



US00D863777S

(12) **United States Design Patent** (10) **Patent No.:** **US D863,777 S**  
**Courtney et al.** (45) **Date of Patent:** **\*\* Oct. 22, 2019**

(54) **HANDLE FOR DENTAL APPLIANCE**  
(71) Applicant: **Dyson Technology Limited**, Wiltshire (GB)  
(72) Inventors: **Stephen Benjamin Courtney**, Bath (GB); **Timothy Nicholas Stickney**, Gloucester (GB); **Thomas James Dunning Follows**, Swindon (GB)  
(73) Assignee: **Dyson Technology Limited**, Malmesbury, Wiltshire (GB)

(\*\*) Term: **15 Years**  
(21) Appl. No.: **29/674,391**  
(22) Filed: **Dec. 20, 2018**

**Related U.S. Application Data**

(62) Division of application No. 29/602,443, filed on May 1, 2017, now Pat. No. Des. 836,346.

**Foreign Application Priority Data**

Nov. 2, 2016 (GB) ..... 6002265  
Nov. 2, 2016 (GB) ..... 6002267  
Nov. 2, 2016 (GB) ..... 6002269

(51) **LOC (12) Cl.** ..... **04-02**

(52) **U.S. Cl.**  
USPC ..... **D4/101**

(58) **Field of Classification Search**

USPC ..... D4/101, 104, 105, 108, 110, 111;  
D24/111, 152, 156, 176; D8/300, 301,  
D8/303, 321  
CPC ..... A46B 5/00; A46B 5/021; A46B 5/023;  
A46B 5/026; A46B 5/028; A46B 5/0016;  
A46B 5/0095; A46B 13/00; A46B 13/02;  
A46B 13/04; A46B 2200/10; A46B  
2200/30; A46B 2200/108; A46B  
2200/302; A46B 2200/304; A46B  
2200/1066; A46B

(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

1,051,815 A 1/1913 Morgan  
D84,131 S 5/1931 D'Ayrenx et al.  
(Continued)

FOREIGN PATENT DOCUMENTS

CN 304361403 11/2017  
GB 2538299 11/2016  
(Continued)

OTHER PUBLICATIONS

Courtney et al., Ex Parte Quayle Action dated Dec. 5, 2018, directed to U.S. Appl. No. 29/602,331; 5 pages.  
(Continued)

*Primary Examiner* — Wan Laymon  
*Assistant Examiner* — Clint A Samuel  
(74) *Attorney, Agent, or Firm* — Morrison & Foerster LLP

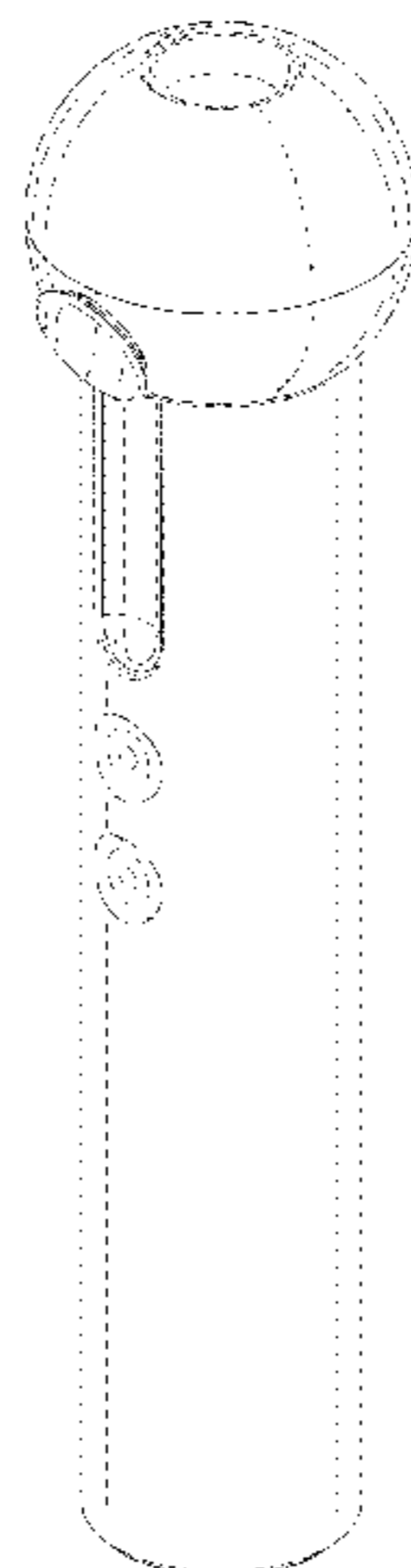
(57) **CLAIM**

We claim the ornamental design for a handle for dental appliance, as shown and described.

**DESCRIPTION**

FIG. 1 is a perspective view of a handle for dental appliance showing our new design;  
FIG. 2 is a front view thereof;  
FIG. 3 is a rear view thereof;  
FIG. 4 is a side view thereof;  
FIG. 5 is a side view of the opposite side of FIG. 4;  
FIG. 6 is a top view thereof; and,  
FIG. 7 is a bottom view thereof.  
The broken lines shown in the drawings illustrate portions of a handle for dental appliance that form no part of the claimed design.

