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(54) HANDHELD DRUG DELIVERY DEVICE

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USPC D24/112–114, 108, 133, 130, 127, 186
CPC A61M 5/178; A61M 3/00; A61M 5/20; A61M 5/31; A61M 5/3146; A61M 5/3129; A61M 5/3148; A61M 5/315
See application file for complete search history.

(56) References Cited

U.S. PATENT DOCUMENTS

758,567 A	4/1904	Wohlfahrt et al.
3,316,909 A	5/1967	Cowley
D321,472 S	11/1991	Evans et al.

(Continued)

FOREIGN PATENT DOCUMENTS

CA	3127415 A1	9/2020
CN	302858428	6/2014

(Continued)

OTHER PUBLICATIONS

Office Action and Search Report for Taiwan application No. 1066305338, dated Mar. 26, 2018.
(Continued)

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(57) CLAIM

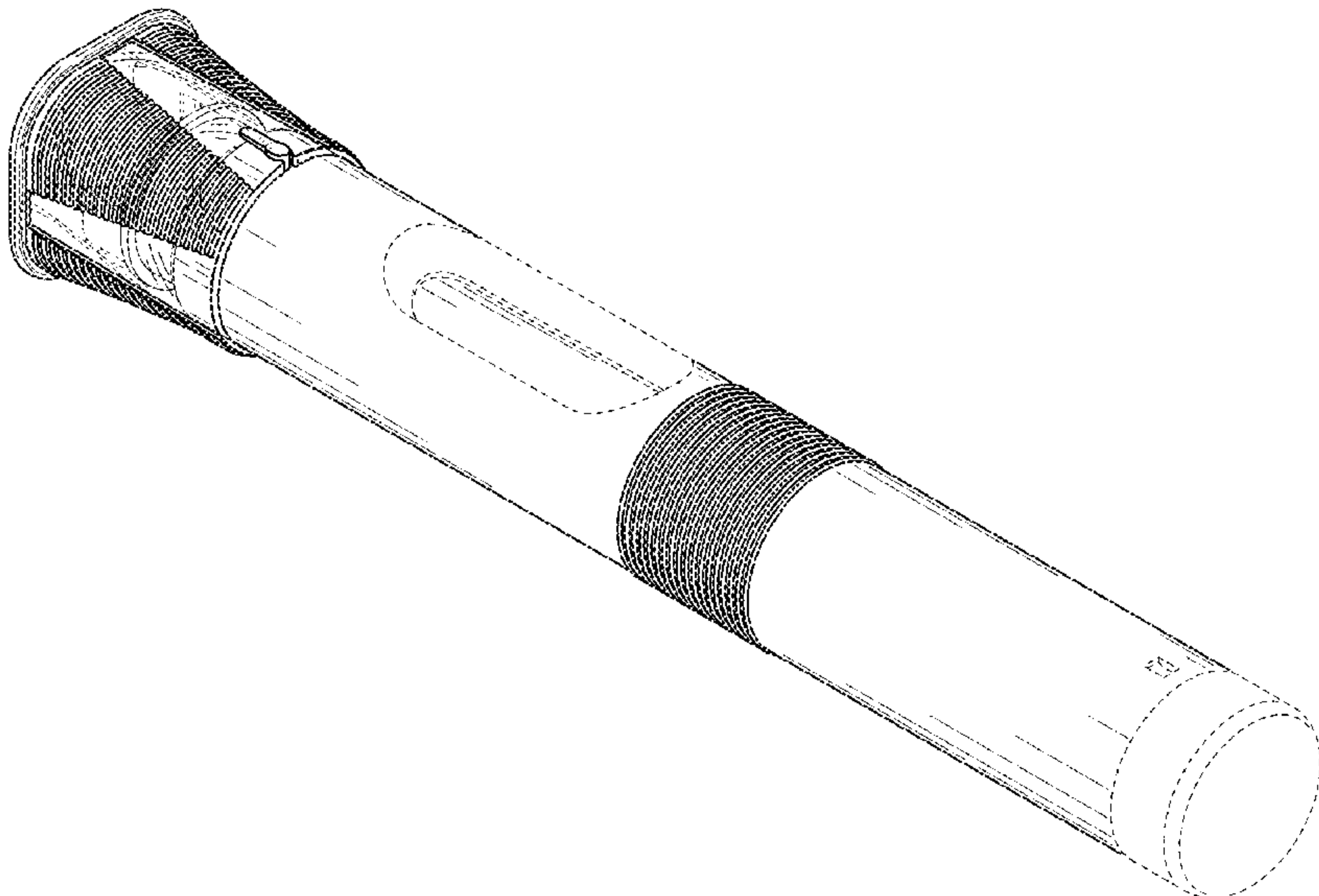
The ornamental design for a handheld drug delivery device, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view showing a fourth embodiment of a new design for a handheld drug delivery device; FIG. 2 is a front view of the handheld drug delivery device of FIG. 1; FIG. 3 is a rear view of the handheld drug delivery device of FIG. 1; FIG. 4 is a right-side view of the handheld drug delivery device of FIG. 1; FIG. 5 is a left-side view of the handheld drug delivery device of FIG. 1; FIG. 6 is a top view of the handheld drug delivery device of FIG. 1; FIG. 7 is a bottom view of the handheld drug delivery device of FIG. 1; FIG. 8 is a perspective view of the handheld drug delivery device of FIG. 1 with its cap removed; and, FIG. 9 is a top view of the handheld drug delivery device of FIG. 1 with its cap removed.

The broken lines show portions of the handheld drug delivery device that form no part of the claimed design. Those portions of the drawings that are not shown in color are intended to encompass designs where those portions are of any color, or are clear, transparent, opaque, or otherwise.

