



US00D810029S

(12) **United States Design Patent** (10) **Patent No.:** **US D810,029 S**
Robert et al. (45) **Date of Patent:** **** Feb. 13, 2018**

- (54) **ELECTRICAL CONNECTOR**
- (71) Applicant: **INTERLEMO HOLDING S.A.**,
Ecublens (CH)
- (72) Inventors: **David Robert**, Montbenoit (FR); **Eric Moreau**, Malbuisson (FR)
- (73) Assignee: **INTERLEMO HOLDING SA**,
Ecublens (CH)
- (**) Term: **15 Years**
- (21) Appl. No.: **29/604,596**
- (22) Filed: **May 18, 2017**

D225,740 S	1/1973	Thompson	
3,810,073 A	5/1974	Zajac et al.	
D245,977 S *	10/1977	Mouffet	D13/133
4,155,619 A	5/1979	Bray et al.	
4,191,443 A	3/1980	Doyle	
4,229,064 A	10/1980	Vetter et al.	
4,268,115 A	5/1981	Slemon et al.	
4,316,647 A	2/1982	Bailey et al.	
4,330,166 A	5/1982	Cooper et al.	
4,412,717 A	11/1983	Monroe	
4,422,716 A	12/1983	Morimoto et al.	
4,437,726 A	3/1984	Lambert	
4,448,470 A	5/1984	Peterson	
4,472,012 A	9/1984	Michaels	

(Continued)

Related U.S. Application Data

- (62) Division of application No. 29/499,648, filed on Aug. 18, 2014, now Pat. No. Des. 787,448.

Foreign Application Priority Data

- Feb. 18, 2014 (CH) DM/082,908
- (51) **LOC (11) Cl.** **13-03**
- (52) **U.S. Cl.**
USPC **D13/151**
- (58) **Field of Classification Search**
USPC D13/101, 123, 133, 149, 151, 153, 154,
D13/155, 156, 184, 199; D8/348, 355;
174/650, 656, 659, 665; 439/271, 275,
439/277, 279, 283, 285
CPC ... H01R 4/40; H01R 4/56; H01R 4/60; H01R
4/64; H01R 9/05; H01R 9/0503; H01R
9/0518; H01R 27/00; H01R 13/58
See application file for complete search history.

References Cited

- U.S. PATENT DOCUMENTS
- 2,410,618 A 11/1946 Zelov
- 3,287,031 A 11/1966 Simmons et al.

OTHER PUBLICATIONS

Fischer FiberOptic Series:Connect2, Fischer Connectors SA, Switzerland, Mar. 2014.
(Continued)

Primary Examiner — Derrick Holland
(74) *Attorney, Agent, or Firm* — McCarter & English, LLP

