



US00D778056S

(12) **United States Design Patent** (10) **Patent No.:** **US D778,056 S**
Wada et al. (45) **Date of Patent:** **** Feb. 7, 2017**

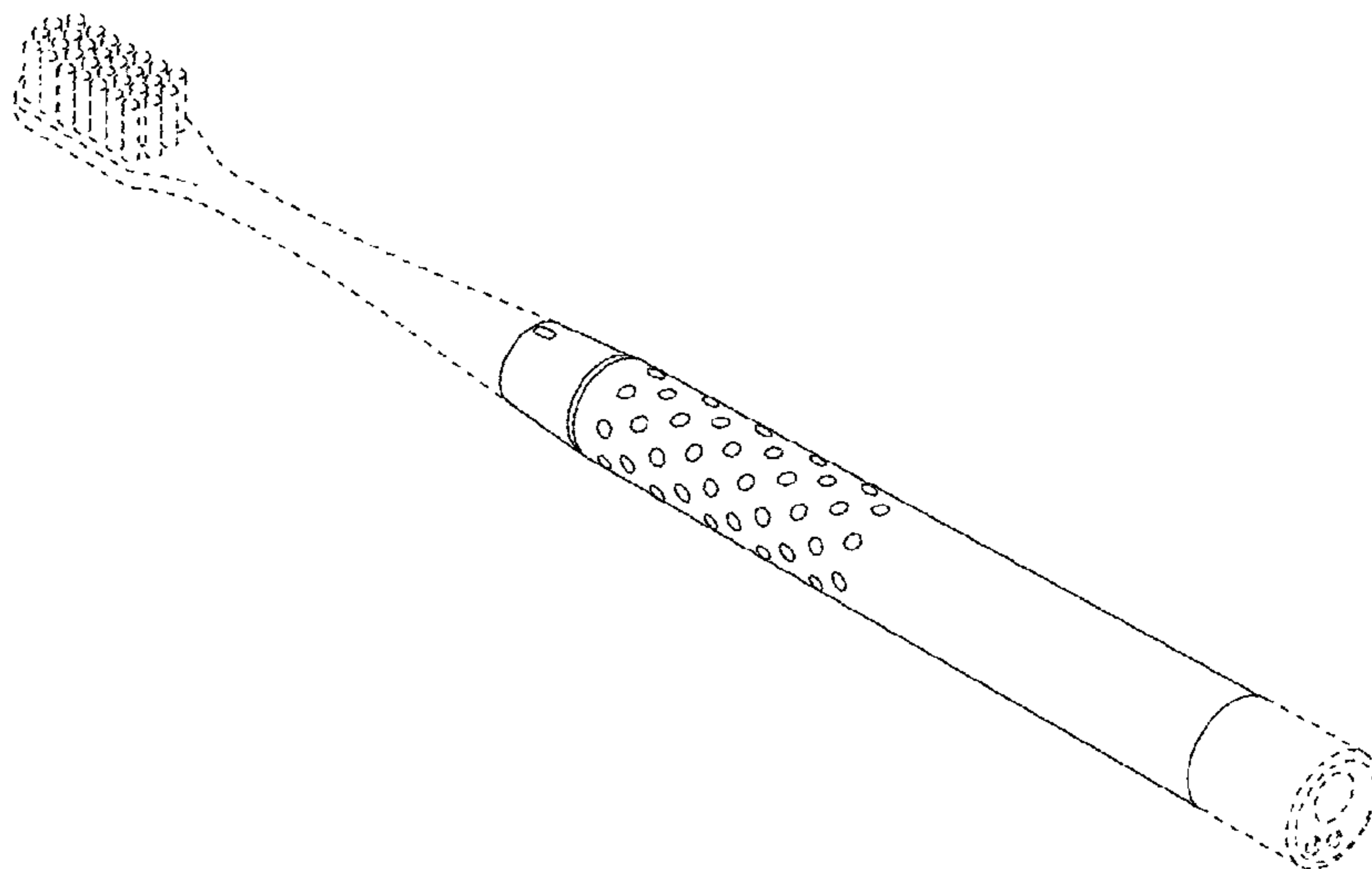
(54) **ELECTRIC TOOTHBRUSH**
(71) Applicant: **SUNSTAR INC.**, Takatsuki-shi (JP)
(72) Inventors: **Yukinori Wada**, Takatsuki (JP);
Kazuaki Yoshida, Takatsuki (JP);
Masahiro Nishiura, Takatsuki (JP);
Narito Tsuchida, Takatsuki (JP); **Kieko Imai**, Takatsuki (JP)
(73) Assignee: **SUNSTAR INC.**, Takatsuki-shi (JP)
(**) Term: **14 Years**
(21) Appl. No.: **29/515,796**
(22) Filed: **Jan. 27, 2015**
(30) **Foreign Application Priority Data**
Jul. 31, 2014 (JP) 2014-016725
(51) **LOC (10) Cl.** **04-02**
(52) **U.S. Cl.**
USPC **D4/101; D4/138**
(58) **Field of Classification Search**
USPC D4/101, 104-112, 114, 138; 15/110,
15/167.1, 167.2, 176.1, 176.6, 188, 22.1,
15/145, 143.1; 132/308-311; 601/139,
601/141, 142; D8/61; 81/57.11-57.14,
81/57.31, 57.42
CPC A46B 5/0095; A46B 7/04; A46B 7/042;
A46B 7/044; A46B 9/04; A46B
2200/1066; A61C 17/16; A61C
17/22; A61C 17/222; A61C 17/32; A61C
17/34; A61C 17/3409; A61C
17/3445; A61C 17/3454; A61C 17/3463;
A61C 17/3481; A61C 17/20; A61C
17/221; A61C 17/225; A61C 17/24; A61C
17/26; A61C 17/3418; A61C
17/3427; A61C 17/3436; A61C 17/3453;
A61C 17/3472; A61C 17/40
See application file for complete search history.