1 Claim, 5 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

5,098,400	A	3/1992	Crouse et al.	D732,161	S	6/2015	Ohashi
5,562,637	A	10/1996	Utterberg	D732,661	S	6/2015	Dubuc et al.
5,569,192	A	10/1996	Van der Wal	D733,869	S	7/2015	Ratjen
5,964,731	A	10/1999	Kovelman	9,072,833	B2	7/2015	Jennings et al.
D443,641	S	6/2001	Mader	9,078,973	B2	7/2015	Harms et al.
6,447,480	B1	9/2002	Brunel	D735,848	S	8/2015	Dubuc et al.
6,454,746	B1	9/2002	Bydlon et al.	9,114,212	B2	8/2015	Enggaard et al.
6,575,939	B1	6/2003	Brunel	D737,639	S	9/2015	Masalin et al.
6,585,702	B1	7/2003	Brunel	D739,011	S *	9/2015	Morrison, Jr. D24/114
D497,806	S	11/2004	Nichols et al.	D739,932	S	9/2015	Ratjen et al.
D509,296	S	9/2005	Minshull et al.	9,174,000	B2	11/2015	Bode
D545,895	S	7/2007	Okutani	9,233,212	B2	1/2016	Holmqvist
7,247,153	B2	7/2007	Guala	9,238,111	B2	1/2016	Marshall et al.
7,370,759	B2	5/2008	Hommann	9,242,050	B2	1/2016	Abry
7,397,730	B2	7/2008	Skyggebjerg et al.	9,272,094	B2	3/2016	Boyd et al.
7,597,685	B2	10/2009	Olson	9,295,784	B2	3/2016	Eggert et al.
D605,006	S	12/2009	Shiao	9,302,053	B2	4/2016	Holmqvist
D612,486	S	3/2010	Van der Stappen	D755,956	S	5/2016	McLoughlin et al.
D616,089	S	5/2010	Van der Stappen	D757,255	S	5/2016	Wohlfahrt et al.
D619,244	S	7/2010	Van der Stappen	9,333,305	B2	5/2016	McLoughlin et al.
D620,106	S	7/2010	Van der Stappen	9,339,610	B2	5/2016	Julian et al.
D621,929	S	8/2010	Van der Stappen	D758,566	S	6/2016	Chen
D622,374	S	8/2010	Julian et al.	D758,567	S	6/2016	Wohlfahrt et al.
7,771,397	B1	8/2010	Olson	D758,568	S	6/2016	Wohlfahrt et al.
D623,738	S	9/2010	Van der Stappen	D758,569	S	6/2016	Wohlfahrt et al.
7,794,432	B2	9/2010	Young et al.	D758,570	S	6/2016	Wohlfahrt et al.
7,806,861	B2	10/2010	Witowski	D758,571	S	6/2016	Geert-Jensen et al.
D626,994	S	11/2010	Gerules	D759,813	S	6/2016	Newman et al.
D627,061	S	11/2010	Van der Stappen	D759,814	S	6/2016	Newman et al.
D628,690	S	12/2010	Galbraith	D765,239	S	8/2016	Hauck et al.
D629,509	S	12/2010	Julian et al.	D765,240	S	8/2016	Hauck et al.
D640,786	S	6/2011	Sato et al.	9,421,336	B2	8/2016	Ekman et al.
7,988,675	B2	8/2011	Gillespie, III et al.	D766,425	S	9/2016	Hauck et al.
8,062,255	B2	11/2011	Brunnberg et al.	D767,119	S	9/2016	Hauck et al.
D660,958	S	5/2012	McLoughlin et al.	D770,610	S	11/2016	Saussaye et al.
8,298,194	B2	10/2012	Moller	D773,648	S	12/2016	Wohlfahrt et al.
D671,638	S	11/2012	Young et al.	D773,650	S *	12/2016	Fourt D24/113
8,313,470	B2	11/2012	Abry	D774,639	S	12/2016	Saussaye et al.
8,357,125	B2	1/2013	Grunhut et al.	D774,641	S	12/2016	Miggels et al.
8,361,025	B2	1/2013	Lawlis et al.	D775,279	S	12/2016	Shen
8,372,035	B2	2/2013	Matusch	D780,909	S	3/2017	Burkett et al.
D678,514	S	3/2013	Foley et al.	9,586,007	B2	3/2017	Roervig et al.
D683,016	S	5/2013	Mirza et al.	D783,816	S	4/2017	Wohlfahrt et al.
8,529,518	B2	9/2013	Larsen et al.	9,623,199	B2	4/2017	Richter et al.
8,568,359	B2	10/2013	Carrel et al.	9,656,027	B2	5/2017	Quinn
8,568,364	B2	10/2013	Plumptre	D788,909	S	6/2017	Ratjen
D692,998	S	11/2013	Broberg et al.	D789,519	S	6/2017	Ratjen et al.
D696,397	S	12/2013	Guarraia et al.	D790,686	S	6/2017	Cox et al.
D696,770	S	12/2013	Schneider et al.	D793,547	S	8/2017	Burkett et al.
D696,772	S	12/2013	Schneider et al.	D794,178	S	8/2017	Daniel et al.
D696,773	S	12/2013	Schneider et al.	D794,777	S	8/2017	Daniel et al.
D696,774	S	12/2013	Guarraia et al.	D794,778	S	8/2017	Daniel et al.
D696,775	S	12/2013	Guarraia et al.	D799,026	S	10/2017	Jones et al.
8,608,709	B2	12/2013	Moller et al.	D802,748	S	11/2017	Mills et al.
D697,205	S	1/2014	Schneider et al.	D802,751	S	11/2017	Ratjen et al.
8,647,299	B2	2/2014	Stamp	D809,137	S	1/2018	Ratjen
8,696,618	B2	4/2014	Kramer et al.	D810,280	S	2/2018	Tharp et al.
8,740,871	B2	6/2014	Lawlis et al.	D810,282	S	2/2018	Ratjen
D708,317	S	7/2014	Schneider et al.	9,895,493	B2	2/2018	Burnell et al.
8,814,828	B2	8/2014	Llewellyn-Hyde et al.	D812,746	S	3/2018	Umemura
8,817,258	B2	8/2014	Whalley et al.	D813,379	S	3/2018	Mills et al.
D714,932	S	10/2014	Hall et al.	D814,022	S	3/2018	Boyaval et al.
D715,422	S	10/2014	Hall et al.	RE46,789	E	4/2018	Olson
D717,428	S	11/2014	Sendatzki et al.	D815,732	S	4/2018	Mills et al.
8,882,722	B2	11/2014	Bode et al.	D816,212	S	4/2018	Daniel et al.
D721,802	S	1/2015	Ohashi	D819,198	S	5/2018	Boyaval et al.
D722,158	S	2/2015	Magome et al.	D819,200	S	5/2018	Stonecipher et al.
D722,256	S	2/2015	Kita	D819,804	S	6/2018	Knight et al.
8,945,065	B2	2/2015	Torris et al.	9,987,436	B2	6/2018	Giambattista et al.
8,945,067	B2	2/2015	McLoughlin et al.	D822,198	S	7/2018	Stonecipher et al.
8,992,484	B2	3/2015	Radmer et al.	D822,199	S	7/2018	Clawson et al.
D726,902	S	4/2015	McLoughlin et al.	D823,459	S	7/2018	Bendek et al.
D728,782	S	5/2015	Dubuc et al.	D827,127	S	8/2018	Donnelly
9,022,982	B2	5/2015	Karlsson et al.	D827,128	S	8/2018	Boyaval et al.
9,033,932	B2	5/2015	Holmqvist	D830,539	S	10/2018	Boyaval et al.
				D831,822	S	10/2018	Guillermo et al.
				10,159,795	B2	12/2018	Cave
				10,265,476	B2	4/2019	Laiosa et al.
				D851,754	S	6/2019	Boyaval et al.