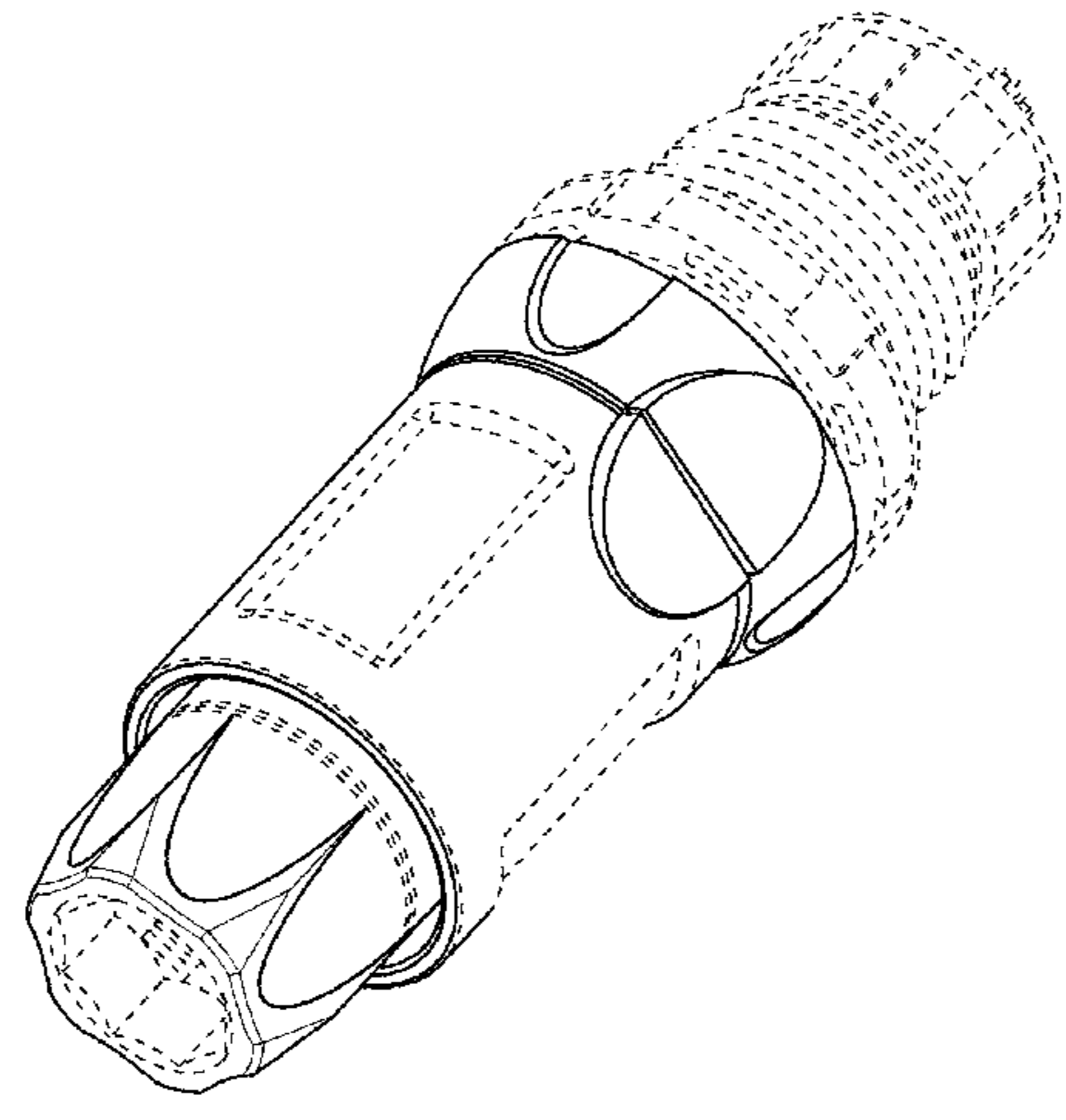
CLAIM

(57) The ornamental design for an electrical connector, as shown and described.

DESCRIPTION

FIG. 1 is a front view of an electrical connector showing our new design;
FIG. 2 is an exploded front view thereof;
FIG. 3 is a side view thereof;
FIG. 4 is a perspective view of the electrical connector shown in FIG. 1; and,
FIG. 5 is an exploded perspective view thereof.
The broken line portions of the figure drawings are included to show unclaimed subject matter only and form no part of the claimed design.