(56) **References Cited**
U.S. PATENT DOCUMENTS
D197,699 S * 3/1964 Hall D4/101
3,408,671 A * 11/1968 Klang A46B 5/0091
15/22.1
(Continued)
Primary Examiner — Susan Moon Lee
(74) *Attorney, Agent, or Firm* — Kratz, Quintos &
Hanson, LLP

(57) **CLAIM**
The ornamental design for an electric toothbrush, as shown
and described.

DESCRIPTION
FIG. 1 is a perspective view of the electric toothbrush
showing our new design;
FIG. 2 is a front view thereof;
FIG. 3 is a back view thereof;
FIG. 4 is a right side view thereof;
FIG. 5 is a left side view thereof;
FIG. 6 is a plan view thereof;
FIG. 7 is a bottom view thereof;
FIG. 8 is an enlarged right side view thereof;
FIG. 9 is an enlarged left side view thereof;
FIG. 10 is a cross-sectional view, omitting internal mecha-
nism, taken along line 10-10 of FIG. 2;
FIG. 11 is an enlarged cross-sectional end view, without
internal structure, taken along line 11-11 of FIG. 2;
FIG. 12 is an enlarged cross-sectional view, without internal
structure, taken along line 12-12 of FIG. 2; and,
FIG. 13 is an enlarged cross-sectional view, without internal
structure, taken along line 13-13 of FIG. 2.
The elements depicted in broken lines illustrate portions of
the electric toothbrush that form no part of the claimed. The
boundary of the unclaimed head piece, as well as of the base
barrel, terminates just before the start of the solid lines.