**1 Claim, 7 Drawing Sheets**



(58) **Field of Classification Search**  
 CPC ..... 2200/1073; A46B 2200/1086; A46B  
 2200/3026; A46B 2200/3033; A46B  
 2200/3046; A46B 9/04; A61C 15/00;  
 A61C 15/047; A61C 15/048; A61C  
 17/00; A61C 17/02; A61C 17/16; A61C  
 17/22; A61C 17/26; A61C 17/38; A61C  
 17/40; A61C 17/221; A61C 17/225; A61C  
 17/227; A61C 17/0202; A61C 1/0084  
 See application file for complete search history.

(56) **References Cited**  
 U.S. PATENT DOCUMENTS

1,847,495 A	3/1932	Priest	D451,244 S	11/2001	Chen et al.
1,959,601 A	5/1934	Schulse	6,332,233 B1	12/2001	Proulx
2,036,706 A	4/1936	Law	D453,996 S	3/2002	Kling et al.
D113,432 S	2/1939	Newman	D455,010 S	4/2002	Kling
2,318,460 A	5/1943	Samuel	D455,556 S	4/2002	Kling
D153,130 S	3/1949	Fischer	D456,608 S	5/2002	Lim
2,490,185 A	12/1949	Work	D456,996 S	5/2002	McCurrach
D197,763 S	3/1964	Aymar	D458,028 S	6/2002	McCurrach
3,370,415 A	2/1968	McIlvaine	D458,029 S	6/2002	Li
3,728,035 A	4/1973	Reitknecht	6,422,974 B1	7/2002	Schimmel
3,734,106 A	5/1973	Zimmerman	D462,174 S	9/2002	Schaber
D230,654 S	3/1974	Fishbein	6,461,164 B1	10/2002	Ramelli
D258,237 S	2/1981	Anspach	D465,279 S	11/2002	Etter et al.
4,277,194 A	7/1981	Smith	D468,422 S	1/2003	McCurrach
D264,359 S	5/1982	Grubb et al.	D476,156 S	6/2003	Ferber et al.
4,344,184 A	8/1982	Edwards	D477,716 S	7/2003	Roberson
D276,935 S	12/1984	Fattaleh	D478,212 S	8/2003	Winkler
4,761,138 A	8/1988	Niesyn	D478,214 S	8/2003	Winkler et al.
D301,400 S	6/1989	Berendsen et al.	D478,423 S	8/2003	Mulder et al.
4,949,875 A	8/1990	Kuo	D483,182 S	12/2003	Blaustein et al.
D310,368 S	9/1990	Derhaag et al.	D487,911 S	3/2004	Cheney
D315,831 S	4/1991	Kawano	D492,717 S	7/2004	Cohen
D319,170 S	8/1991	Franke	D492,996 S	7/2004	Rehkemper et al.
D320,275 S	9/1991	Wada et al.	6,766,549 B2	7/2004	Klupt
D321,285 S	11/1991	Hirabayashi	D497,481 S	10/2004	Porter et al.
5,062,728 A	11/1991	Kuo	D499,554 S	12/2004	Ramelli
D323,326 S	1/1992	Takawo	D500,136 S	12/2004	Rehkemper et al.
D323,745 S	2/1992	Stuart	D500,209 S	12/2004	Kellogg
D336,567 S	6/1993	Glover et al.	D500,599 S	1/2005	Callaghan
5,303,109 A	4/1994	Takao	D501,605 S	2/2005	Brown, Jr. et al.
5,349,480 A	9/1994	Takao	D503,852 S	4/2005	Hensel
D353,490 S	12/1994	Hartwein	D504,911 S	5/2005	Ng
D354,168 S	1/1995	Hartwein	D508,776 S	8/2005	Kling et al.
5,379,271 A	1/1995	Moedt	D509,362 S	9/2005	Maeda
D357,016 S	4/1995	Li et al.	7,007,331 B2	3/2006	Davies et al.
D359,607 S	6/1995	Yun	D521,681 S	5/2006	Xu
D379,472 S	5/1997	Smith	D527,187 S	8/2006	Ramelli
D384,207 S	9/1997	Underwood	D527,527 S	9/2006	Ramelli
D385,702 S	11/1997	Okada	D528,176 S	9/2006	Milliken
D387,805 S	12/1997	Hsu	D531,240 S	10/2006	Geisendorfer
D388,958 S	1/1998	Hartwein	D531,811 S	11/2006	Cochran
D393,016 S	3/1998	Young	D532,974 S	12/2006	Zhuan
D396,957 S	8/1998	Allende	D533,720 S	12/2006	Vu
5,815,872 A	10/1998	Meginniss, III et al.	D534,728 S	1/2007	Vu
D401,270 S	11/1998	Cockram	D541,049 S	4/2007	Huang
D403,864 S	1/1999	Holland et al.	D549,209 S	8/2007	Bauman et al.
D411,483 S	6/1999	Greene, Jr.	D556,453 S	12/2007	Sprosta et al.
D411,769 S	7/1999	Wright	D556,455 S	12/2007	Williams
D413,729 S	9/1999	Jansheski, Jr.	D562,488 S	2/2008	Weiser
D417,082 S	11/1999	Classen et al.	D569,623 S	5/2008	Beedham
D419,305 S	1/2000	Porter et al.	7,389,781 B2	6/2008	Kemp et al.
6,047,429 A	4/2000	Wu	D572,007 S	7/2008	Lamason et al.
D423,784 S	5/2000	Joulin	D577,199 S	9/2008	Zhuan
D428,704 S	8/2000	Wildman	D579,664 S	11/2008	Fisher et al.
D433,232 S	11/2000	Stützer et al.	D579,666 S	11/2008	Jamson
D433,813 S	11/2000	Stützer et al.	D580,173 S	11/2008	Beedham
D433,814 S	11/2000	Blaustein et al.	D583,052 S	12/2008	Kagawa
D436,254 S	1/2001	Kling et al.	D586,125 S	2/2009	Winkler et al.
D440,766 S	4/2001	Hartwein et al.	D588,364 S	3/2009	Nanda
6,220,772 B1	4/2001	Taylor	D589,255 S	3/2009	Taylor et al.
D445,831 S	7/2001	Lindner	7,527,446 B2	5/2009	Johnson Papa et al.
D446,022 S	8/2001	Vonarburg et al.	D595,366 S	6/2009	Katzke
			D595,771 S	7/2009	Oas
			D598,653 S	8/2009	Crossman
			D598,806 S	8/2009	Rosenkötter
			D599,555 S	9/2009	Oliphant
			D612,611 S	3/2010	Brown, Jr. et al.
			D621,455 S	8/2010	Chernick et al.
			D627,971 S	11/2010	Battaglia
			D634,547 S	3/2011	Botelho
			D636,604 S	4/2011	Zhuan
			D637,817 S	5/2011	Smith
			D645,922 S	9/2011	Wu
			D649,787 S	12/2011	Ivarsson
			D657,954 S	4/2012	Gebski
			D658,883 S	5/2012	Winkler
			D669,274 S	10/2012	Meurrens
			D669,978 S	10/2012	Gebski et al.
			8,317,424 B2	11/2012	Chenvainu et al.