1 Claim, 3 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

4,614,029 A 9/1986 Neumann et al.
 4,647,127 A 3/1987 Weingartner
 4,657,327 A 4/1987 Weingartner
 4,685,758 A 8/1987 Yoshida
 4,708,662 A 11/1987 Klein
 4,726,788 A 2/1988 F'Geppert
 4,762,389 A 8/1988 Kaihara
 4,770,443 A 9/1988 Yamamoto
 D300,425 S 3/1989 Sumita
 4,812,136 A 3/1989 Molitor
 4,820,204 A 4/1989 Batty
 4,834,678 A 5/1989 Emadi et al.
 D301,459 S * 6/1989 Chambers D13/151
 4,891,021 A 1/1990 Hayes et al.
 4,915,421 A 4/1990 Dennany, Jr.
 4,936,662 A 6/1990 Griffin
 4,938,718 A 7/1990 Guendel
 5,042,891 A 8/1991 Mulholland et al.
 5,067,909 A 11/1991 Behning
 5,101,463 A 3/1992 Cubukciyan et al.
 5,127,843 A 7/1992 Henry et al.
 5,195,905 A 3/1993 Pesci
 5,212,752 A 5/1993 Stephenson et al.
 5,265,183 A 11/1993 Feng et al.
 5,288,243 A 2/1994 Mergless
 5,356,315 A 10/1994 Jankowski et al.
 5,394,494 A 2/1995 Jennings et al.
 5,449,302 A 9/1995 Yarbrough et al.
 D368,697 S 4/1996 Hoard
 D372,221 S 7/1996 Anthony
 5,637,010 A 6/1997 Jost et al.
 5,666,970 A 9/1997 Smith
 5,683,270 A 11/1997 Warislohner
 5,704,809 A 1/1998 Davis
 5,727,963 A 3/1998 LeMaster
 5,746,619 A 5/1998 Harting et al.
 5,890,929 A 4/1999 Mills et al.
 5,984,378 A 11/1999 Ostrander et al.
 6,045,404 A 4/2000 Myer
 6,056,577 A 5/2000 Blanchet
 D434,003 S 11/2000 Brisson
 6,161,579 A 12/2000 Vulliet
 D438,844 S 3/2001 Meyer et al.
 6,290,525 B1 9/2001 Jacobi
 6,296,508 B1 10/2001 Kuwahara et al.
 6,416,334 B1 7/2002 Plishner

D461,778 S 8/2002 Fox
 6,454,613 B2 9/2002 Valceschini
 6,508,669 B2 1/2003 Wang
 D494,136 S 8/2004 Vesecky
 6,796,812 B2 9/2004 Reicharz
 D501,826 S 2/2005 Bachmann
 D512,378 S 12/2005 Dobler
 D512,965 S 12/2005 Dobler
 7,326,091 B2 2/2008 Nania et al.
 D566,653 S 4/2008 Sakamoto
 D582,850 S 12/2008 Andre
 D588,991 S * 3/2009 Holliday D13/151
 D596,127 S 7/2009 Nania et al.
 D601,966 S 10/2009 Shaw
 7,661,995 B2 2/2010 Nania et al.
 D615,932 S 5/2010 Nania et al.
 D616,825 S 6/2010 Nania et al.
 7,805,838 B2 10/2010 Morana et al.
 7,938,670 B2 5/2011 Nania et al.
 D649,121 S 11/2011 Urban
 D662,063 S 6/2012 Eriksen et al.
 D664,504 S 7/2012 Alrutz
 8,225,475 B2 7/2012 Strange et al.
 D668,620 S 10/2012 Convert et al.
 8,449,314 B1 5/2013 Feist et al.
 8,597,034 B2 12/2013 Morana et al.
 8,636,551 B2 1/2014 Skidmore
 2002/0182924 A1 12/2002 Mo
 2009/0186503 A1 7/2009 Dobler
 2011/0294335 A1 12/2011 Sagdic et al.
 2014/0073164 A1 3/2014 Convert et al.

OTHER PUBLICATIONS

Fischer FiberOptic Series: Connect2, Technical Specification, Fischer Connectors SA, Switzerland, Apr. 2014.
 Fischer Ultimate Bend Relief: Connect2, Fischer Connectors, SA, Sep. 2013.
 Hypergrip—Push/Pull Plastic Circular Connectors, Hypertronics Corporation, MA, USA.
 Mini Hypergrip Series, High Reliability Medical Connector, Hypertronics Corporation, MA, USA, 2011.
 OmneMed Circular Plastic Connector, Omnetic Connector Corporation, MN, USA.
 Redel XP series Catalog, Lemo, SA, Switzerland, Nov. 2010.
 Redel P Series Catalog, Lemo, SA, Switzerland, Oct. 2008.

