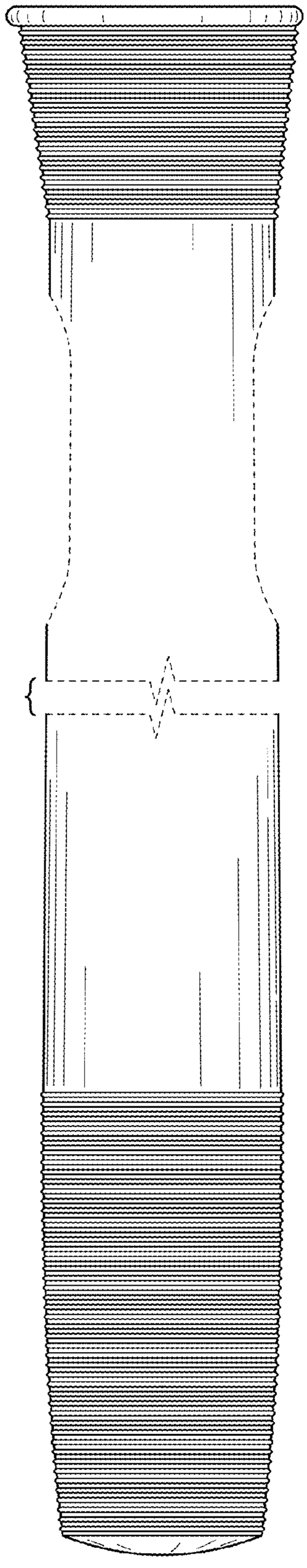


FIG. 3

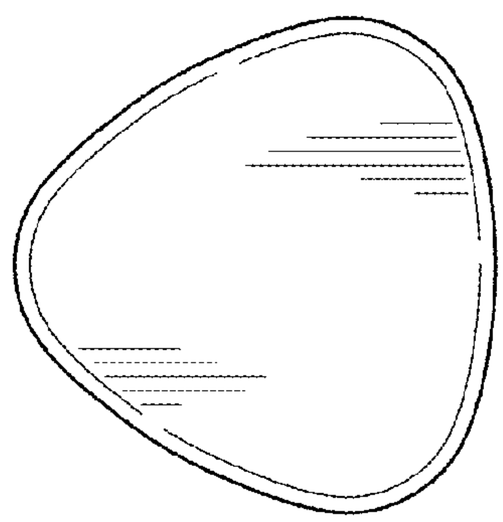


FIG. 5

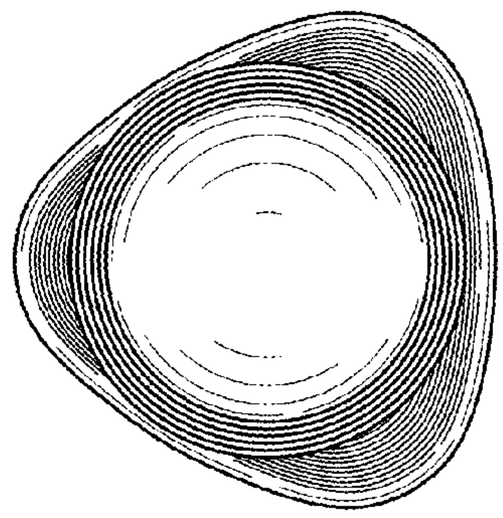


FIG. 4