1 Claim, 13 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

3,488,788	A *	1/1970	Robinson	A61C 17/20	15/22.1	D623,413	S *	9/2010	Blanchard	D4/104
3,800,350	A *	4/1974	Francolino	A61C 17/349	15/23	D632,490	S *	2/2011	Cobabe	D4/138
D287,549	S *	1/1987	Arnaud	D4/107		7,901,153	B1 *	3/2011	Strider	A46B 5/0095
D288,628	S *	3/1987	Farrand	D4/104						401/176
D306,522	S *	3/1990	Stiller	D4/104		8,079,109	B2 *	12/2011	Misner	A46B 15/0002
4,974,278	A *	12/1990	Hommann	A61C 17/3472	15/22.1	D658,885	S *	5/2012	Pereira	D4/104
5,052,071	A *	10/1991	Halm	A46B 5/0062	15/143.1	D664,358	S *	7/2012	Behar	D4/104
5,435,033	A *	7/1995	Millner	A61C 15/00	132/321	D670,504	S *	11/2012	Watanabe	D4/104
5,504,959	A *	4/1996	Yukawa	A61C 17/349	15/22.1	8,448,287	B2 *	5/2013	Ponzini	A46B 7/042
5,623,739	A *	4/1997	Thompson	A46B 5/02	15/143.1	8,453,285	B2 *	6/2013	Dickie	A46B 5/0062
5,625,916	A *	5/1997	McDougall	A61C 17/3436	15/22.1	8,529,150	B2 *	9/2013	Olson	A46B 5/02
D394,751	S *	6/1998	Eguchi	D4/101						15/167.1
5,794,296	A *	8/1998	Wong	A61C 17/26	15/22.1	D692,242	S *	10/2013	Jimenez	D4/101
D401,069	S *	11/1998	Lamond	D4/104		D696,024	S *	12/2013	Shigeno	D4/101
5,903,949	A *	5/1999	Halm	A46B 5/0062	15/143.1	D702,946	S *	4/2014	Shigeno	D4/101
5,915,433	A *	6/1999	Hybler	A46B 5/02	15/111	D719,356	S *	12/2014	Blanchard	D4/104
D413,204	S *	8/1999	Mitchell	D4/108		D720,541	S *	1/2015	Behar	D4/104
D416,136	S *	11/1999	Watanabe	D4/104		9,265,338	B1 *	2/2016	Cygler	A61C 17/222
6,138,310	A *	10/2000	Porper	A46B 5/0012	15/22.1	D752,868	S *	4/2016	McGarry	D4/101
6,140,723	A *	10/2000	Matsui	B06B 1/045	15/22.1	D758,736	S *	6/2016	Shigeno	D4/101
D451,287	S *	12/2001	Ingram	D32/42		2003/0000033	A1 *	1/2003	Lev	A61C 17/22
D456,136	S *	4/2002	Roehrig	D4/104						15/28
D456,207	S *	4/2002	Zemel	D4/138		2003/0115695	A1 *	6/2003	Lev	A61C 17/22
D456,614	S *	5/2002	Zemel	D4/134						15/22.1
D456,667	S *	5/2002	Veltri	D7/387		2003/0135940	A1 *	7/2003	Lev	A61C 17/22
D457,322	S *	5/2002	Ferber	D4/101						15/22.1
D460,861	S *	7/2002	Compton	D4/108		2003/0150474	A1 *	8/2003	Doyscher	A61C 15/046
D463,914	S *	10/2002	Ferber	D4/101						132/325
D463,952	S *	10/2002	Zemel	D7/395		2005/0144748	A1 *	7/2005	Hohlbein	A46B 5/0029
6,546,583	B1 *	4/2003	Rohrig	A46B 5/02	15/110					15/167.1
D474,644	S *	5/2003	Zemel	D7/395		2005/0193510	A1 *	9/2005	Kemp	A46B 5/00
D476,156	S *	6/2003	Ferber	D4/101						15/143.1
D482,201	S *	11/2003	Long	D4/108		2006/0213018	A1 *	9/2006	Gross	A46B 5/02
D482,566	S *	11/2003	Zemel	D7/395						15/143.1
D483,184	S *	12/2003	Geiberger	D4/104		2011/0047729	A1 *	3/2011	Iwahori	A61C 17/3481
D484,311	S *	12/2003	Cacka	D4/101						15/22.1
D497,257	S *	10/2004	Jamson	D4/108		2011/0308029	A1 *	12/2011	Edelstein	A46B 5/026
7,140,059	B2 *	11/2006	Scherl	A61C 17/26	15/22.1					15/167.1
D542,493	S *	5/2007	Berti	D32/52		2012/0036665	A1 *	2/2012	Cho	A46B 9/026
7,464,715	B1 *	12/2008	Husted	A61C 3/06	132/321					15/167.1
7,703,179	B2 *	4/2010	Ferguson	A63B 53/14	16/431	2012/0138082	A1 *	6/2012	Pardue	A46B 7/04
										132/309
						2014/0332028	A1 *	11/2014	Tran	A46B 9/04
										134/6
						2014/0352719	A1 *	12/2014	Tran	A46B 5/026
										134/6
						2015/0074926	A1 *	3/2015	Jang	A46B 5/0016
										15/106
						2015/0082564	A1 *	3/2015	Buchholz	A46B 9/04
										15/105
						2015/0150366	A1 *	6/2015	Kim	A46B 9/04
										15/167.1
						2015/0305482	A1 *	10/2015	Tran	A46B 9/04
										15/22.1
						2016/0022393	A1 *	1/2016	Yoshida	A46B 15/0006
										15/22.1

