



US00D579565S

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

(10) **Patent No.:** **US D579,565 S**
(45) **Date of Patent:** **** Oct. 28, 2008**

(54) **DISPOSABLE DENTAL HANDPIECE**

(75) Inventors: **Eli Thomssen**, Kalamazoo, MI (US);
David Murphy, Ostego, MI (US);
Clayton Waldorf, Richland, MI (US);
Dirk Schipper, Kalamazoo, MI (US);
Kevin Turner, Highland Village, TX (US)

(73) Assignee: **Axenic Dental Inc.**, Kalamazoo, MI (US)

(**) Term: **14 Years**

(21) Appl. No.: **29/296,704**

(22) Filed: **Oct. 25, 2007**

Related U.S. Application Data

(62) Division of application No. 29/277,333, filed on Feb. 21, 2007, now abandoned.

(51) **LOC (8) Cl.** **24-03**

(52) **U.S. Cl.** **D24/152**

(58) **Field of Classification Search** D24/152,
D24/154, 133; 433/3, 141, 114, 119, 118,
433/321, 322; 604/1

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D110,936 S 8/1938 Wiseman
D121,506 S 7/1940 Davis
D162,002 S 2/1951 Brown

(Continued)

FOREIGN PATENT DOCUMENTS

CH 686113 A5 1/1996

(Continued)

OTHER PUBLICATIONS

Supplementary European Search Report to European Application No. 04 72 0427, dated Apr. 5, 2007 listing documents cited.

(Continued)

Primary Examiner—Charles A. Rademaker

(74) *Attorney, Agent, or Firm*—Knobbe, Martens, Olson & Bear, LLP

(57) **CLAIM**

The ornamental design for a disposable dental handpiece, as shown and described.

DESCRIPTION

FIG. 1 is a top, front and left side perspective view of a disposable dental handpiece showing our new design;

FIG. 2 is a right side elevation thereof;

FIG. 3 is a left side elevation thereof;

FIG. 4 is a front elevation thereof;

FIG. 5 is a rear elevation thereof;

FIG. 6 is a top plan view thereof;

FIG. 7 is a bottom plan view thereof;

FIG. 8 is a bottom, rear and right side perspective view thereof;

FIG. 9 is a top, front and left side perspective view of a modified embodiment of the design shown in FIGS. 1 through 8;

FIG. 10 is a right side elevation thereof;

FIG. 11 is a left side elevation thereof;

FIG. 12 is a front elevation thereof;

FIG. 13 is a rear elevation thereof;

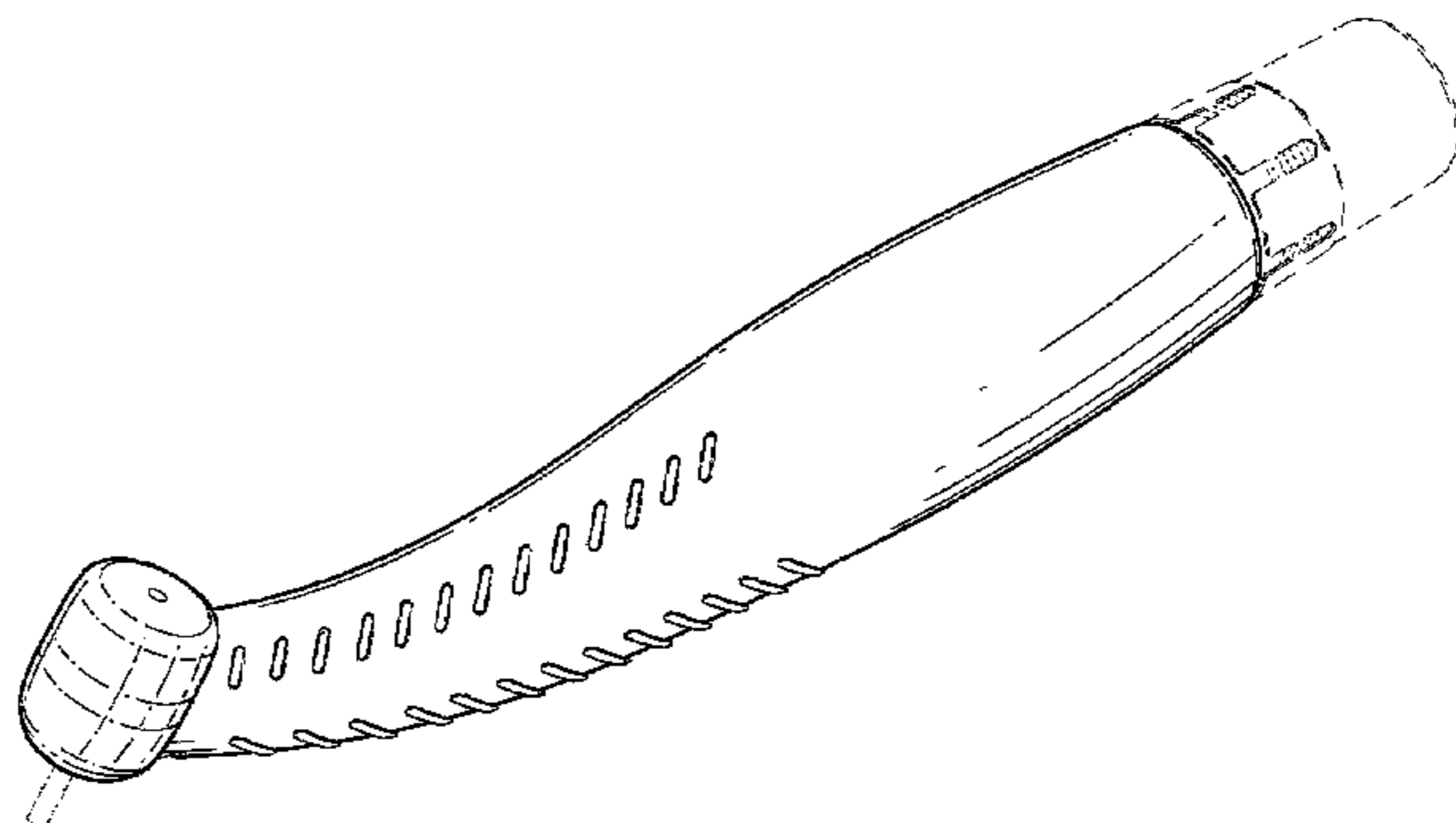
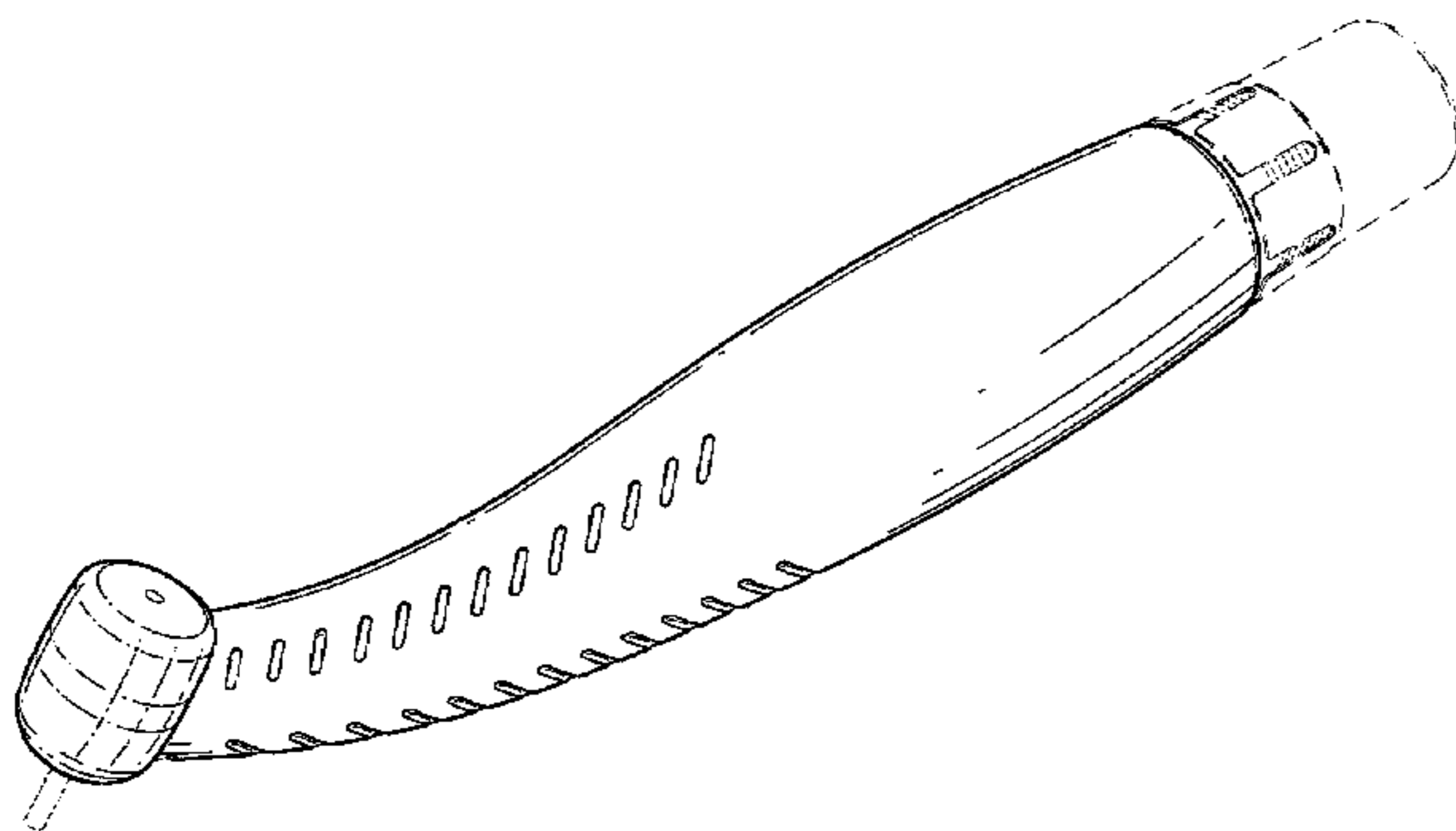
FIG. 14 is a top plan view thereof;