* cited by examiner

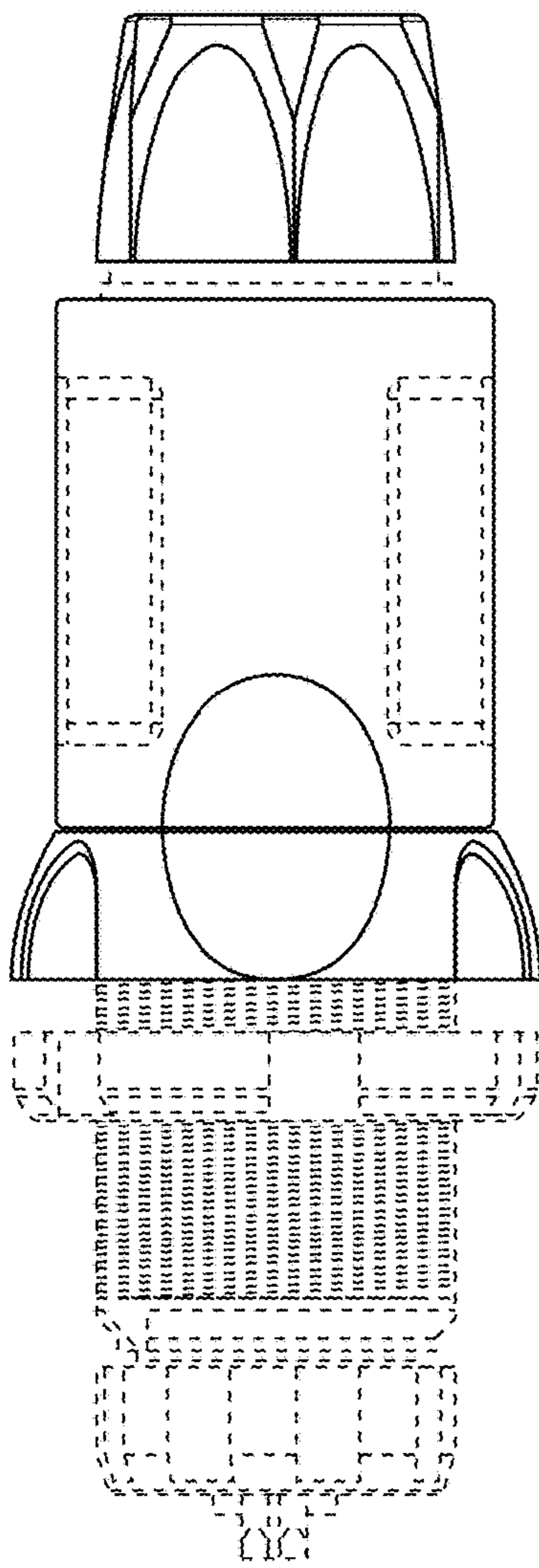


FIG. 1