* cited by examiner

FIG. 1

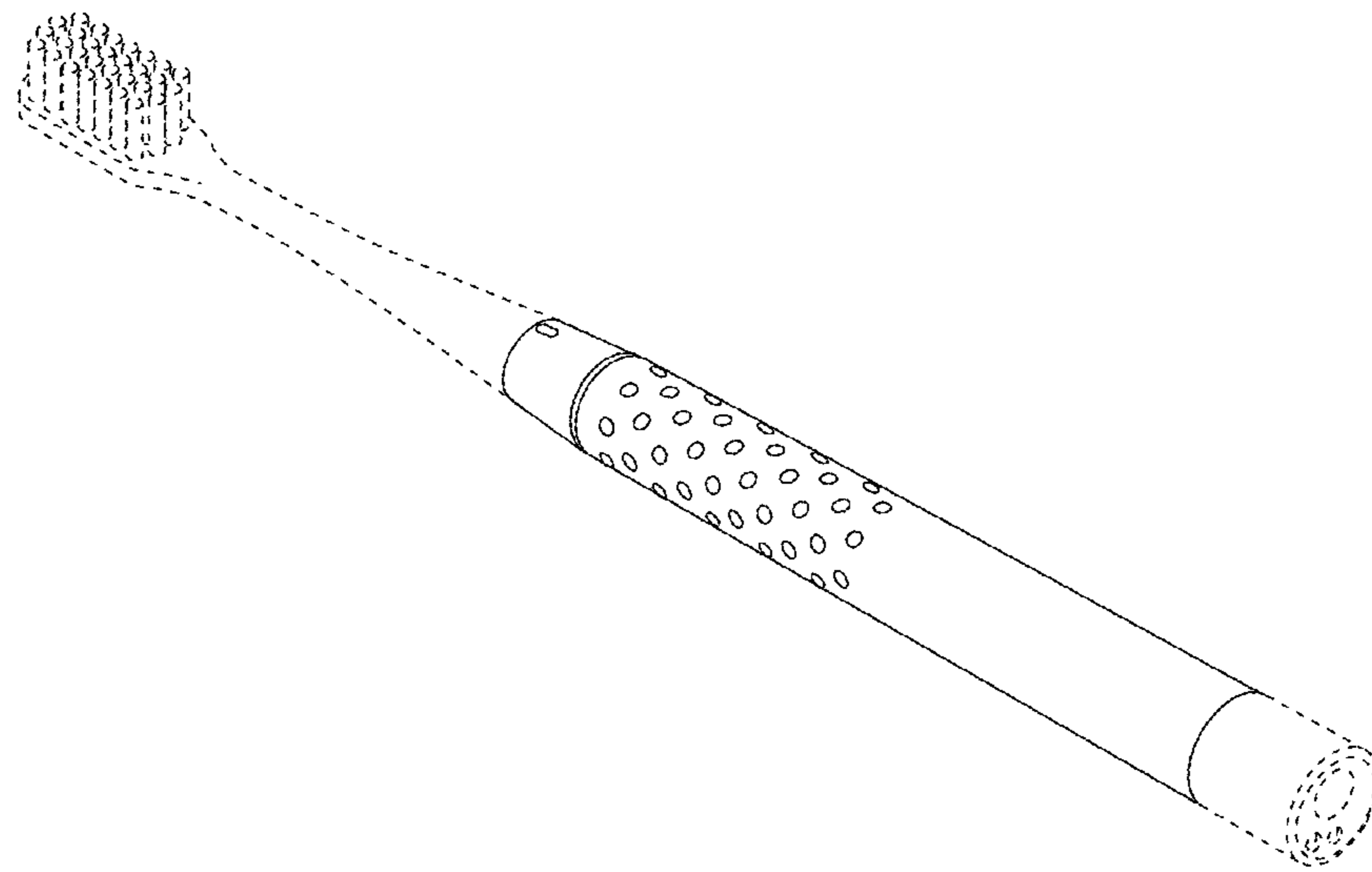


FIG. 2

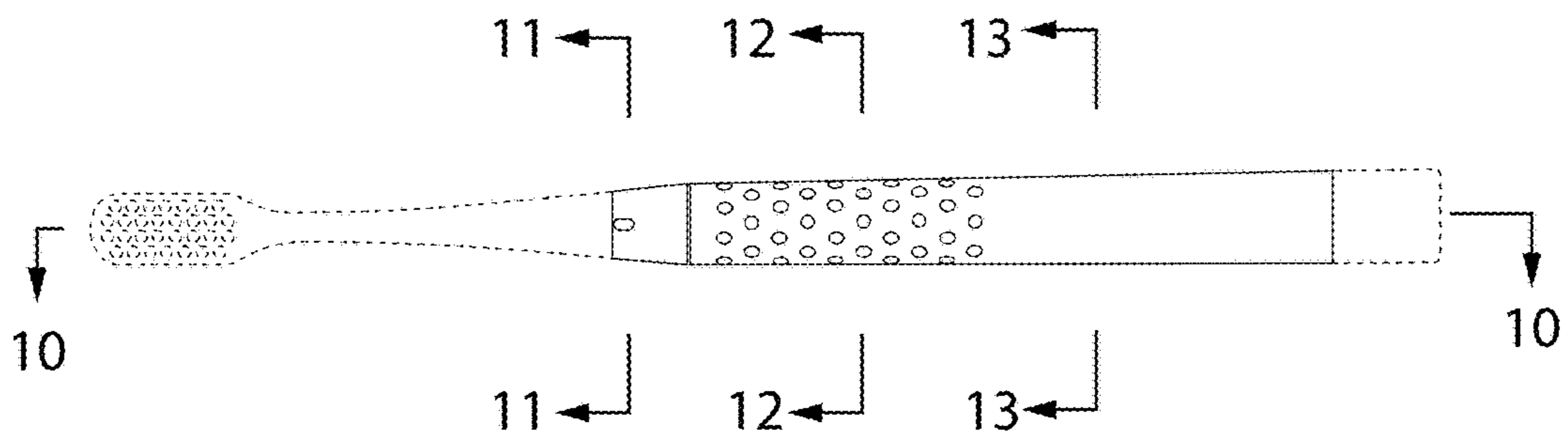