FIG. 15 is a bottom plan view thereof; and,

FIG. 16 is a bottom, rear and right side perspective view thereof.

The broken lines shown in the drawings are included for the purpose of illustrating environmental structure and form no part of the claimed design.

1 Claim, 12 Drawing Sheets



U.S. PATENT DOCUMENTS

3,120,705 A 2/1964 Hoffmeister et al.
D219,979 S 2/1971 Coss
3,893,242 A 7/1975 Lieb et al.
D239,390 S 3/1976 Webb
D241,550 S 9/1976 Morin
4,014,099 A 3/1977 Bailey
D251,304 S 3/1979 Leonard
D254,570 S 3/1980 McDonald
D255,929 S 7/1980 Austin, Jr.
D255,930 S 7/1980 Nilles et al.
D257,284 S 10/1980 Leonard
4,249,896 A 2/1981 Kerfoot
D261,032 S 9/1981 Marucci et al.
D261,301 S 10/1981 Marucci et al.
D263,877 S 4/1982 Podszus et al.
D264,876 S 6/1982 Seid
D267,036 S 11/1982 Podszus et al.
4,370,132 A 1/1983 Wohlgemuth
D269,122 S 5/1983 Seeley
4,795,343 A 1/1989 Choisser
4,842,516 A 6/1989 Choisser
D305,935 S 2/1990 Straihammer et al.
4,941,828 A 7/1990 Kimura
4,978,297 A 12/1990 Vlock
5,007,831 A 4/1991 Bierbaum et al.
5,040,978 A 8/1991 Falcon et al.
5,096,421 A 3/1992 Seney
5,156,547 A 10/1992 Bailey
D336,517 S * 6/1993 McKeown D24/152
5,217,372 A 6/1993 Truocchio
5,231,973 A 8/1993 Dickie
5,263,606 A 11/1993 Dutt
5,308,242 A 5/1994 McLaughlin et al.
5,334,013 A 8/1994 Meller
5,348,473 A 9/1994 Kivlighan, Jr.
5,352,118 A 10/1994 Franetzki et al.
5,352,119 A 10/1994 Sakurai
5,374,189 A 12/1994 Mendoza
D355,971 S 2/1995 Meller
D356,866 S 3/1995 Meller
5,538,425 A 7/1996 Reeves
D373,636 S 9/1996 Martin
5,562,446 A 10/1996 Matsui et al.
D378,235 S 2/1997 Mark
D378,412 S * 3/1997 Badoz et al. D24/152
5,674,068 A 10/1997 Eibofner
5,681,409 A 10/1997 Lin et al.
D389,912 S 1/1998 Emerson et al.
5,733,120 A 3/1998 Yao et al.
5,772,436 A 6/1998 Matsui et al.
5,782,634 A 7/1998 Lingenhole et al.
5,797,743 A 8/1998 Bailey
5,807,108 A 9/1998 Schwenoa et al.
5,810,588 A 9/1998 Cohen
5,902,108 A 5/1999 Nakayama et al.
5,911,577 A 6/1999 Henrikson
5,921,777 A 7/1999 Dorman
5,924,865 A 7/1999 Quinn
5,984,654 A 11/1999 Mendoza et al.

D425,988 S 5/2000 Frank
D426,636 S 6/2000 Herring
D427,311 S 6/2000 Henrikson
D427,682 S 7/2000 Novak
6,099,309 A 8/2000 Cardarelli
6,149,430 A 11/2000 Nemetz et al.
6,186,784 B1 2/2001 Bailey
6,305,935 B1 10/2001 Cardarelli
6,315,560 B1 11/2001 Krouglicof et al.
6,350,124 B1 2/2002 Wade
D461,894 S * 8/2002 Jansheski, Jr. D24/152
D463,556 S * 9/2002 Bareth et al. D24/152
D465,279 S 11/2002 Etter et al.
D472,969 S 4/2003 Wilden
6,579,093 B2 6/2003 Bailey et al.
6,638,068 B2 10/2003 Lingenhole et al.
6,676,374 B2 1/2004 Hashimoto et al.
D489,134 S 4/2004 Nakanishi
6,716,028 B2 4/2004 Rahman et al.
6,821,119 B2 11/2004 Shortt et al.
D499,486 S 12/2004 Kuhn et al.
D504,949 S 5/2005 Kuhn et al.
7,008,224 B1 3/2006 Browning et al.
D533,276 S * 12/2006 Nakanishi D24/152
D550,358 S * 9/2007 Nakanishi D24/152
D556,323 S * 11/2007 Nakanishi D24/152
2002/0119420 A1 8/2002 Bailey et al.
2006/0121413 A1 6/2006 Turner
2006/0183073 A1 8/2006 Browning et al.
2006/0183074 A1 8/2006 Brennan