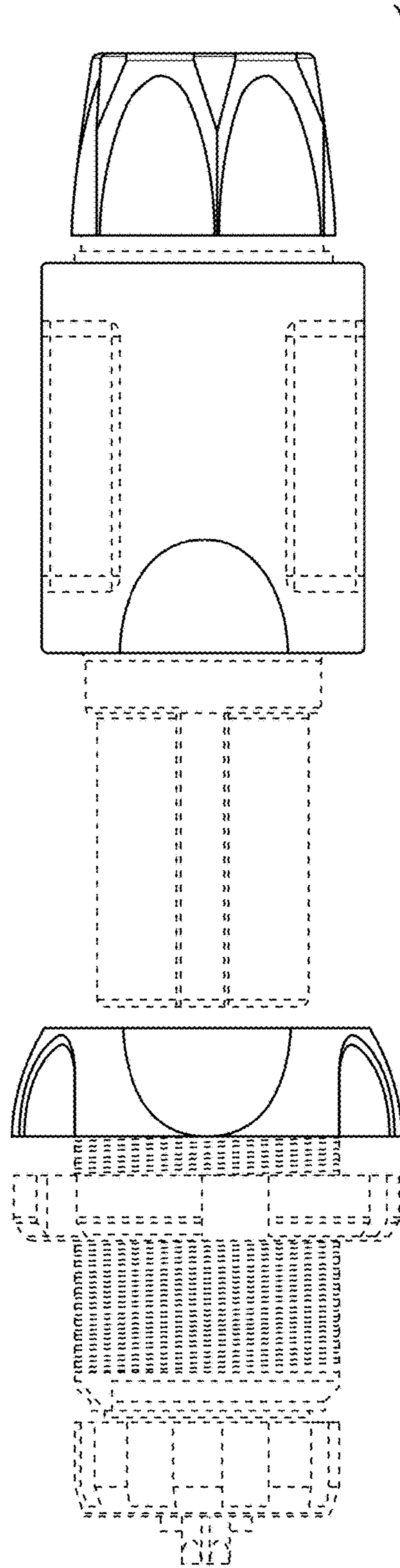


FIG. 2