FIG. 3

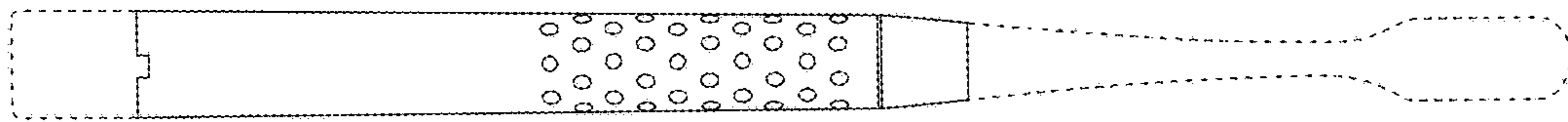


FIG. 4



FIG. 5

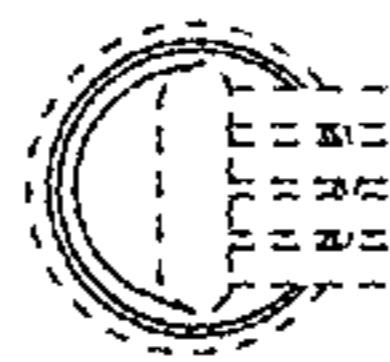


FIG. 6

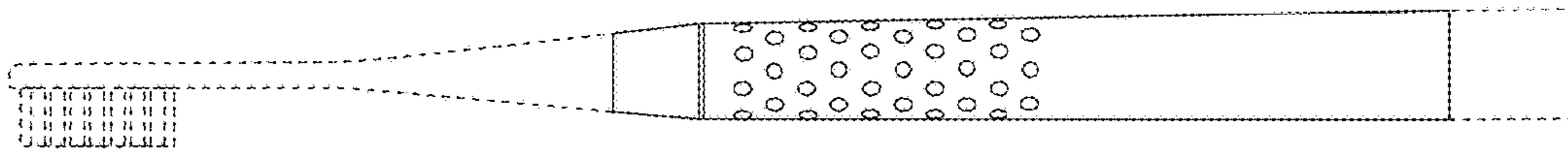


FIG. 7

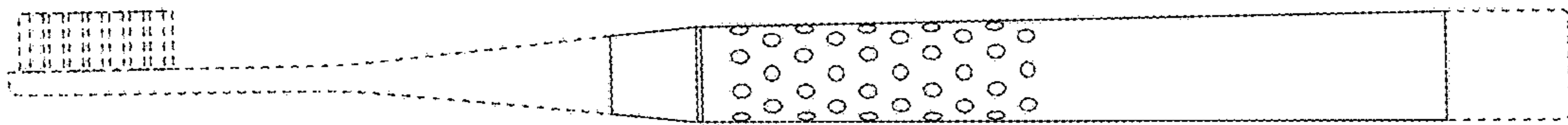


FIG. 8