FOREIGN PATENT DOCUMENTS

EP 0925762 A1 6/1999
GB 1023481 5/1985
GB 2071913 5/1998
JP 1211559 8/1989
WO WO 91/15160 10/1991
WO WO 95/12361 5/1995
WO WO 02/076308 A2 10/2002
WO WO 2004-082501 A2 9/2004

OTHER PUBLICATIONS

International Search Report Accompanying WO 91/15160.
International Search Report Accompanying WO 95/12361.
KaVo ELECTROtorque plus Brushless Electric Motor System Brochure in 17 pages, KaVo America Corporation, Lake Zurich, IL.
Dentsply Professional Midwest Stylus Brochure in 2 pages, 2005 Dentsply International, Des Plaines, IL.
Dentsply Professional Midwest System Brochure in 8 pages, 2002 Dentsply International, Des Plaines, IL.
Dental EZ Group Star Dental Solara Series Brochure in 6 pages, 2003 Dental EZ Group, Malvem, PA.
The Dental Company Sirona Handpieces Brochure in 14 pages, Sirona Dental Systems LLC, Charlotte, NC.
Dental EZ Group StarDental 430 Series LubeFree High-Speed Handpiece System Brochure in 4 pages, 2005 Dental EZ Group, Lancaster, PA.
Office Action dated Jul. 20, 2007 for Japanese Design Application No. 2007-7115.