(56)

References Cited

U.S. PATENT DOCUMENTS

10,335,553 B2 7/2019 Bendek
D857,192 S * 8/2019 Burkett D24/112
D861,859 S 10/2019 Rapp et al.
D864,378 S 10/2019 Tafazoli et al.
D866,751 S 11/2019 Rogge et al.
D866,752 S 11/2019 Rogge et al.
D866,757 S 11/2019 Diluzio et al.
D867,588 S 11/2019 Rogge et al.
D868,245 S 11/2019 Holmqvist et al.
D868,961 S 12/2019 Stewart et al.
D870,270 S * 12/2019 Burkett D24/112
10,512,725 B1 12/2019 Bauss et al.
D878,560 S * 3/2020 Boyaval D24/113
D878,563 S 3/2020 Clawson et al.
D878,564 S 3/2020 Clawson et al.
D878,566 S 3/2020 Jansen
D882,071 S * 4/2020 Stonecipher D24/113
RE48,006 E * 5/2020 Fourt A61M 5/00
D24/113
D883,475 S * 5/2020 Boyaval D24/117
D884,161 S 5/2020 Stewart et al.
D886,281 S 6/2020 Boyaval et al.
D886,282 S 6/2020 Stonecipher et al.
D892,311 S 8/2020 Nicholas et al.
D892,312 S 8/2020 Nicholas et al.
D893,710 S * 8/2020 Neby D24/114
10,780,256 B2 9/2020 Cordoba et al.
D898,189 S * 10/2020 Boyaval D24/113
D898,900 S 10/2020 Atterbury et al.
D917,064 S 4/2021 Ribeiro et al.
D922,566 S 6/2021 Ono
D922,567 S 6/2021 Boyaval et al.
D931,443 S 9/2021 Bainton et al.
D936,824 S 11/2021 Donnelly
D956,212 S 6/2022 Petersen et al.
D958,329 S 7/2022 Bourelle et al.
D962,423 S 8/2022 Melander et al.
D965,140 S 9/2022 Petersen et al.
D973,866 S 12/2022 Bourelle et al.
D974,547 S 1/2023 O'Malley et al.
D985,116 S 5/2023 Davis et al.
D985,117 S 5/2023 Davis et al.
D985,118 S 5/2023 Davis et al.
D985,119 S 5/2023 Melander et al.
D990,668 S 6/2023 Bourelle et al.
D992,109 S 7/2023 O'Malley et al.
2004/0068283 A1 4/2004 Fukuzawa et al.
2005/0148933 A1 7/2005 Raven 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.
2009/0054849 A1 2/2009 Burnell et al.
2009/0234297 A1 9/2009 Jennings
2010/0152659 A1 6/2010 Streit et al.
2011/0098656 A1 4/2011 Burnell et al.
2012/0089098 A1 4/2012 Boyd et al.
2012/0123347 A1 5/2012 Boyd et al.
2012/0123350 A1 5/2012 Giambattista et al.
2012/0197208 A1 8/2012 Bruggemann et al.
2012/0232474 A1 9/2012 Nielsen et al.
2013/0035645 A1 2/2013 Bicknell et al.
2013/0060231 A1 3/2013 Adlon et al.
2013/0150802 A1 6/2013 Claughton
2013/0211330 A1 8/2013 Pedersen et al.
2013/0211340 A1 8/2013 Helmer
2013/0274671 A1 10/2013 Jennings et al.
2013/0281933 A1 10/2013 Cowe et al.
2013/0310746 A1 11/2013 Wozencroft
2013/0331796 A1 12/2013 Wozencroft
2014/0012205 A1 1/2014 Jugl et al.
2014/0094743 A1 4/2014 Bengtsson
2014/0101912 A1 4/2014 Abry
2014/0207073 A1 7/2014 Shang et al.
2014/0213985 A1 7/2014 Teucher et al.
2014/0221916 A1 8/2014 Kramer et al.

2014/0221936 A1 8/2014 Edhouse et al.
2014/0228769 A1 8/2014 Karlsson et al.
2014/0243750 A1 8/2014 Larsen et al.
2014/0243753 A1 8/2014 Boström
2014/0323976 A1 10/2014 Jugl et al.
2014/0330216 A1 11/2014 Weaver et al.
2014/0336588 A1 11/2014 McLoughlin et al.
2014/0343503 A1 11/2014 Holmqvist
2014/0343507 A1 11/2014 Karlsson et al.
2014/0364812 A1 12/2014 Lumme et al.
2014/0371684 A1 12/2014 Holmqvist
2015/0051553 A1 2/2015 Björk et al.
2015/0174325 A1 6/2015 Young et al.
2015/0190577 A1 7/2015 Shaanan et al.
2015/0202368 A1 7/2015 Carrel et al.
2015/0290396 A1 10/2015 Nagar et al.
2015/0335829 A1 11/2015 Giambattista et al.
2015/0367081 A1 12/2015 Rosenthal
2016/0082198 A1 3/2016 Holmqvist
2016/0106929 A1 4/2016 Fournier et al.
2016/0144132 A1 5/2016 Scanlon
2016/0151586 A1 6/2016 Kemp
2016/0193413 A1 7/2016 Gabrielsson
2016/0199589 A1 7/2016 Plumptre
2016/0220763 A1 8/2016 Teucher et al.
2016/0250421 A1 9/2016 Fincham et al.
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.
2018/0104413 A1 4/2018 McLoughlin et al.
2019/0247589 A1 8/2019 Holmqvist et al.
2019/0266921 A1 8/2019 Chang
2019/0298924 A1 10/2019 Gibson et al.
2019/0328485 A1 10/2019 Bauss et al.
2020/0179612 A1 6/2020 Wei
2020/0258425 A1 8/2020 Foley et al.
2020/0289753 A1 9/2020 André et al.
2021/0093789 A1 4/2021 Plambeck et al.
2021/0093796 A1 4/2021 Finkelstein et al.
2021/0093797 A1 4/2021 Finkelstein et al.
2021/0093799 A1 4/2021 Perot et al.
2021/0121633 A1 4/2021 Finkelstein et al.
2022/0288324 A1 9/2022 Davis et al.