(56)

References Cited

U.S. PATENT DOCUMENTS

D673,225 S 12/2012 Heidrich  
 8,434,190 B2 5/2013 Stief et al.  
 8,444,416 B2 5/2013 Chenvainu et al.  
 D688,464 S 8/2013 Hara  
 D688,877 S 9/2013 Li  
 D689,125 S 9/2013 Lochen  
 D689,698 S 9/2013 Dickie et al.  
 D690,369 S 9/2013 Wu  
 D693,581 S 11/2013 Ballmaier et al.  
 D694,524 S 12/2013 Erskine-Smith  
 D696,024 S 12/2013 Shigeno et al.  
 D696,517 S 12/2013 Gebski  
 D701,388 S 3/2014 Chuanzhou  
 D702,946 S 4/2014 Shigeno et al.  
 D704,337 S 5/2014 Dunn  
 D706,033 S 6/2014 Dickie et al.  
 D707,764 S 6/2014 Deveaux  
 D708,440 S 7/2014 Owen et al.  
 D711,988 S 8/2014 Gubany  
 D712,988 S 9/2014 Sagedahl  
 D713,391 S 9/2014 Ibuki et al.  
 D718,056 S 11/2014 Masee et al.  
 D718,057 S 11/2014 Masee et al.  
 D719,737 S 12/2014 Adriaenssen et al.  
 D724,679 S 3/2015 Martyn  
 D727,445 S 4/2015 Viramontez  
 9,039,642 B2 5/2015 Lee  
 D735,280 S 7/2015 O'Malley  
 D736,870 S 8/2015 Nagi  
 D738,968 S 9/2015 Oz  
 D741,423 S 10/2015 Holland  
 9,154,025 B2 10/2015 Schaefer et al.  
 D742,649 S 11/2015 Thompson  
 D749,851 S 2/2016 Watkins  
 D749,852 S 2/2016 Since  
 9,265,334 B1 2/2016 Fung-A-Wing  
 D751,821 S 3/2016 Since  
 D752,868 S 4/2016 McGarry et al.  
 D757,439 S 5/2016 Shigeno et al.  
 D758,079 S 6/2016 Since  
 D758,080 S 6/2016 Since  
 D758,736 S 6/2016 Shigeno et al.  
 D759,382 S 6/2016 Watkins  
 D761,567 S 7/2016 Uchida  
 D766,580 S 9/2016 Kollar et al.  
 D766,581 S 9/2016 Bloch et al.  
 D767,895 S 10/2016 Stebila et al.  
 D768,386 S 10/2016 Demarest et al.  
 D773,192 S 12/2016 Nabavi  
 D773,822 S 12/2016 Sikora et al.  
 D774,144 S 12/2016 Fjelstad  
 D775,288 S 12/2016 Spiegler  
 D777,442 S 1/2017 White et al.  
 D780,456 S 3/2017 Shigeno et al.  
 D787,189 S 5/2017 Fretwell et al.  
 9,668,598 B2 6/2017 Wartersian et al.  
 D790,859 S 7/2017 McGarry et al.  
 D790,861 S 7/2017 Demarest et al.  
 D791,485 S 7/2017 McGarry et al.  
 9,700,129 B2 7/2017 Follows et al.  
 D795,419 S 8/2017 Kohler  
 9,743,749 B2 8/2017 Follows et al.  
 D798,060 S 9/2017 Shigeno et al.  
 D799,217 S 10/2017 Masee  
 D799,756 S 10/2017 Fox  
 D801,696 S 11/2017 McGarry et al.  
 9,814,302 B2 11/2017 Follows et al.  
 9,820,563 B2 11/2017 Follows et al.  
 D804,918 S 12/2017 Lipford  
 D806,228 S 12/2017 Yan  
 9,839,284 B2 12/2017 Follows et al.  
 D810,513 S 2/2018 Mccoy et al.  
 D814,195 S 4/2018 Sikora et al.  
 10,022,208 B2 \* 7/2018 Yoshida ..... A61C 17/222  
 D836,345 S \* 12/2018 Courtney ..... D4/101