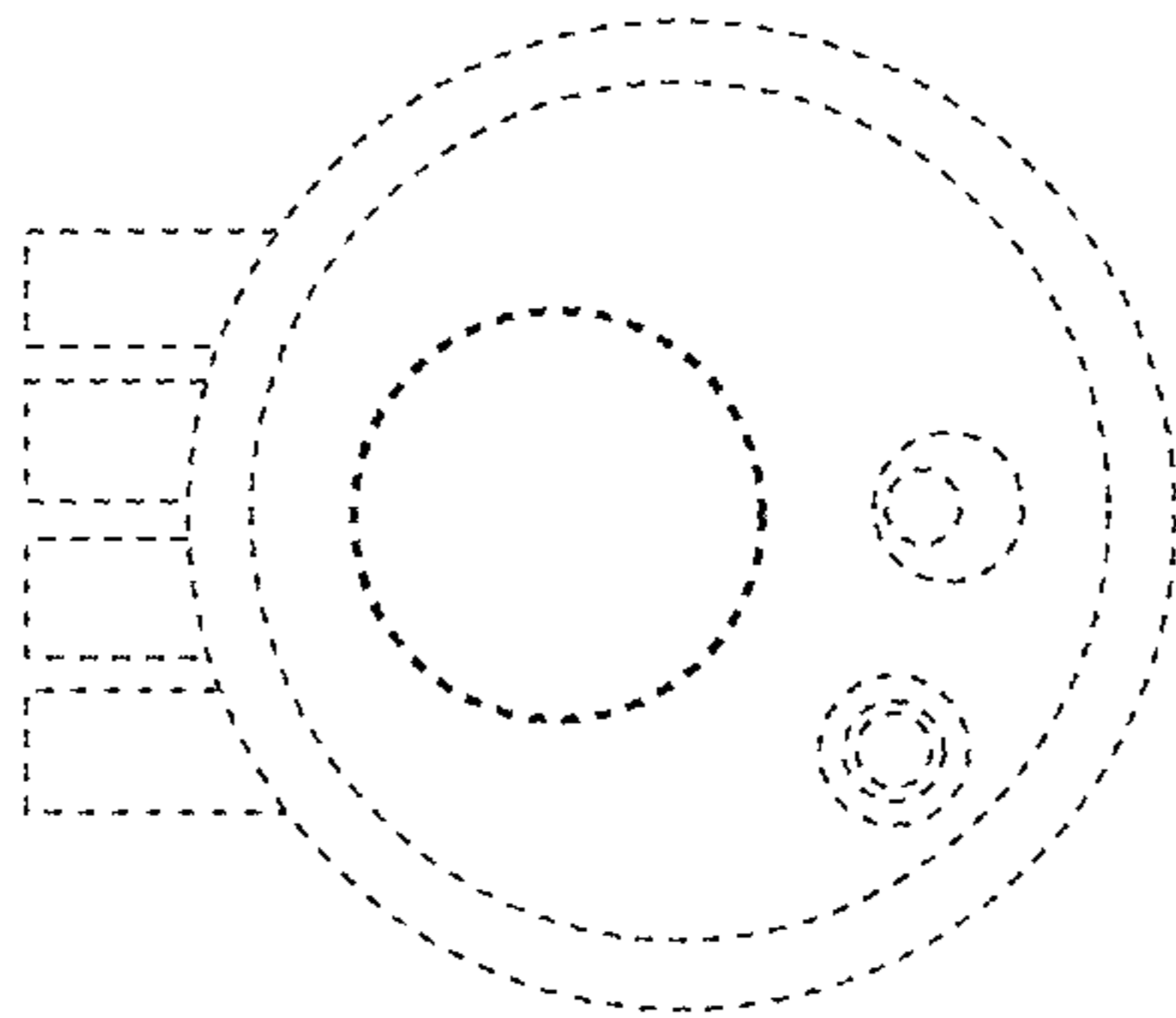


FIG. 9

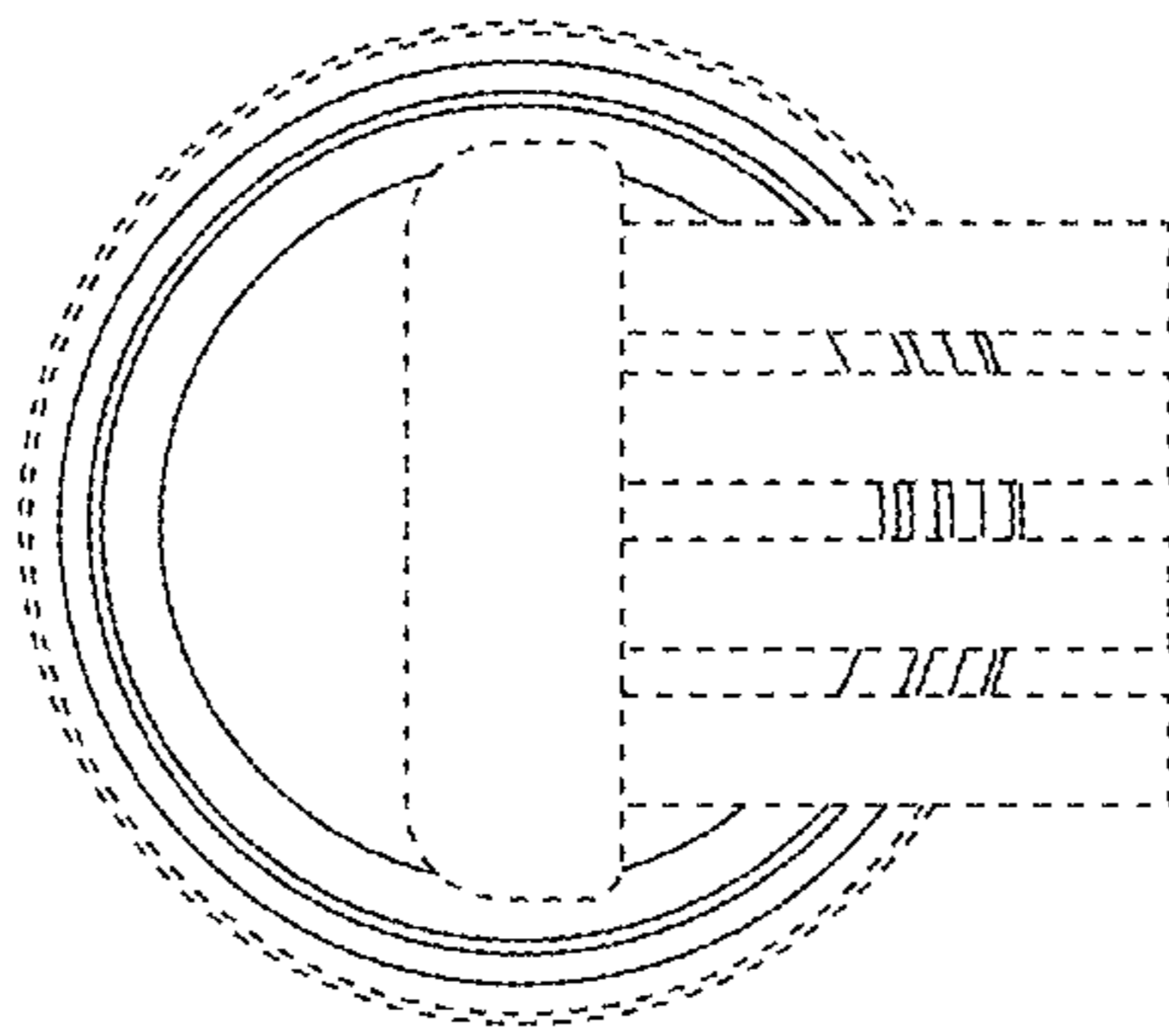


FIG. 10

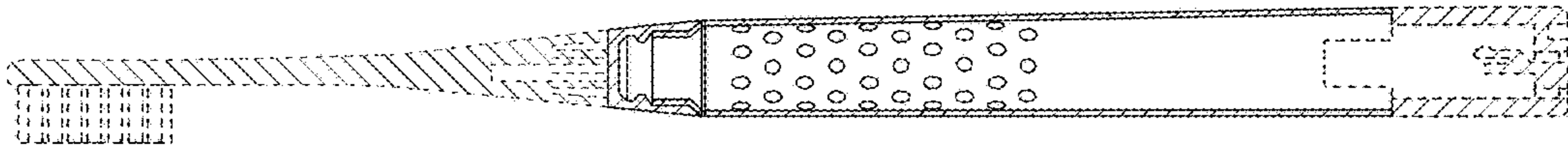