FOREIGN PATENT DOCUMENTS

CN 304223460 7/2017
CN 307287422 S 4/2022
EM 003372911-0002 9/2016
EM 008038723-0005 7/2020
EP 0896827 A1 2/1999
EP 1053037 A1 11/2000
EP 1755706 A1 2/2007
EP 2253348 A1 11/2010
EP 2255842 A1 12/2010
EP 2298390 A1 3/2011
EP 2361648 A1 8/2011
EP 2555820 A2 2/2013
EP 2729203 A1 5/2014
EP 2788048 A1 10/2014
EP 2878321 A1 6/2015
EP 2902063 A1 8/2015
EP 3038682 A1 7/2016
EP 3184138 A1 6/2017
GB 9003372911-0001 9/2016
GB 9008041362-0012 7/2020
GB 6133321 4/2021
GB 6133347 4/2021
GB 6133354 4/2021
GB 6133358 4/2021
HK 2117909 6/2021
IL 67773 A 2/1985
JP 1607619 S 6/2018
JP 1634556 S 6/2019
JP 2020-534959 A 12/2020
JP 1691711 S 8/2021
RU 100256 U1 12/2010

(56)

References Cited

FOREIGN PATENT DOCUMENTS

RU	100299	U1	12/2010
TW	D179360		11/2016
TW	D179362		11/2016
WO	99/39759	A1	8/1999
WO	02/87670	A1	11/2002
WO	2005/115508	A1	12/2005
WO	2010/142812	A1	12/2010
WO	2011/126439	A1	10/2011
WO	2012/003516	A2	1/2012
WO	2012/065965	A1	5/2012
WO	2013/006119	A1	1/2013
WO	2013/085454	A1	6/2013
WO	2013/139894	A1	9/2013
WO	2014/096957	A2	6/2014
WO	2014/118105	A1	8/2014
WO	2015/001819	A1	1/2015
WO	2015/028488	A1	3/2015
WO	2015/085068	A1	6/2015
WO	2015/110533	A2	7/2015
WO	2016/055334	A1	4/2016
WO	2016/062807	A1	4/2016
WO	2016/102299	A1	6/2016
WO	2016/198387	A1	12/2016
WO	2018/111796	A1	6/2018
WO	2018/202458	A1	11/2018
WO	2021/030066	A1	2/2021

OTHER PUBLICATIONS

Office Action, Israel Design Office, Application No. 60912, Mar. 4, 2018.

Notice of Allowance received for U.S. Appl. No. 29/757,411, mailed on Sep. 16, 2022, 8 pages.

Requirement for Restriction/Election received for received for U.S. Appl. No. 29/757,411, mailed on Jun. 22, 2022, 6 pages.

U.S. Appl. No. 12/597,230, Notice of Allowance, mailed Jan. 11, 2023.

U.S. Appl. No. 16/832,987, Non-Final Office Action, mailed Sep. 29, 2022.

U.S. Appl. No. 29/757,416, Notice of Allowance, mailed Sep. 16, 2022.

U.S. Appl. No. 29/757,416, Requirement for Restriction/Election, mailed Jun. 22, 2022.

U.S. Appl. No. 29/773,604, Non-Final Office Action, mailed Sep. 27, 2022.

U.S. Appl. No. 29/776,495, Non-Final Office Action, mailed Sep. 27, 2022.

U.S. Appl. No. 29/776,495, Notice of Allowance, mailed Jan. 20, 2023.

U.S. Appl. No. 29/783,469, Requirement for Restriction/Election, mailed Dec. 20, 2022.

“30 Years in the Making—An Inside Perspective on the Emergence of Autoinjectors”, available on ON drug Delivery Magazine, Issue 101 (Oct. 2019), pp. 20-23, by McGowan M, published Oct. 2, 2019 [online], [site visited Dec. 7, 2021], Internet URL: <https://www.ondrugdelivery.com/wp-content/uploads/2019/09/101_2019_SHL_article.pdf> (Year: 2019).

Aimovig, Amgen, [Postdate unknown], [Site seen Sep. 6, 2022], Seen at URL: <https://www.amgeninjectiondemos.com/Aimovig> (Year: 2022).

Auto Injectors, Pen Injectors and Inhaler Systems, Pharmaceutical Technology, [postdate: unknown], [Site seen May 3, 2022], Seen at URL: <https://www.pharmaceutical-technology.com/contractors/drug-delivery/shl-group/> (Year: 2022).

BD Vystra Disposable Pen, BD.com, [Postdate: Jan. 9, 2019], [Site seen May 3, 2022], Seen at URL: <https://drugdeliversystems.bd.com/products/self-injection-systems/vystra-disposable-pen> (Year: 2019). International Application No. PCT/US22/19414, International Search Report and Written Opinion, mailed Jul. 1, 2022.

International Application No. PCT/US22/19418, International Search Report and Written Opinion, mailed Jul. 13, 2022.

Parental Drug Association, “Trends in the Self-injection Device Market & next Generation Platform Technologies,” [post date 2018], [Site seen Sep. 6, 2022], Seen at URL: <https://pda-asiapacific.glueup.com/resources/protected/organization/1176/event/26285/93bd1ce6-33aa-48c1-b0b7-9833dd5155bc.pdf> (Year: 2022).

Roy et al., Autoinjector—A smart device for emergency cum personal therapy, Saudi Pharmaceutical Journal, 29(10):1205-1215 (2021).

U.S. Appl. No. 29/726,050, Ex Parte Quayle Action, mailed Jan. 7, 2022.

U.S. Appl. No. 29/726,050, Notice of Allowance, mailed Mar. 23, 2022.

U.S. Appl. No. 29/773,601, Non-Final Office Action, mailed Sep. 14, 2022.

U.S. Appl. No. 29/773,601, Requirement for Restriction/Election, mailed Jun. 22, 2022.

U.S. Appl. No. 29/773,604, Requirement for Restriction/Election, mailed Jun. 22, 2022.

U.S. Appl. No. 29/776,495, Requirement for Restriction/Election, mailed Jun. 22, 2022.