D836,346 S \* 12/2018 Courtney ..... D4/101  
 D839,597 S \* 2/2019 Courtney ..... D4/101  
 D839,598 S \* 2/2019 Courtney ..... D4/101  
 D839,599 S \* 2/2019 Courtney ..... D4/101  
 2001/0034917 A1 11/2001 DuCey  
 2004/0187889 A1 9/2004 Kemp et al.  
 2006/0078844 A1 4/2006 Goldman et al.  
 2006/0133885 A1 6/2006 Kaminski  
 2009/0007357 A1 1/2009 Meadows et al.  
 2012/0272468 A1 11/2012 Weisman et al.  
 2013/0007969 A1 1/2013 Driesen et al.  
 2013/0091645 A1 4/2013 Suwanbutr  
 2014/0246049 A1 9/2014 Ikkink et al.  
 2014/0259474 A1 9/2014 Sokol et al.  
 2015/0150664 A1 6/2015 Crossman et al.  
 2015/0230898 A1 8/2015 Miller  
 2015/0310763 A1 10/2015 Miller et al.  
 2016/0015163 A1 1/2016 Newman et al.  
 2016/0157596 A1 6/2016 Fifield  
 2016/0331113 A1 11/2016 Follows  
 2016/0331114 A1 11/2016 Follows et al.  
 2016/0331115 A1 11/2016 Follows et al.  
 2016/0331116 A1 11/2016 Follows et al.  
 2016/0331117 A1 11/2016 Follows  
 2016/0331497 A1 11/2016 Follows  
 2016/0331498 A1 11/2016 Follows  
 2017/0119510 A1 5/2017 Tomori et al.  
 2018/0021116 A1 1/2018 Störkel et al.  
 2018/0055212 A1 \* 3/2018 Follows ..... A61C 17/02  
 2018/0055616 A1 \* 3/2018 Zheng ..... A46B 9/04  
 2018/0084898 A1 \* 3/2018 Vincent ..... A46B 11/0006  
 2018/0085207 A1 \* 3/2018 Tweedie ..... A61C 17/36  
 2018/0110321 A1 \* 4/2018 Harris ..... A46B 15/0036  
 2018/0110322 A1 \* 4/2018 Marsh ..... A46B 15/0036  
 2018/0110601 A1 \* 4/2018 Mighall ..... A46B 13/04  
 2018/0116390 A1 \* 5/2018 Tweedie ..... A46B 13/04  
 2018/0116774 A1 \* 5/2018 Coleman ..... A46B 11/002  
 2018/0125221 A1 \* 5/2018 Wronski ..... A46B 11/0055  
 2018/0125621 A1 \* 5/2018 Tweedie ..... A61C 17/02  
 2018/0125624 A1 \* 5/2018 Tweedie ..... A61C 17/221  
 2018/0168332 A1 \* 6/2018 Wagner ..... F21V 11/00  
 2018/0221124 A1 \* 8/2018 Carlyle ..... A46B 11/00  
 2018/0289456 A1 \* 10/2018 Follows ..... A61C 17/0202  
 2018/0289458 A1 \* 10/2018 Follows ..... A46B 9/04  
 2018/0333240 A1 \* 11/2018 Taniguchi ..... A61C 17/3472

FOREIGN PATENT DOCUMENTS

GB 2538308 11/2016  
 GB 2538309 11/2016  
 GB 2554401 A \* 4/2018 ..... A46B 11/0006  
 GB 2555386 A \* 5/2018 ..... A46B 11/001  
 GB 2555417 A \* 5/2018 ..... A46B 13/04  
 GB 2555418 A \* 5/2018 ..... A46B 15/0036  
 GB 2555449 A \* 5/2018 ..... A46B 13/04  
 GB 2555449 A8 \* 5/2018 ..... A46B 13/04  
 JP 1595568 1/2018  
 JP 1595649 1/2018  
 WO 2005/076818 8/2005  
 WO WO-2018142099 A1 \* 8/2018 ..... A46B 11/00