* cited by examiner

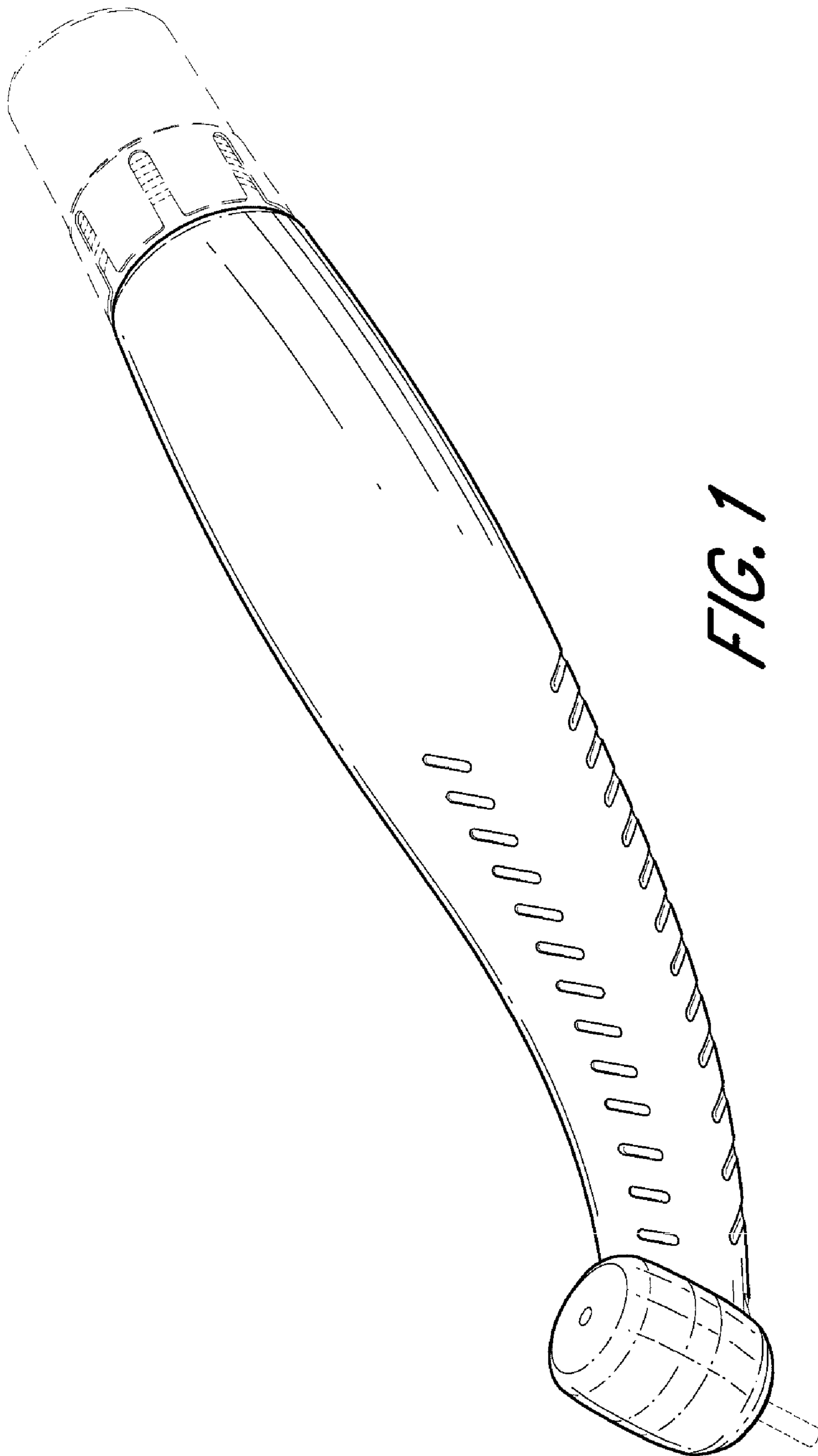


FIG. 1

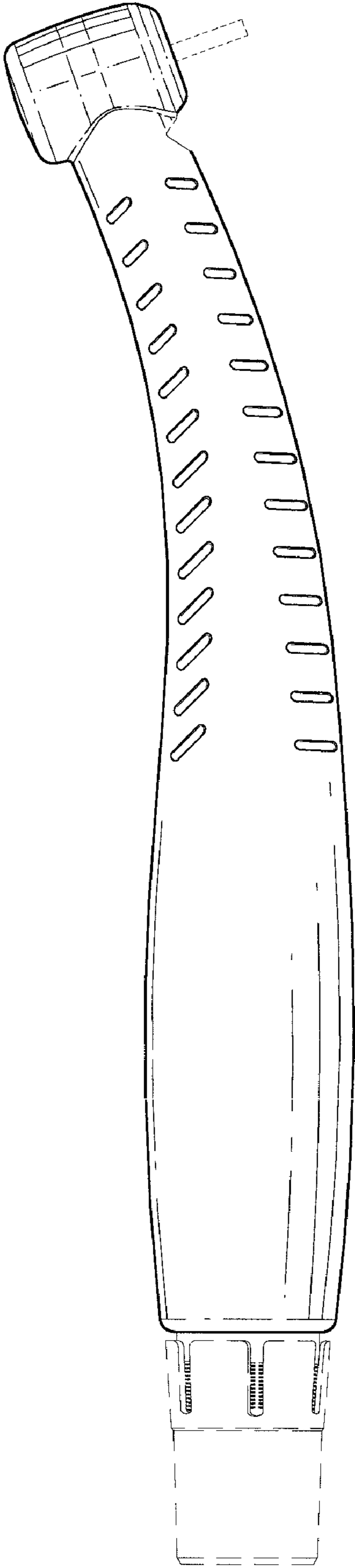


FIG. 2

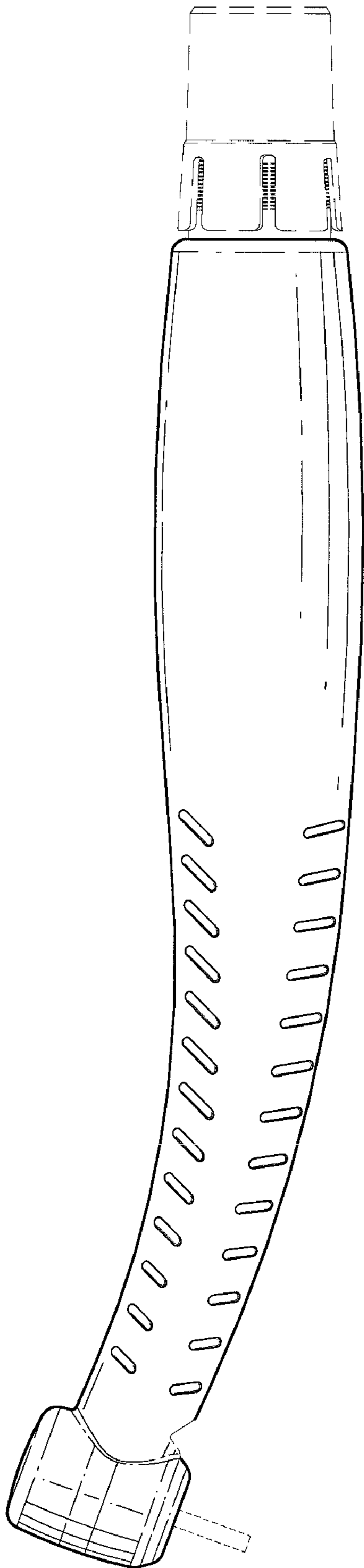