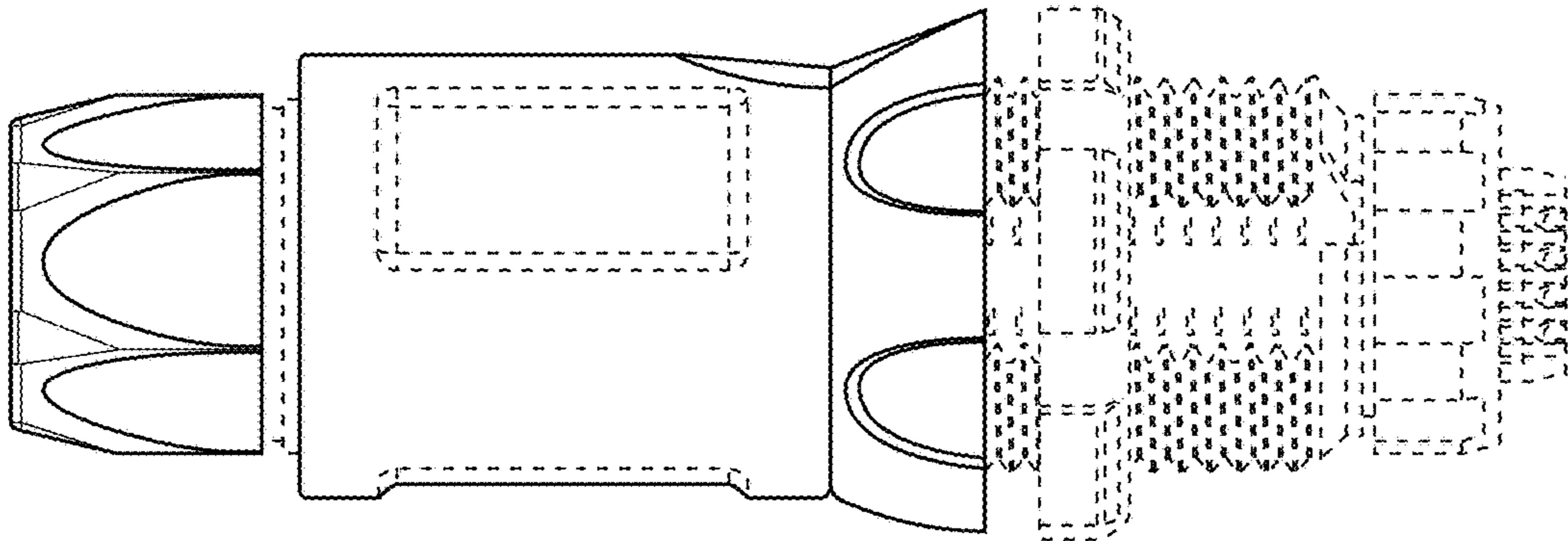


FIG. 3

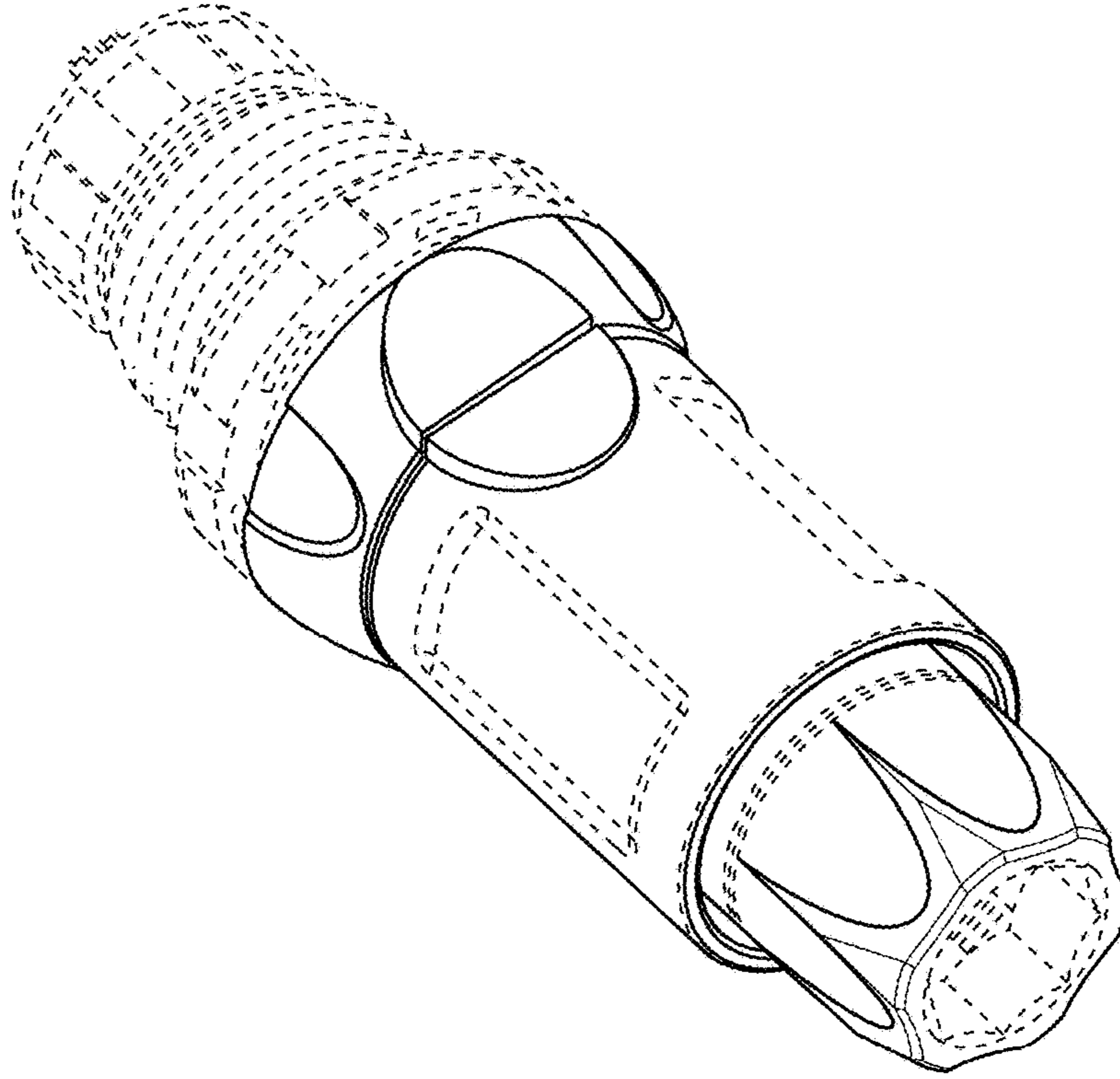