OTHER PUBLICATIONS

Courtney et al., Ex Parte Quayle Action dated Oct. 18, 2018, directed to U.S. Appl. No. 29/602,369; 6 pages.  
 Courtney et al., U.S. Office Action dated Apr. 19, 2018, directed to U.S. Appl. No. 29/602,351; 14 pages.  
 Courtney et al., U.S. Office Action dated Apr. 19, 2018, directed to U.S. Appl. No. 29/602,366; 14 pages.  
 Courtney et al., U.S. Office Action dated Apr. 19, 2018, directed to U.S. Appl. No. 29/602,367; 13 pages.  
 Courtney et al., U.S. Office Action dated Apr. 19, 2018, directed to U.S. Appl. No. 29/602,369; 16 pages.  
 Courtney et al., U.S. Office Action dated Apr. 19, 2018, directed to U.S. Appl. No. 29/602,370; 16 pages.  
 Courtney et al., U.S. Office Action dated Apr. 19, 2018, directed to U.S. Appl. No. 29/602,381; 17 pages.





(56)

**References Cited**

OTHER PUBLICATIONS

Courtney et al., U.S. Office Action dated Oct. 18, 2018, directed to U.S. Appl. No. 29/602,445; 9 pages.

Courtney et al., U.S. Office Action dated Sep. 7, 2018, directed to U.S. Appl. No. 29/602,368; 9 pages.

Love, J. (Nov. 27, 2016) "Dyson is designing an electric toothbrush," located at <<http://www.electriceeth.co.uk/dyson-is-designing-an-electric-toothbrush/>> (18 pages).

Pettit, H. (Nov. 24, 2016). "Dyson's next device could be a smart Toothbrush that flosses your teeth with high-powered jets of water," located at <<http://www.dailymail.co.uk/sciencetech/article-968756/Dyson-s-invention-smart-TOOTHBRUSH-flosses-teeth-water-clean-them.html>> (5 pages).

