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Barrefelt et al.

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(54) **ELECTRICAL OR OPTICAL CONNECTOR**

13/62; H01R 13/63; H01R 33/00; G02B 6/36; F16L 21/06

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See application file for complete search history.

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(56) **References Cited**

U.S. PATENT DOCUMENTS

D320,001	S *	9/1991	Hirabayashi	D13/146
7,934,943	B2 *	5/2011	Malstrom	.....	H01R 12/592 439/447
D714,725	S *	10/2014	Vogelmann	.....	D13/133
8,882,364	B2 *	11/2014	Busse	.....	G02B 6/3825 385/77
9,256,030	B2 *	2/2016	Belenkiy	.....	G02B 6/36
D769,822	S *	10/2016	Reynolds	.....	D13/146
D804,426	S *	12/2017	Watkins	.....	D13/151
2011/0244721	A1 *	10/2011	Amidon	.....	H01R 9/05 439/578
2014/0057487	A1 *	2/2014	May	H01R 13/60 439/530
2015/0369406	A1 *	12/2015	Dieduksman	F16L 21/06 285/417

(Continued)

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(**) Term: **15 Years**

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(30) **Foreign Application Priority Data**

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(51) **LOC (11) Cl.** **13-03**

(52) **U.S. Cl.**
USPC **D13/133**

(58) **Field of Classification Search**
USPC D13/118, 120, 123, 133–135, 145–147, D13/149, 151, 153–157, 173, 184, 199
CPC ... A61B 1/00; H01R 9/00; H01R 9/05; H01R 13/00; H01R 13/33; H01R 13/40; H01R 13/52; H01R 13/56; H01R 13/58; H01R

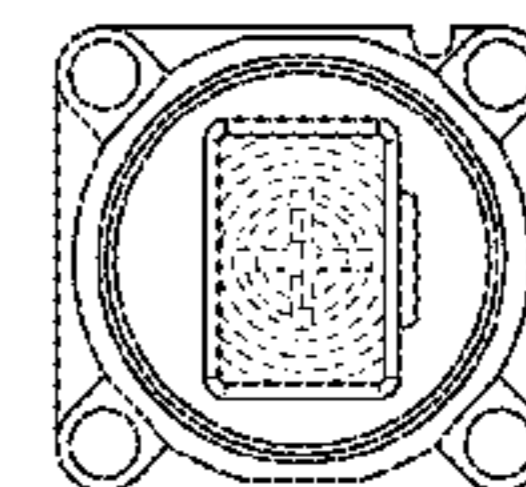
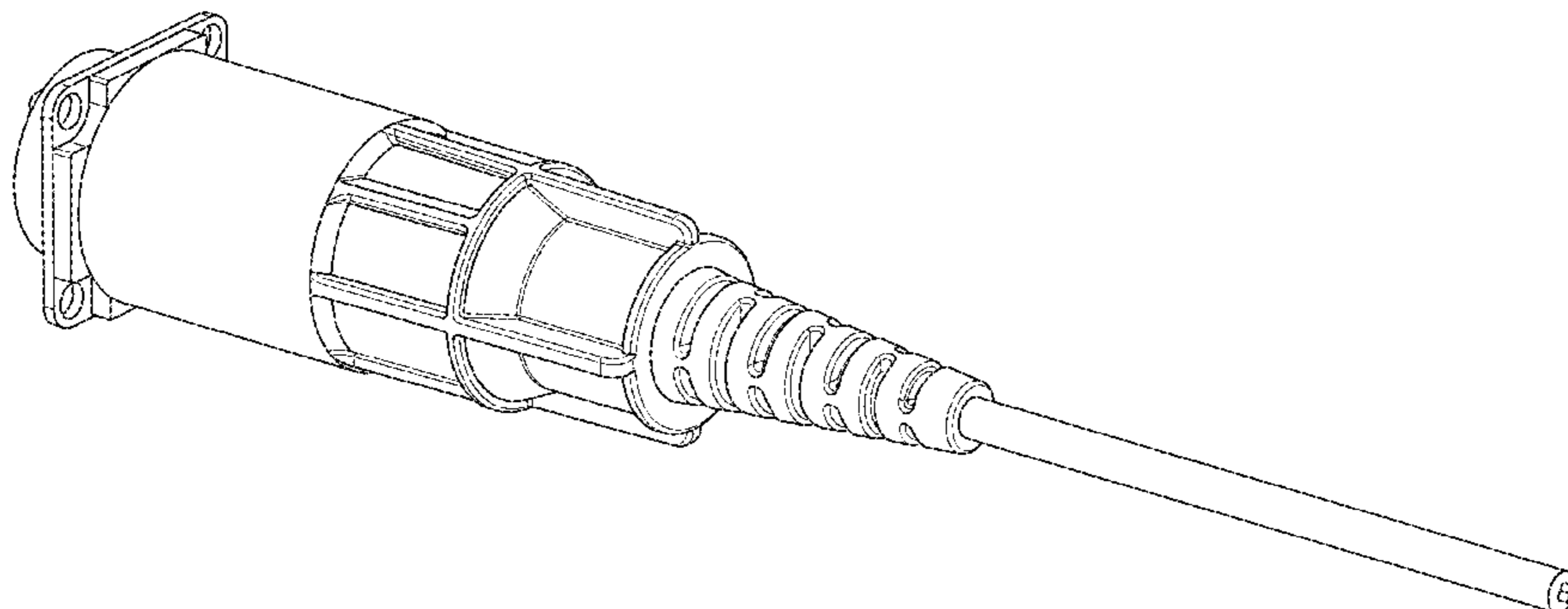
(57) **CLAIM**