FIG. 3

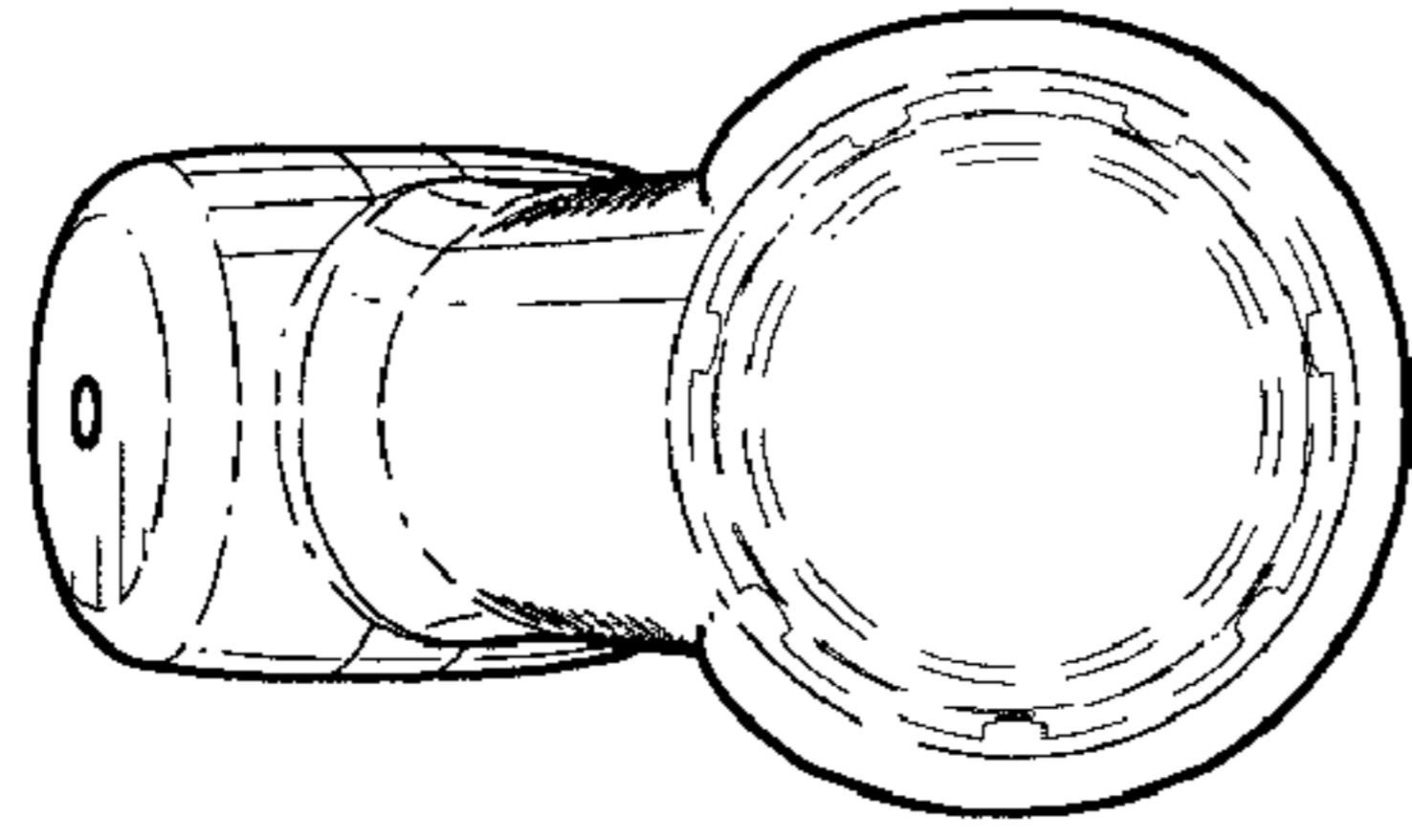


FIG. 5

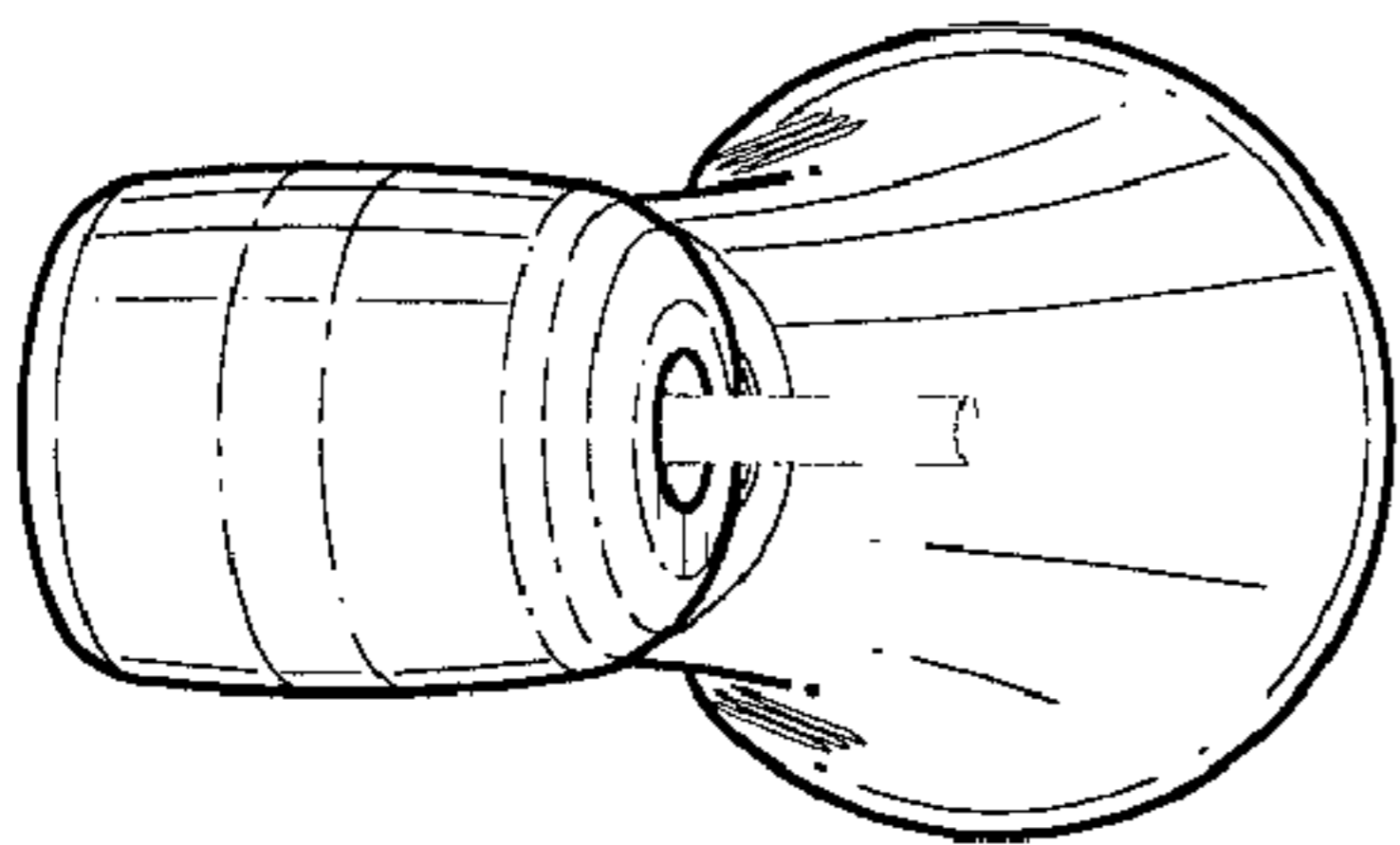


FIG. 4

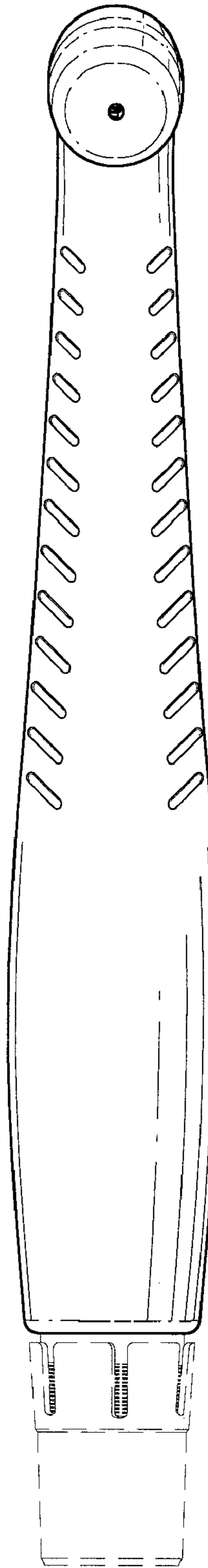


FIG. 6