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

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

McGowan, 30 Years in the Making—An Inside Perspective on the Emergency of Autoinjectors, ONdrugDelivery Magazine, Issue 101, pp. 20-23 (Oct. 2019).

Gvoke Hypopen, Xeris, fiercepharma.com, [Post date: Aug. 14, 2020], [Site seen Apr. 6, 2023], Seen at URL: <https://www.fiercepharma.com/drug-delivery/xeris-gvoke-hypopen-soars-spite-covid-19> (Year: 2020).

Ypsomate, Ypsomed, issuu.com, [Postdate: Oct. 10, 2022], [Site seen Apr. 6, 2023], Seen at URL: https://issuu.com/guyfurness/docs/pfs_-_ondd_-_oct_2022_-_issue_138_-_hires (Year: 2022).

“Innovating in the viscosity design space with a new 2.25 mL autoinjector platform”, BD Intevia™, downloaded from the Internet at: <<https://www.cphi-online.com/innovating-in-the-viscosity-design-space-with-a-news112108.html>> (Year: 2021).

Amneal Pharmaceuticals, Epinephrine Auto-Injector, downloaded from the Internet at: <<https://www.safcodental.com/catalog/pharmaceuticals-and-otc/pain-relievers-and-antibiotics/epinephrine-auto-injector>> (Year: 2023).

Owen Mumford Pharmaceutical Services, Auto-injectors for intramuscular and subcutaneous administration, [Post date unknown] downloaded from the Internet at: <<https://www.owenmumford.com/en/drug-delivery/auto-injectors>> (Year: 2023).

PiccoJect self injector, Haselmeier, downloaded from the Internet at: <<https://globaldesignnews.com/this-compact-user-focused-auto-injector-platform-innovates-with-improved-features-that-address-key-challenges-making%E2%80%A6>> (Year: 2023).

SHL Group, Auto Injectors & Pen Injectors: A user-centric design approach, downloaded from the Internet at: <<https://www.ondrugdelivery.com/wp-content/uploads/2017/05/SHL-HR.pdf>> (2015).

U.S. Appl. No. 29/723,028, Requirement for Restriction, mailed Apr. 7, 2020.

U.S. Appl. No. 29/773,604, Notice of Allowance, mailed Feb. 6, 2023.