\* cited by examiner

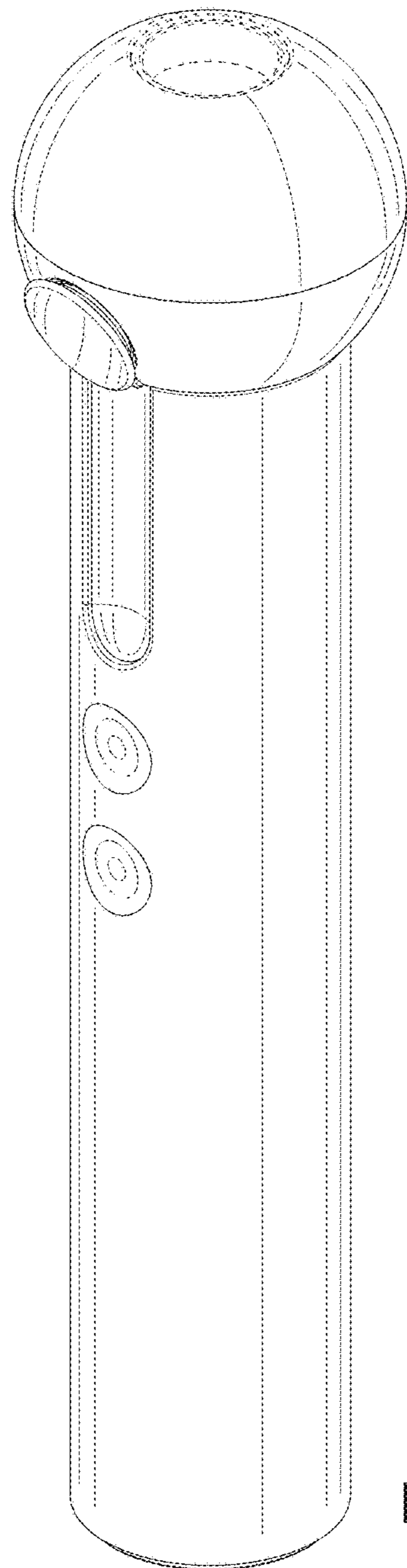


FIG. 1



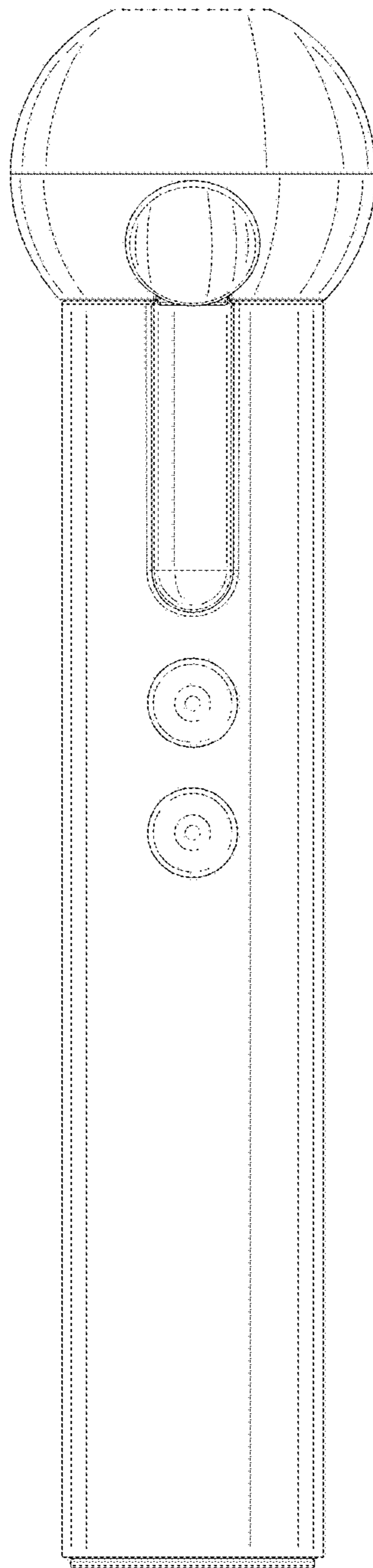


FIG. 2