FIG. 11

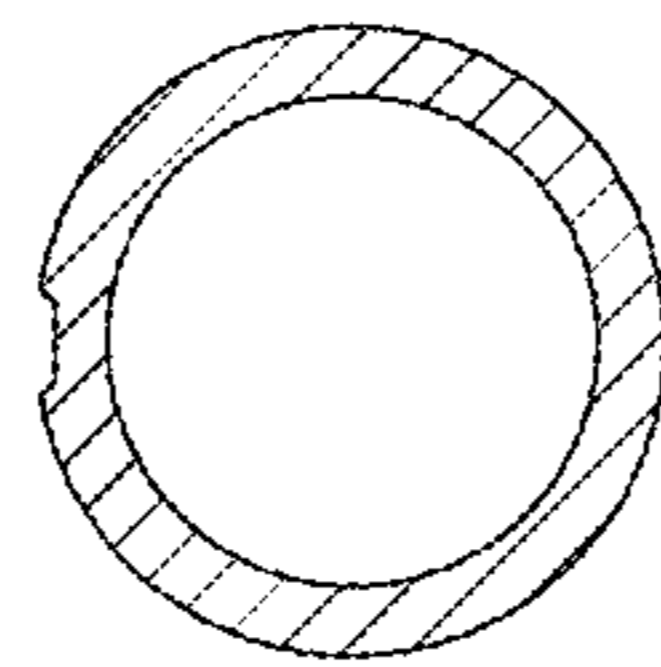


FIG. 12

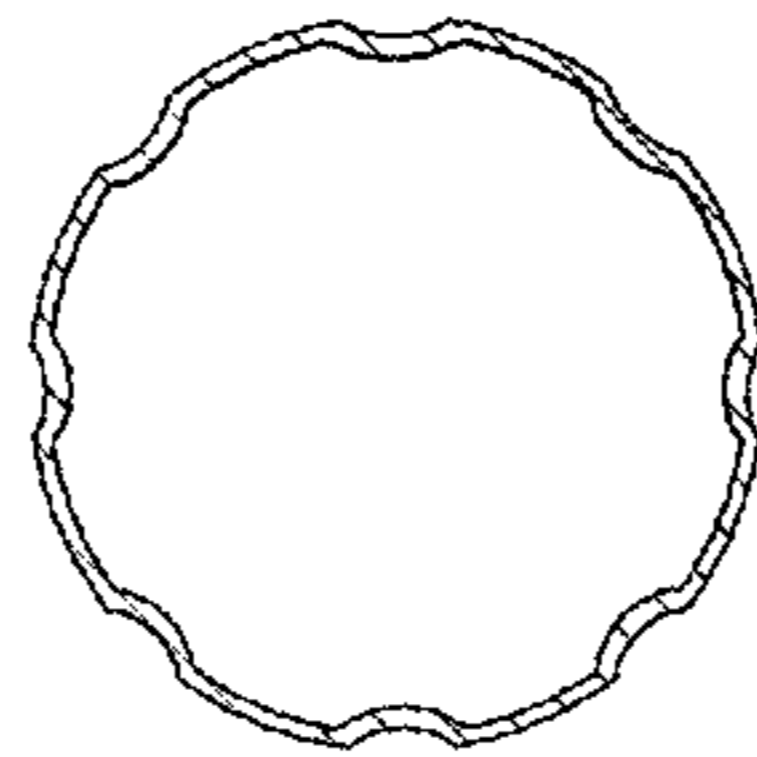


FIG. 13