* cited by examiner

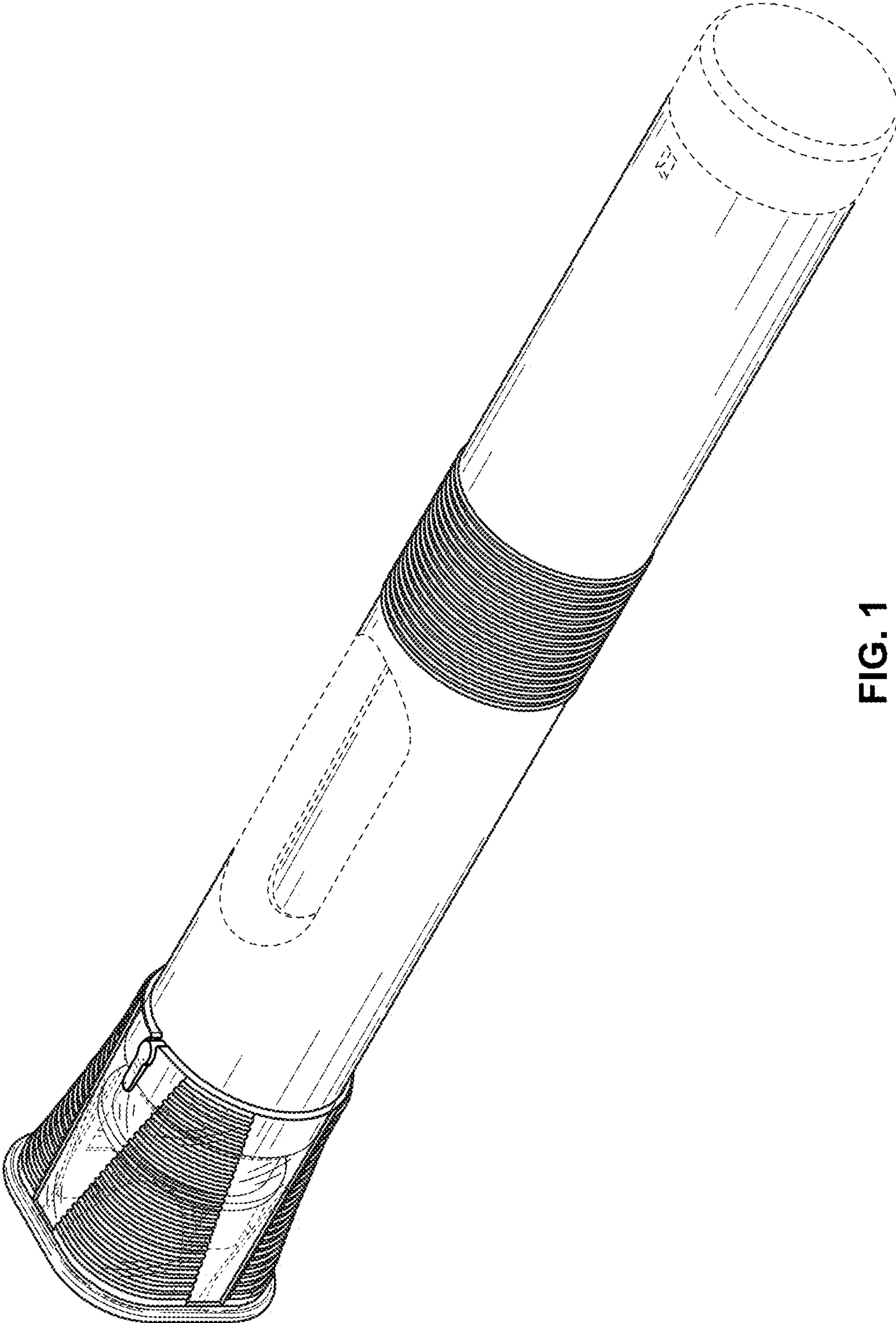


FIG. 1

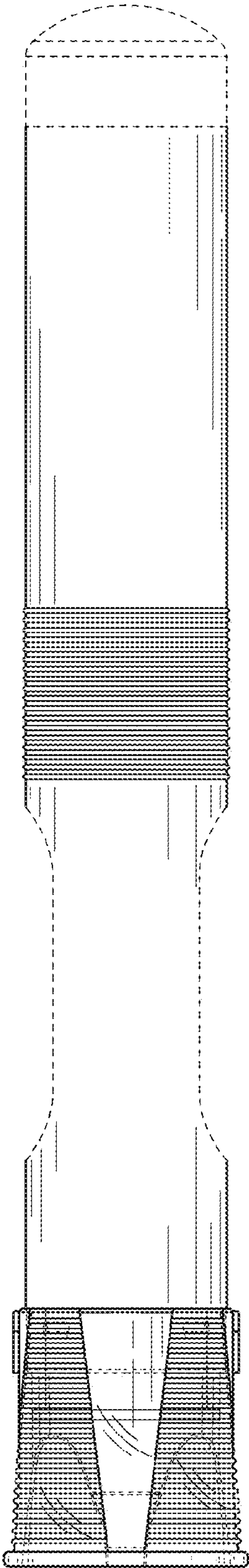


FIG. 2

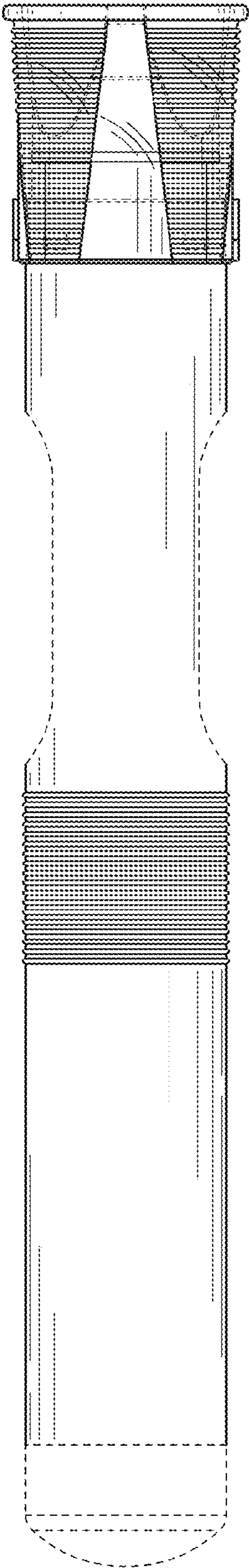