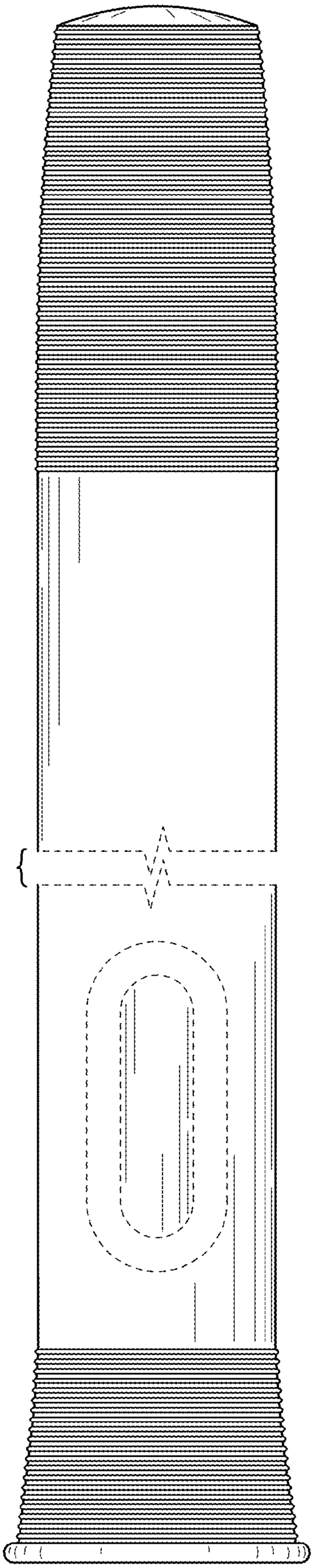


FIG. 6

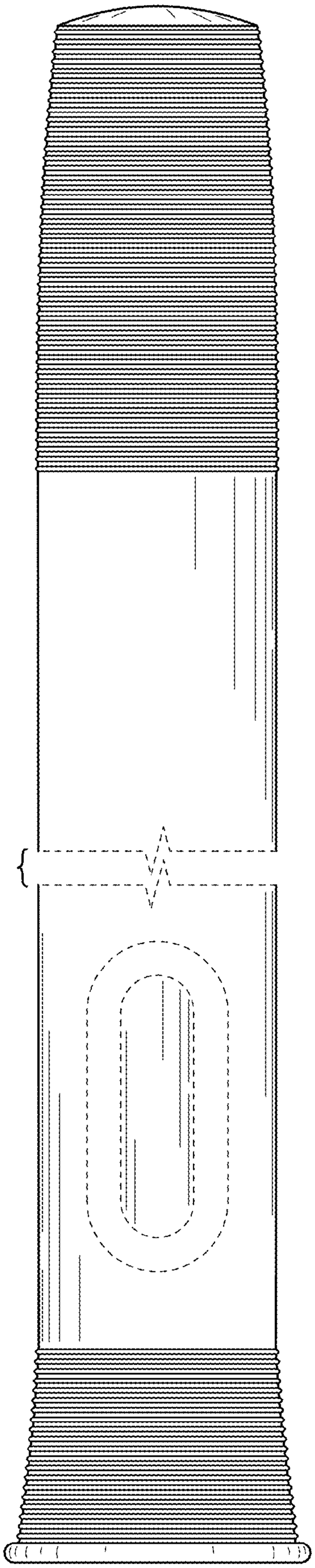


FIG. 7

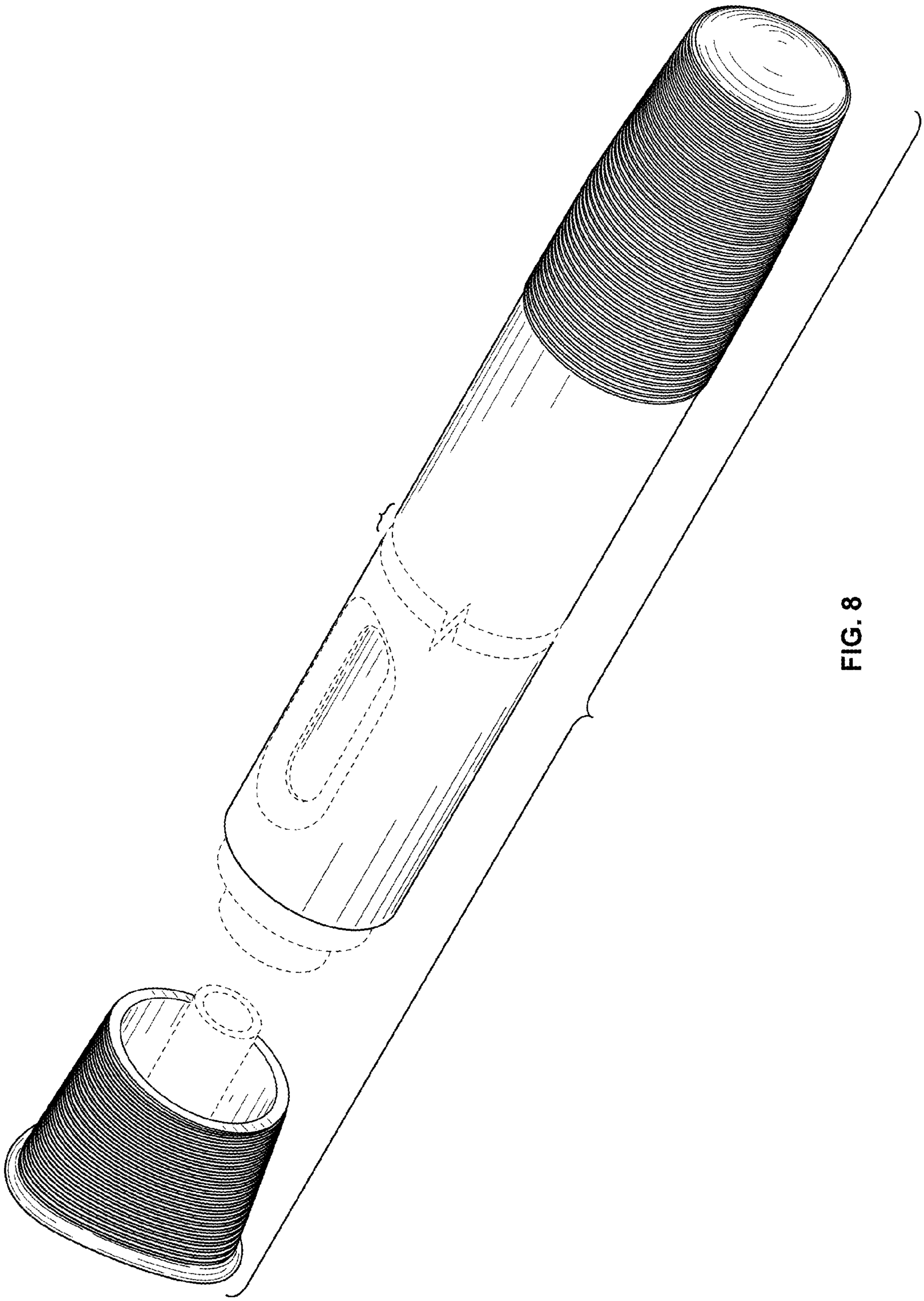


FIG. 8