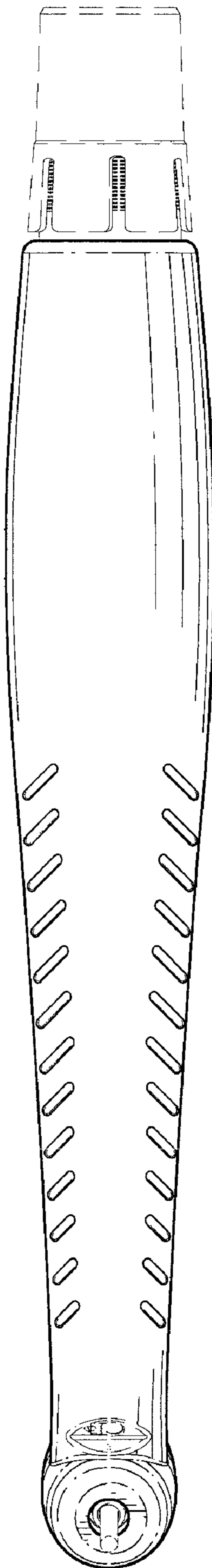


FIG. 7

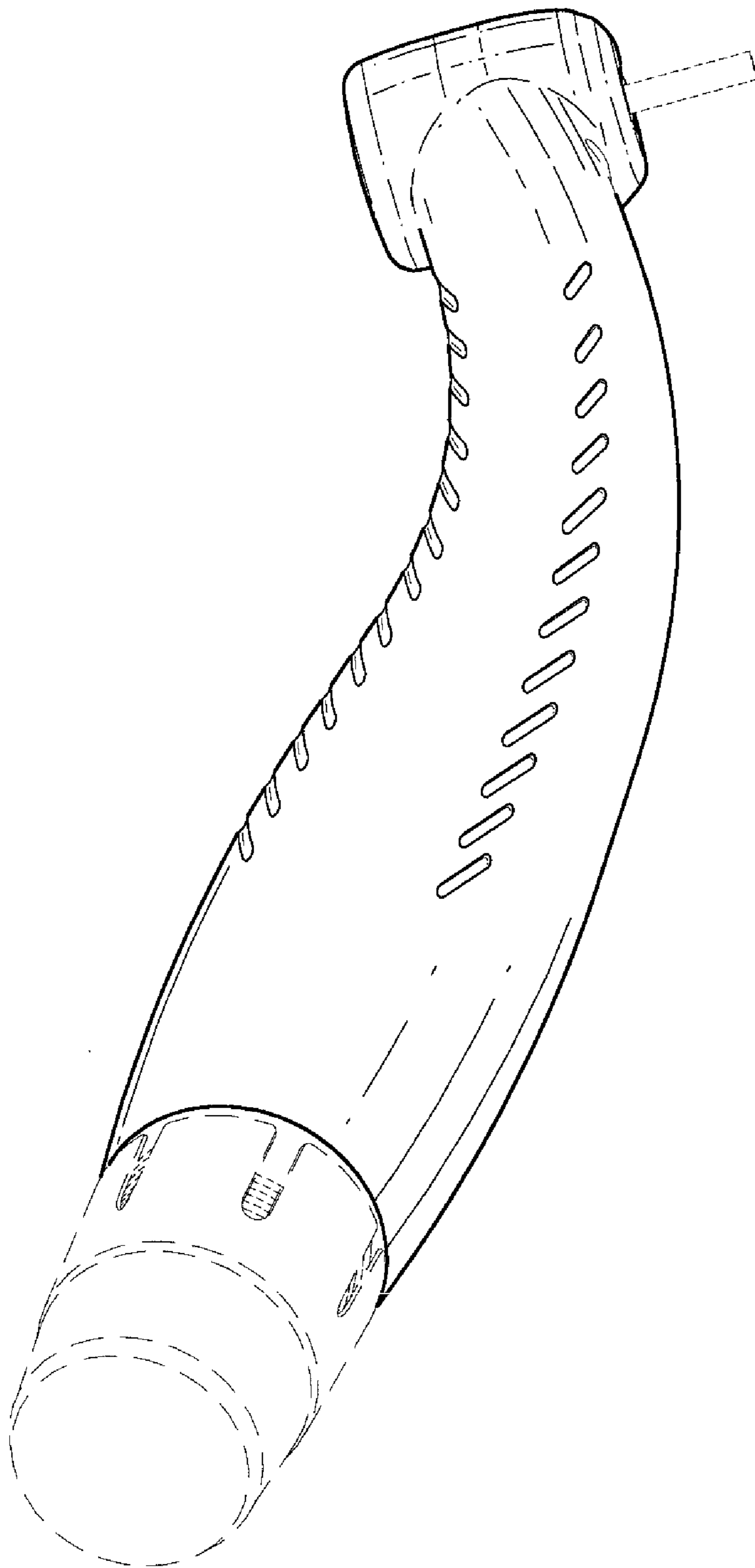


FIG. 8

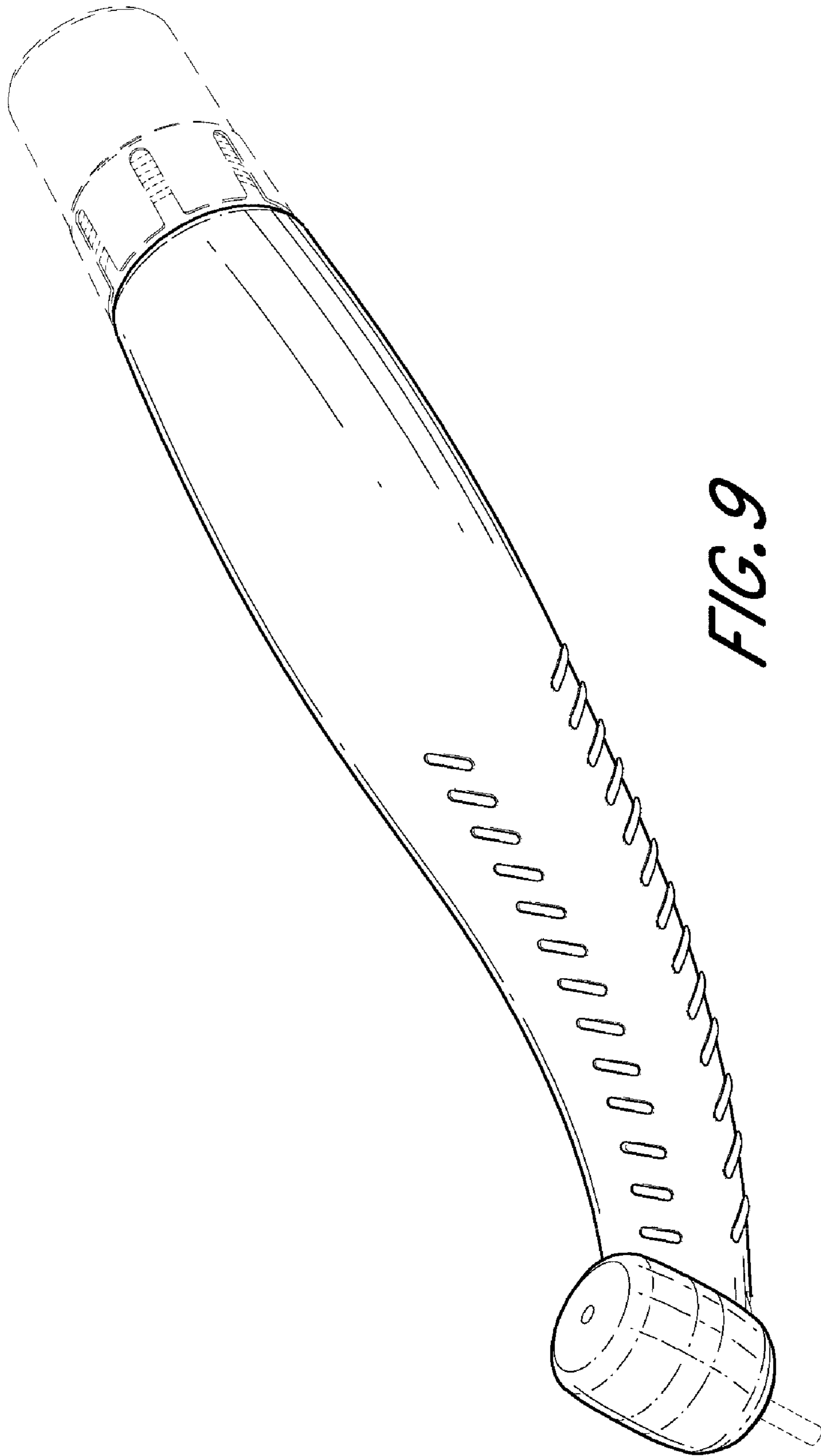


FIG. 9

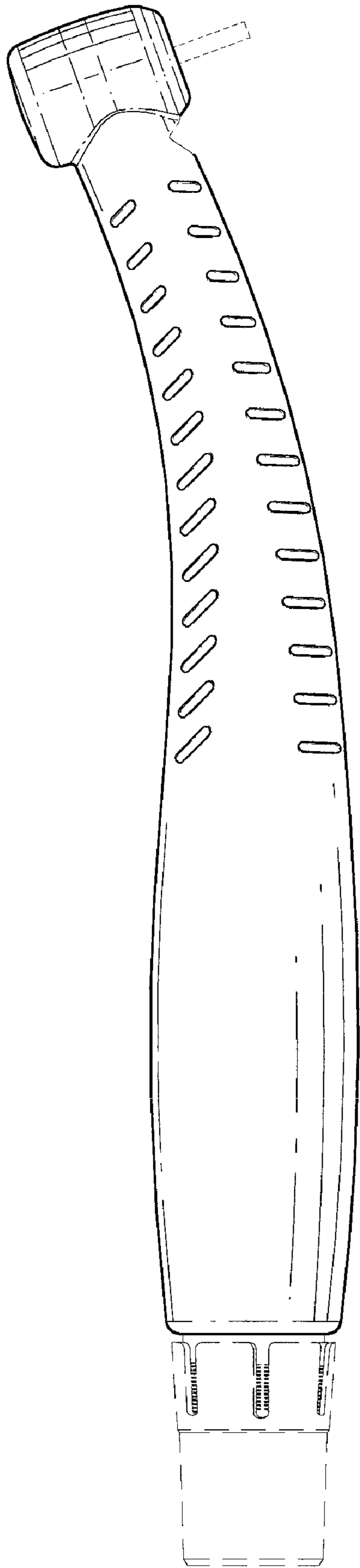