FIG. 3

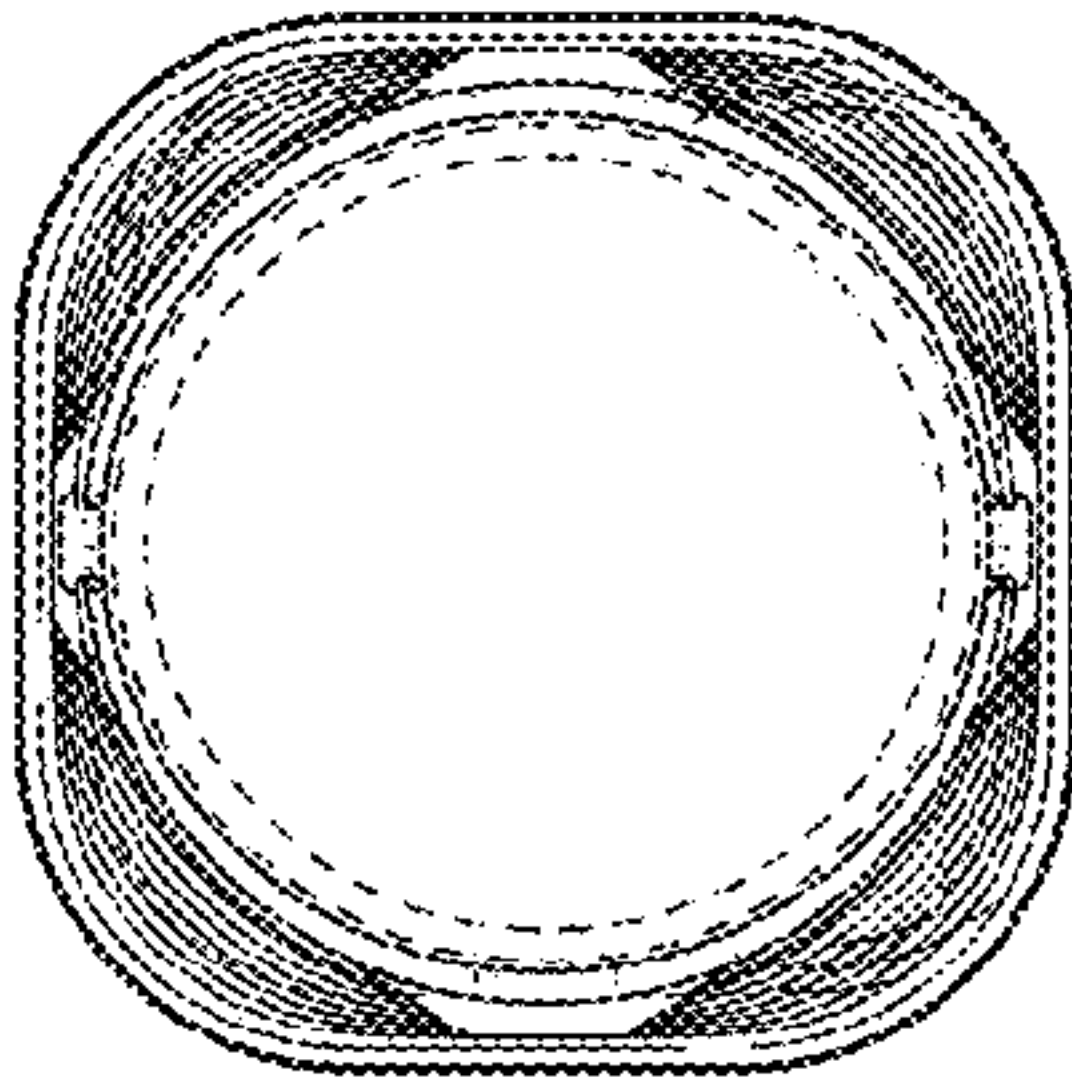


FIG. 4

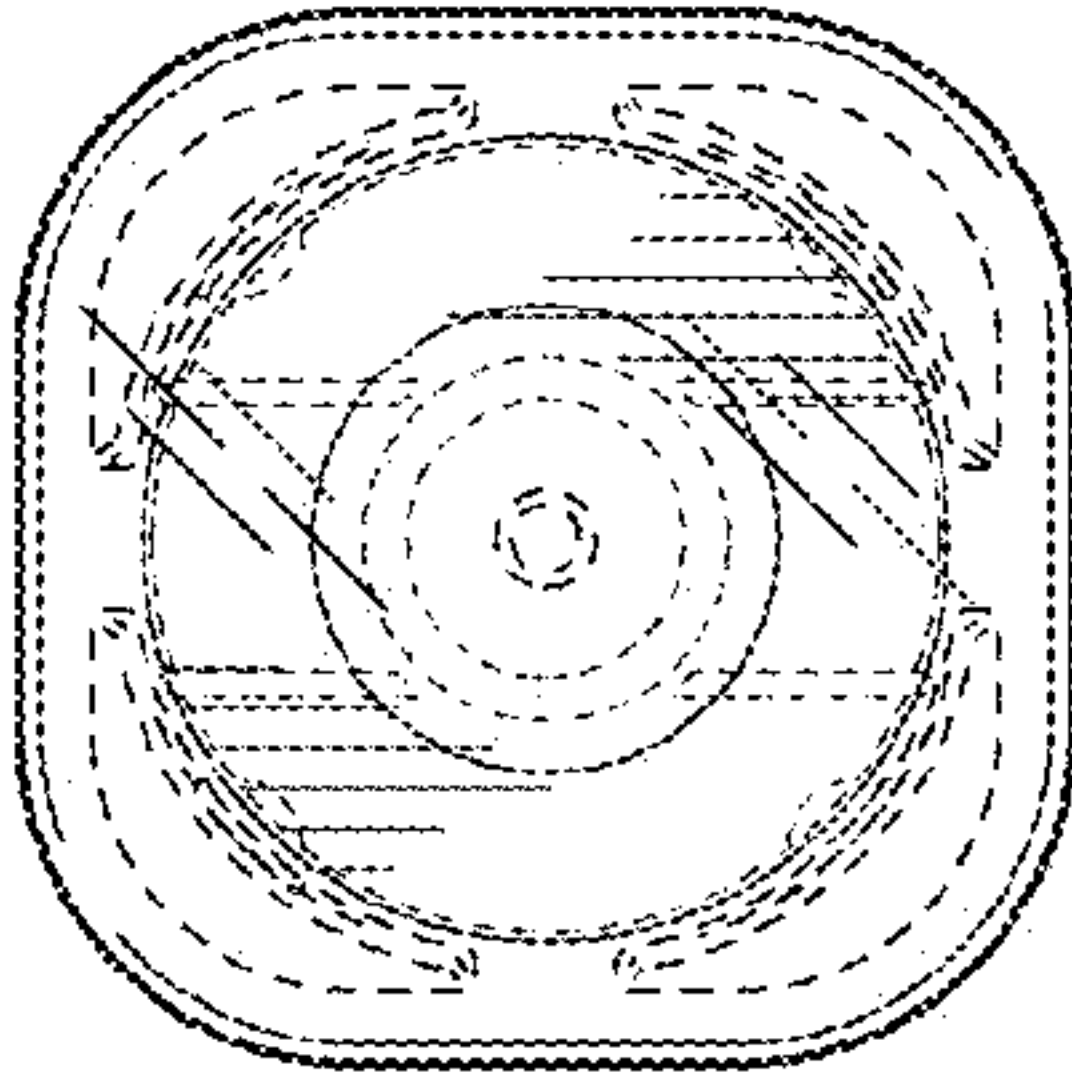


FIG. 5

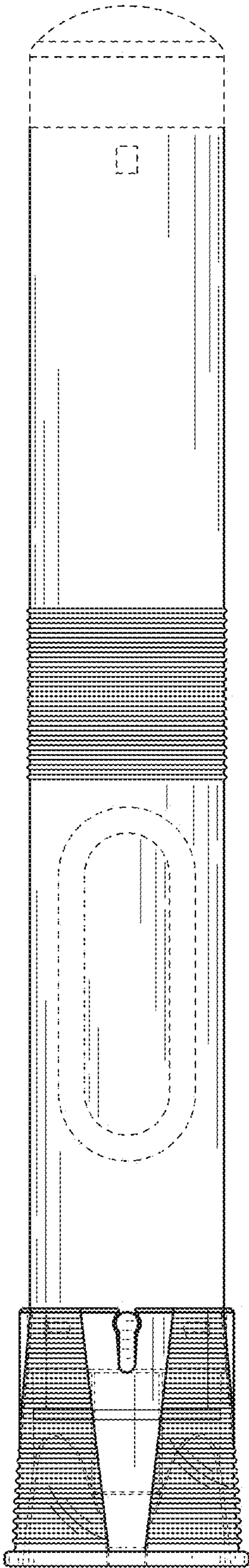