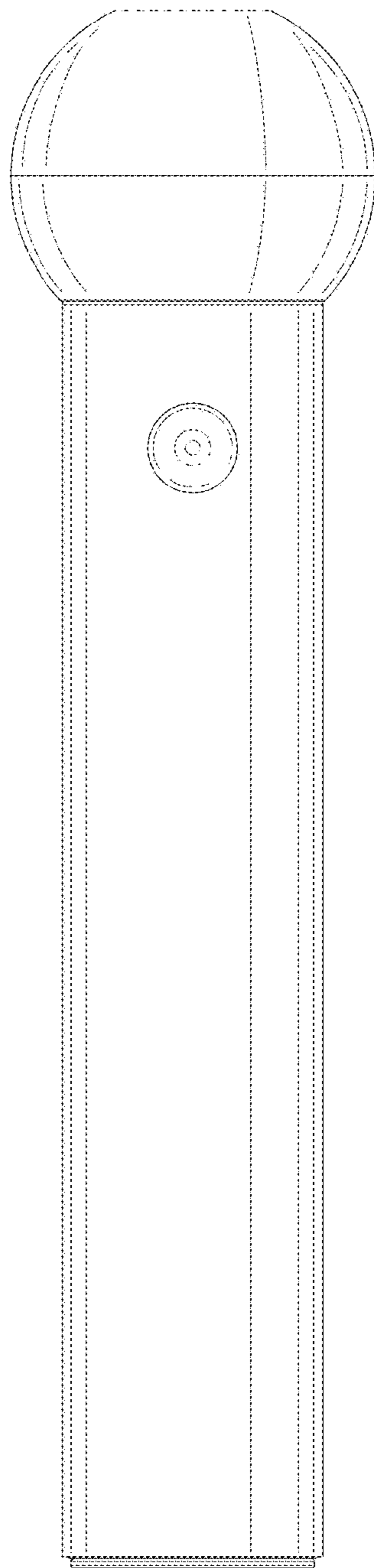


FIG. 3



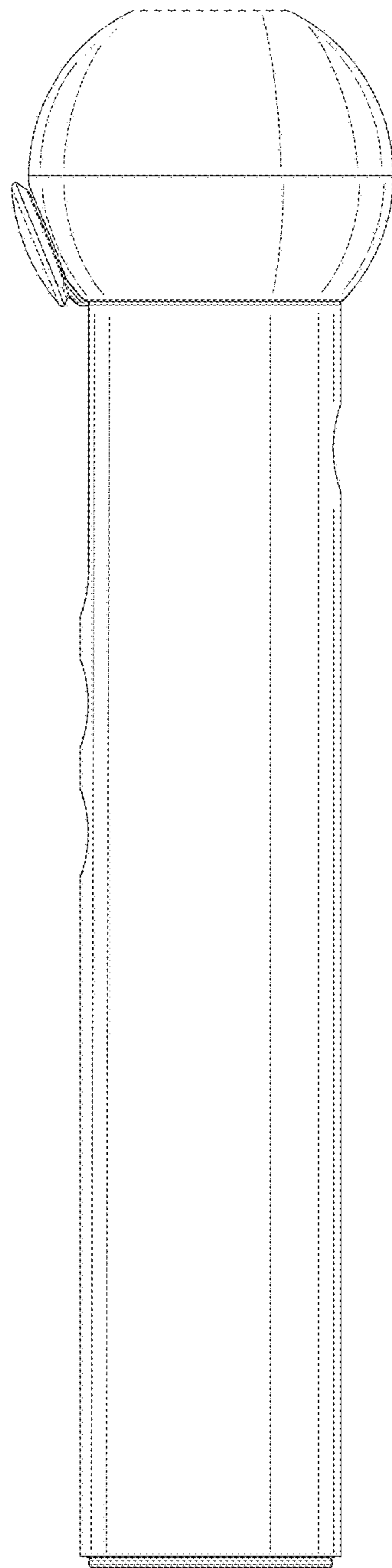


FIG. 4

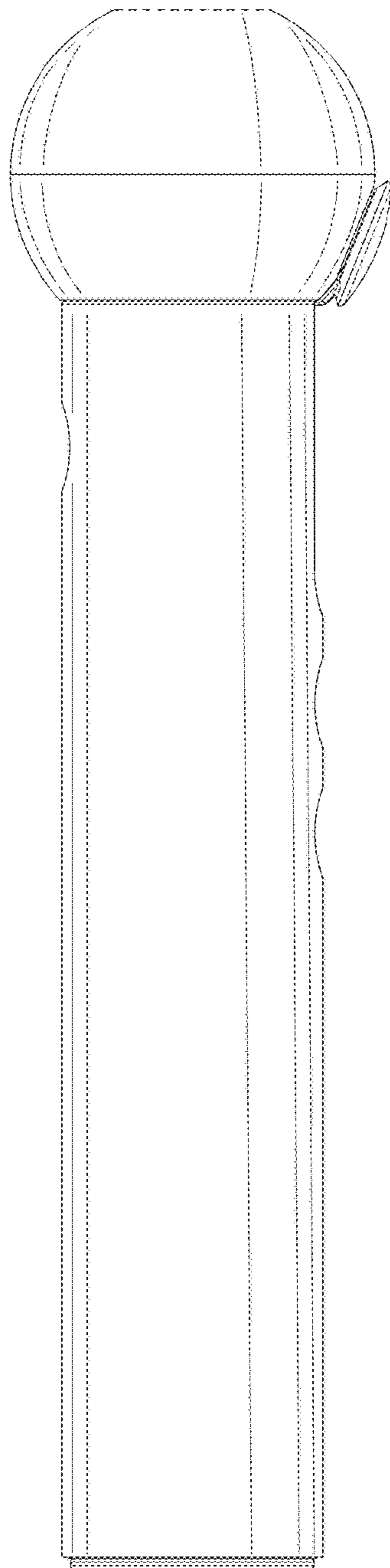