The ornamental design for an electrical or optical connector, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of an electrical or optical connector;
FIG. 2 is a front plan view thereof;
FIG. 3 is a rear elevation view thereof;
FIG. 4 is a left side elevation view thereof;
FIG. 5 is a right side elevation view thereof;
FIG. 6 is a top plan view thereof; and,
FIG. 7 is a bottom plan view thereof.

(Continued)



The broken line portion of the figure drawings is included to show portions of the article that form no part of the claimed design.

1 Claim, 7 Drawing Sheets

(56) **References Cited**

U.S. PATENT DOCUMENTS

2015/0372417 A1* 12/2015 Dieduksman G02B 6/3807
439/461
2016/0018603 A1* 1/2016 Mooij G02B 6/3817
385/76
2016/0134066 A1* 5/2016 Endo H01R 9/05
439/578
2016/0172783 A1* 6/2016 Endo H01R 13/052
439/746
2017/0288335 A1* 10/2017 Hsu G02B 6/36
2017/0299817 A1* 10/2017 Huang G02B 6/44
2017/0346200 A1* 11/2017 Bertrand H01R 11/01
2017/0365962 A1* 12/2017 Gniadek H01R 24/20

* cited by examiner

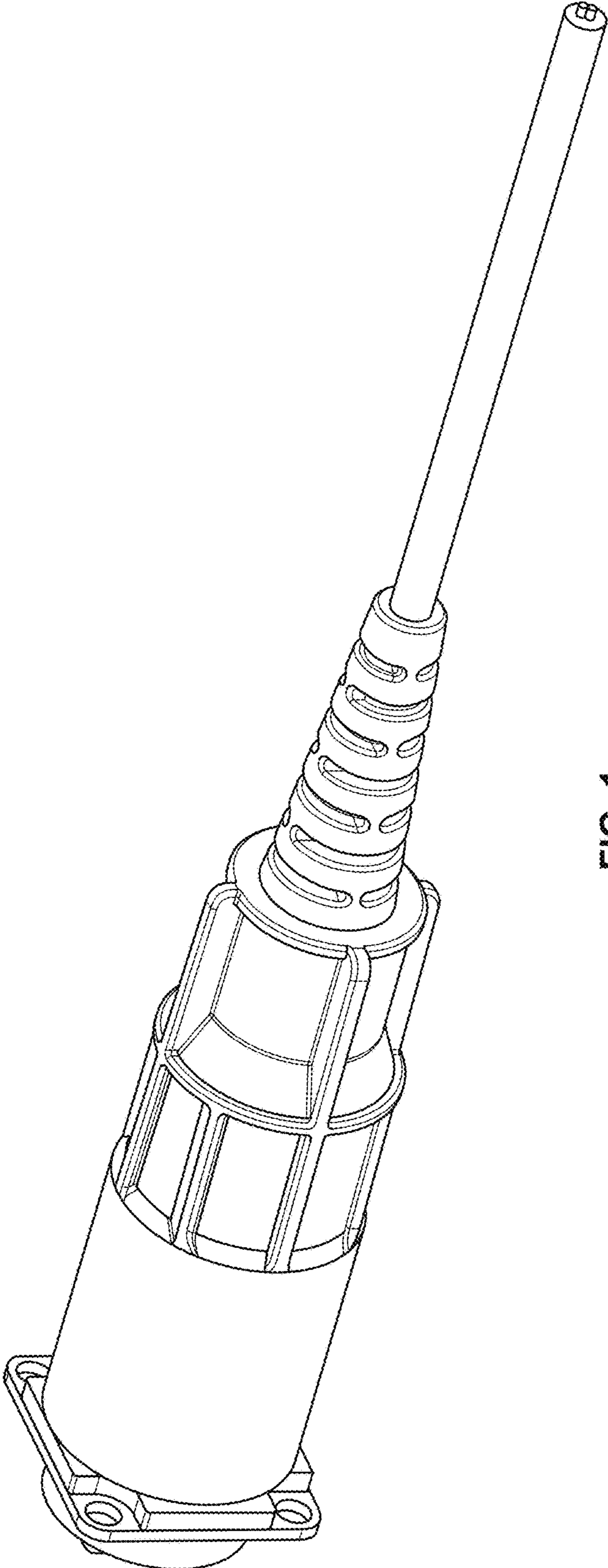


FIG. 1

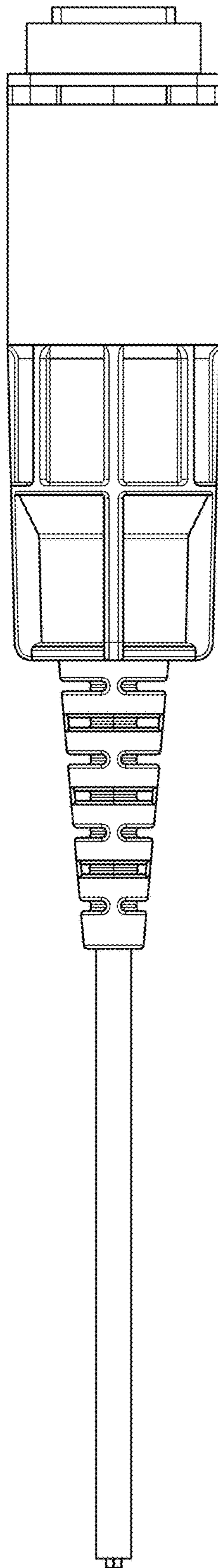


FIG. 2

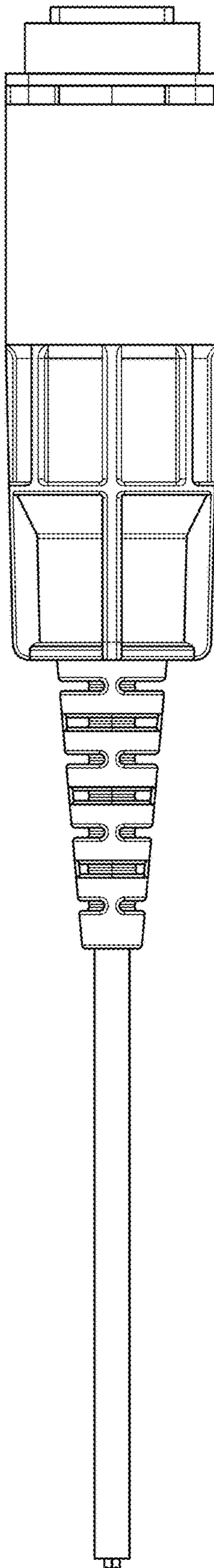


FIG. 3

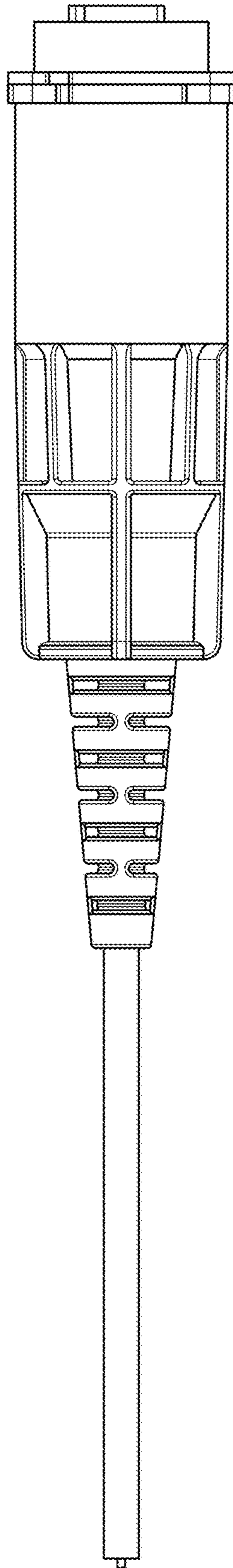


FIG. 4

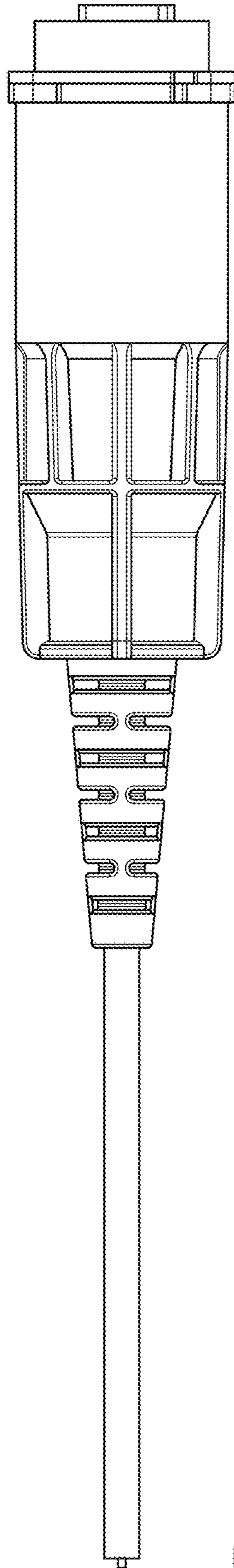


FIG. 5

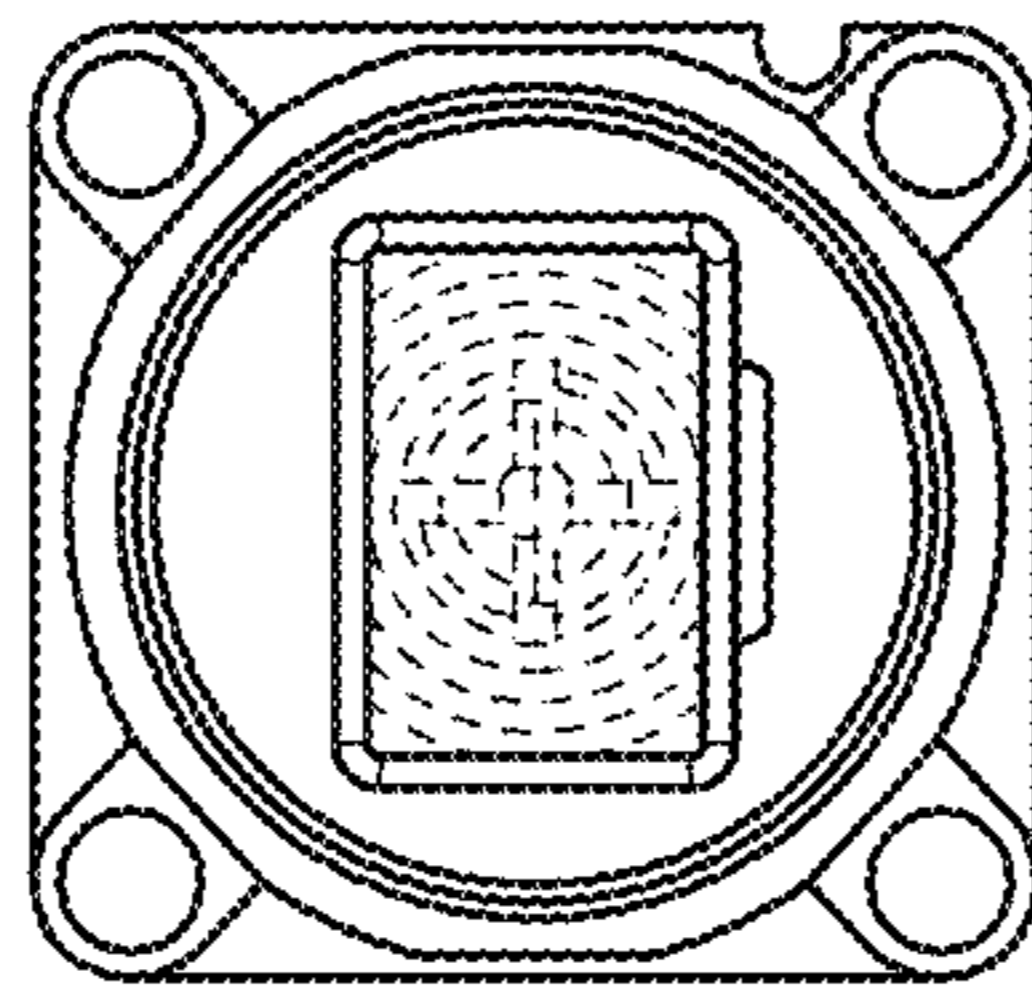


FIG. 6

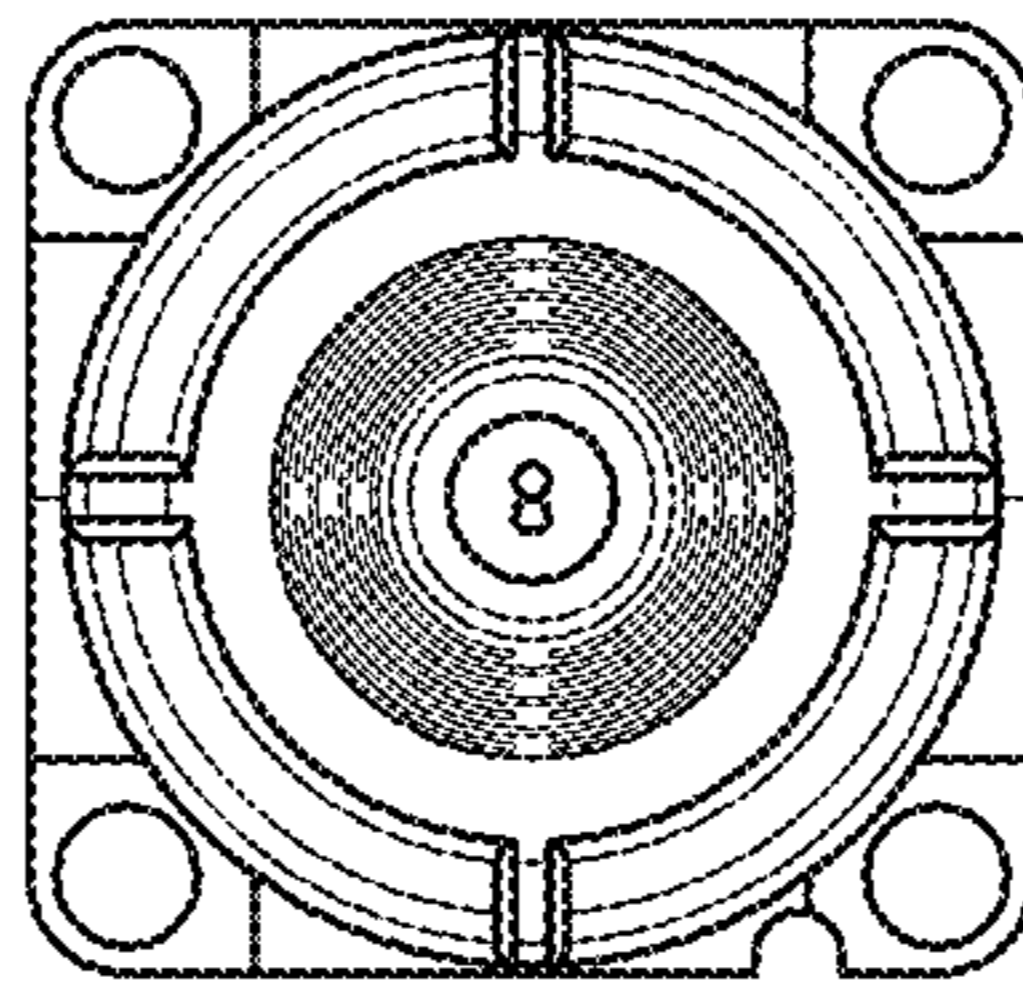


FIG. 7