FIG. 10

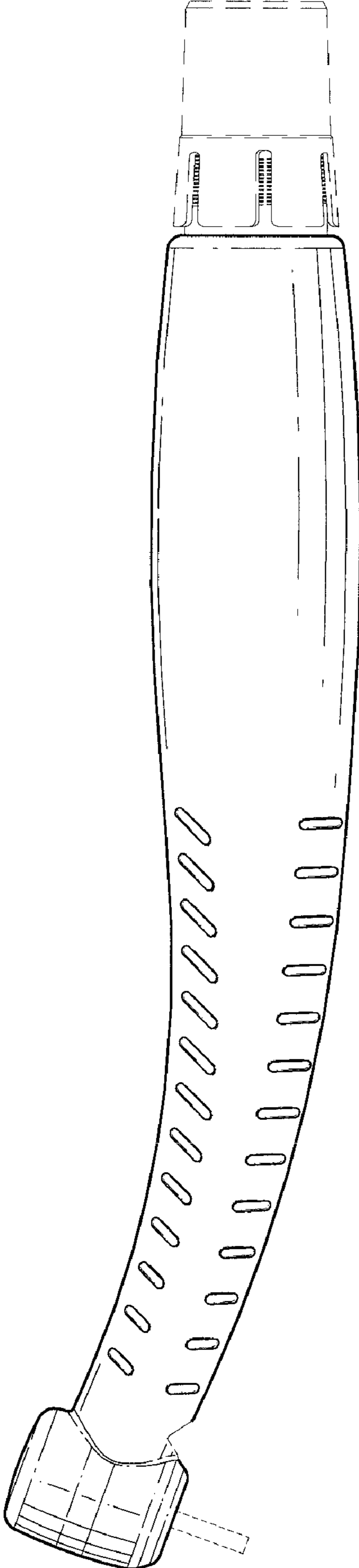


FIG. 11

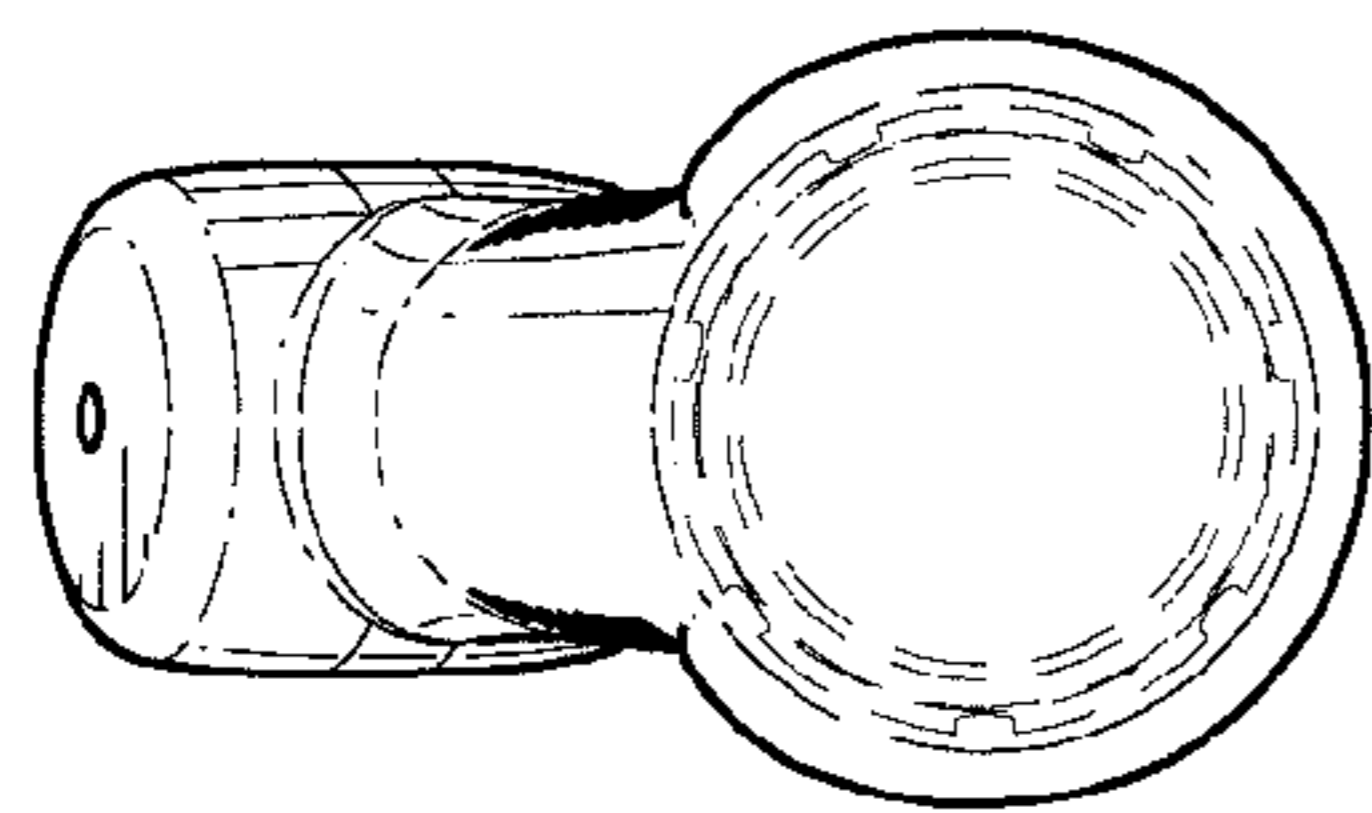


FIG. 12

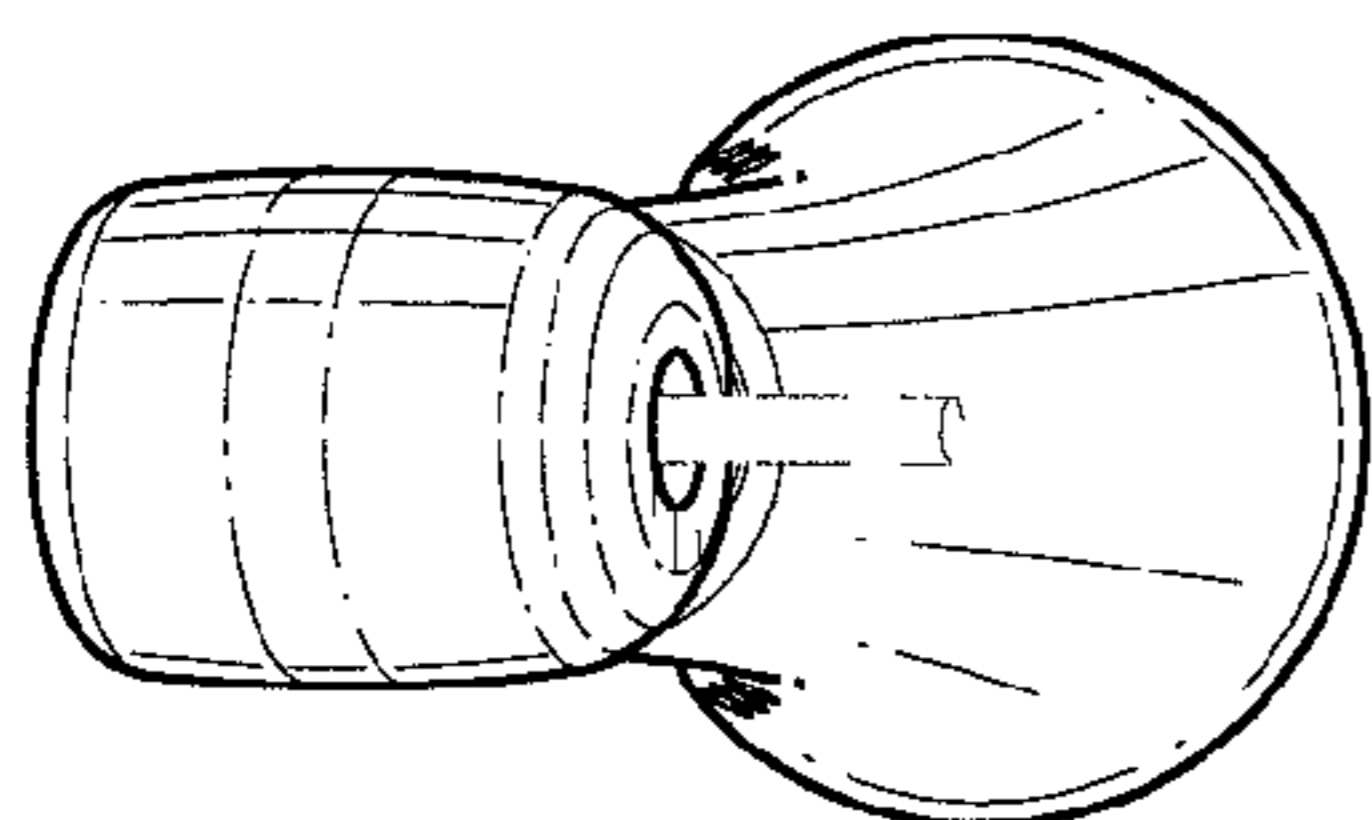