FIG. 5

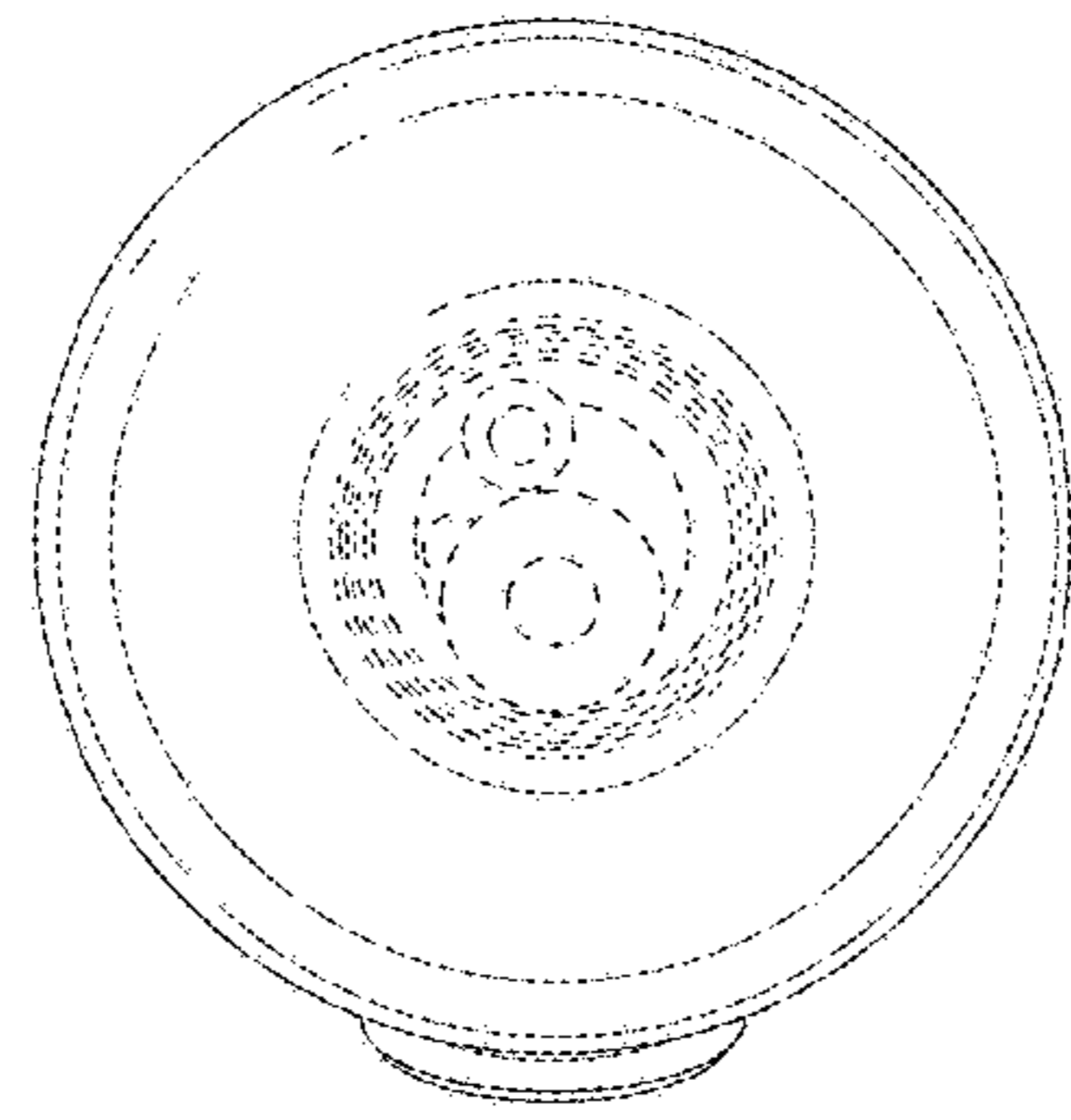


FIG. 6



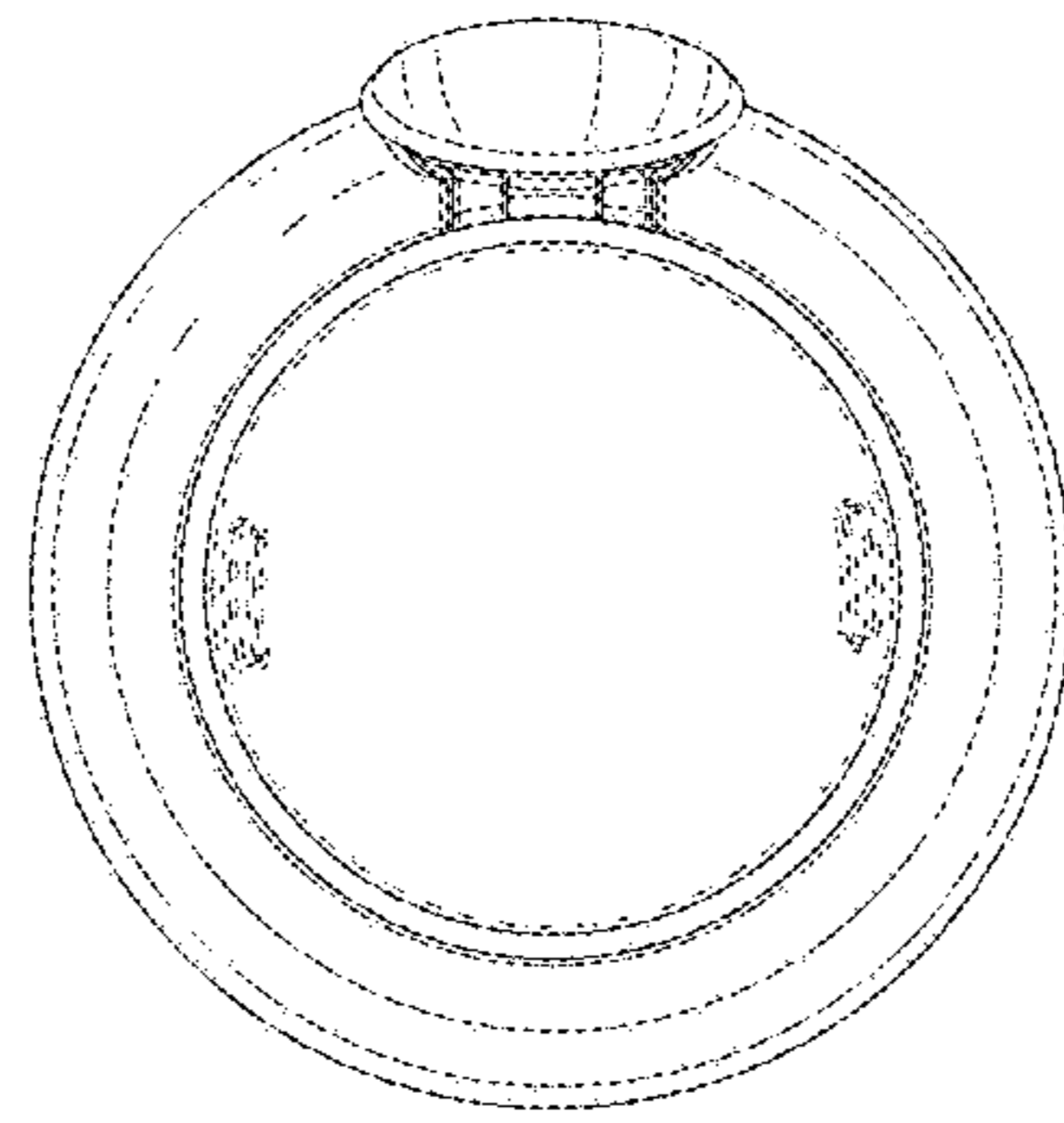


FIG. 7