FIG. 4

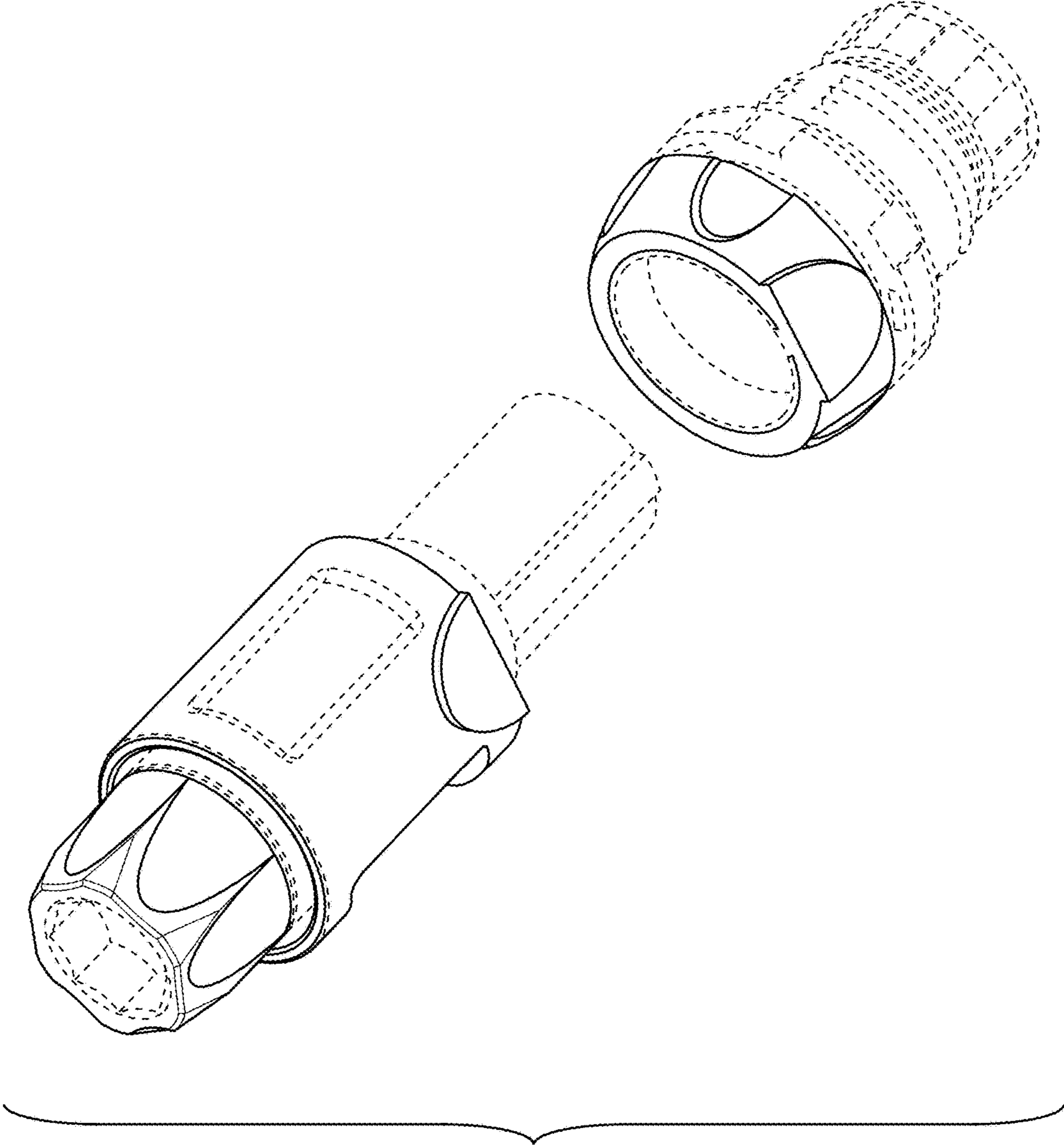


FIG. 5