FIG. 6

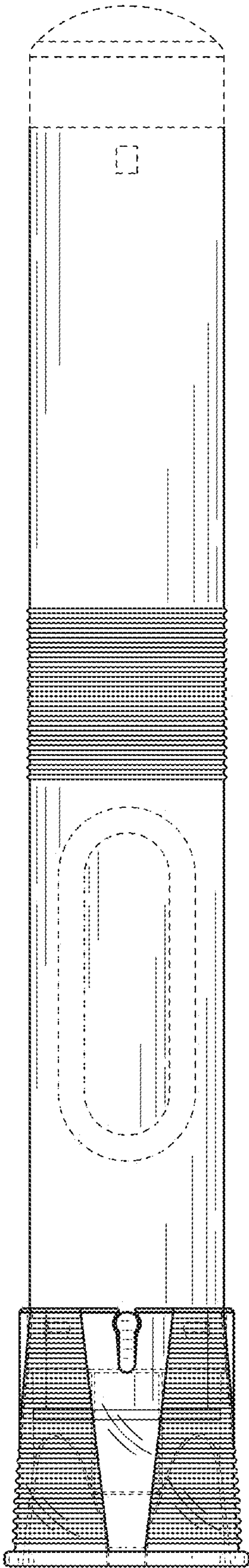


FIG. 7

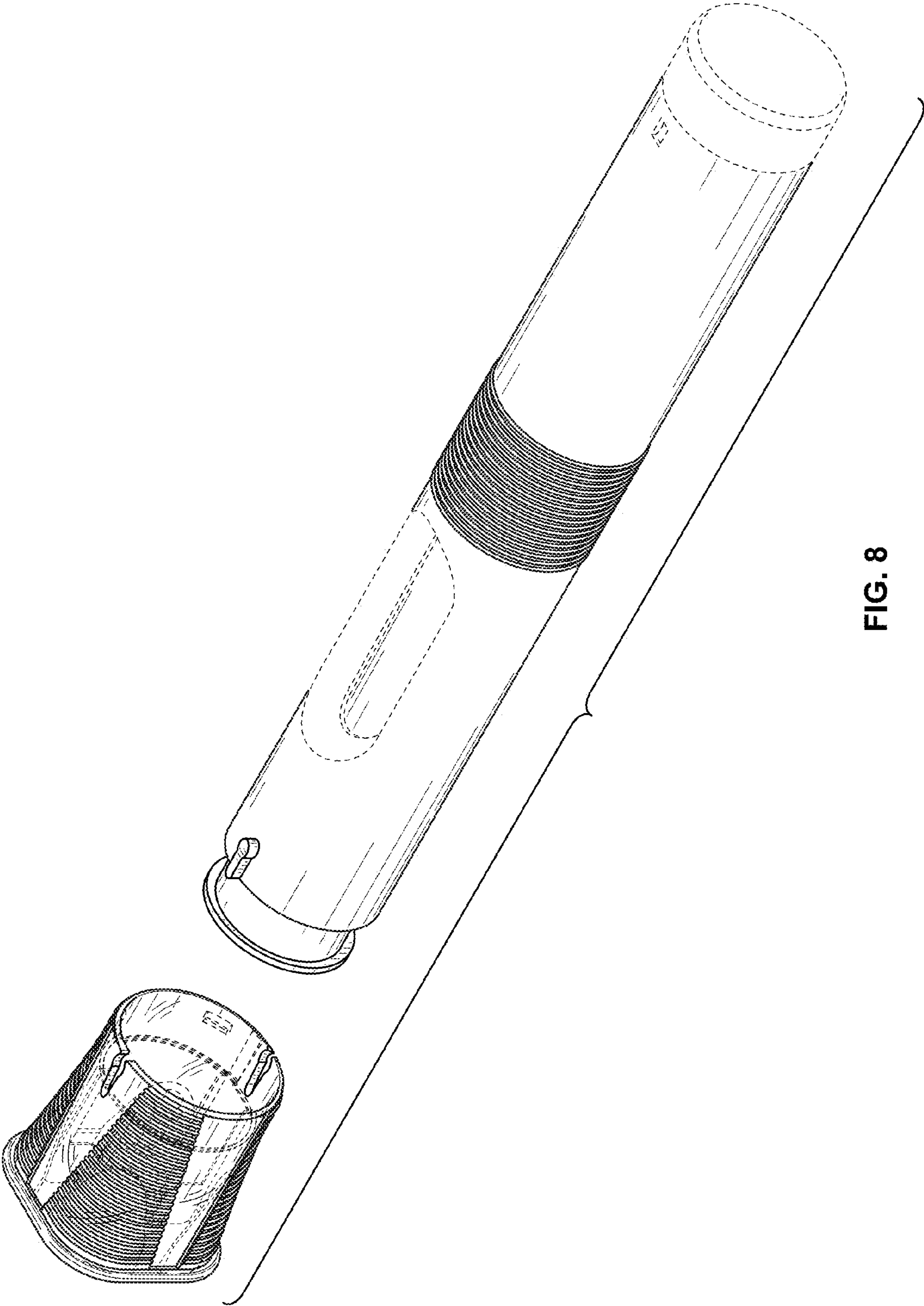


FIG. 8

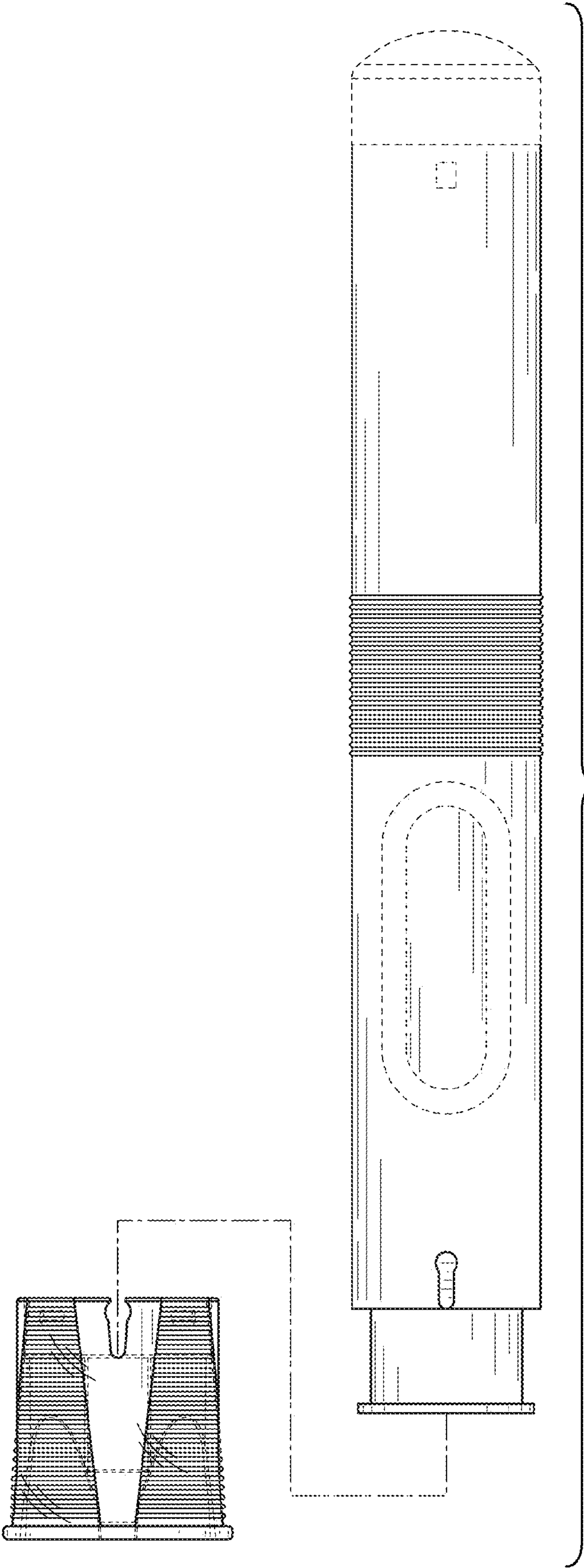


FIG. 9