FIG. 13

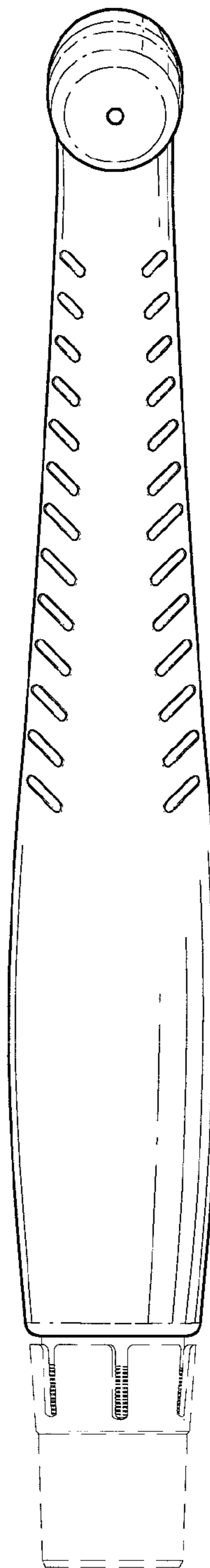


FIG. 14

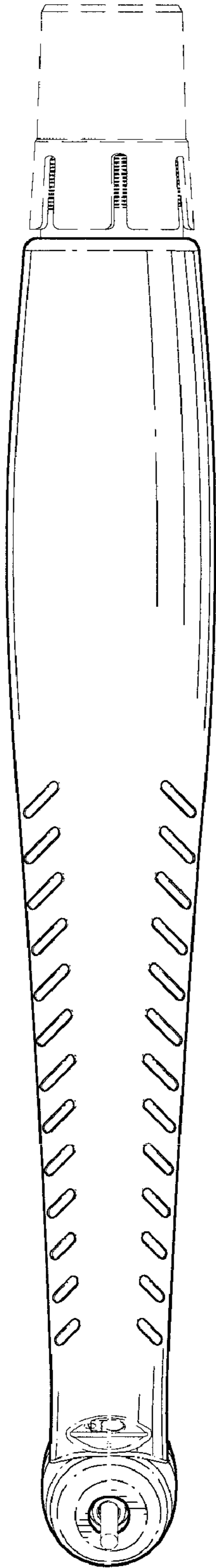


FIG. 15

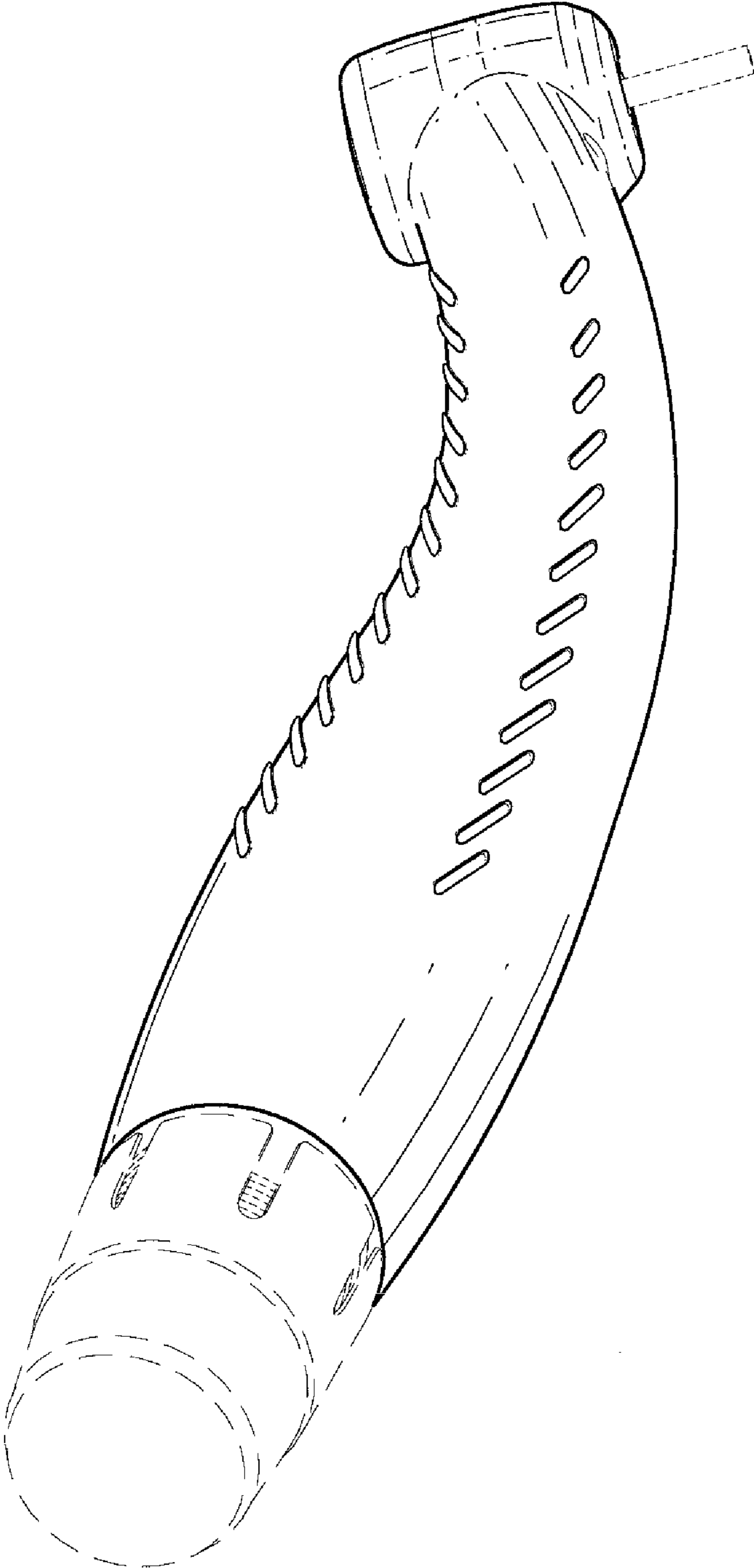


FIG. 16