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(12) United States Design Patent

Moseke et al.

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(54) **ELECTRICAL CONNECTOR**

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

(21) Appl. No.: **29/631,932**

(22) Filed: **Jan. 4, 2018**

(30) **Foreign Application Priority Data**

Jul. 7, 2017 (EM) 004093219

(51) **LOC (12) Cl.** **13-03**

(52) **U.S. Cl.**
USPC **D13/146**

(58) **Field of Classification Search**
USPC D13/147, 154, 146; D15/146, 133; D8/303, 29.1, 82, 83, 97
CPC H01R 24/28; H01R 13/6335; H01R 13/5804; H01R 13/6275; H01R 13/6395; B60L 53/16
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D340,636 S * 10/1993 Ming-Chang D8/303
D390,827 S * 2/1998 Sekimori D13/146
D442,458 S * 5/2001 Jimenez D8/107
D544,777 S * 6/2007 Yeh D8/303
D570,182 S * 6/2008 Chen D8/107
D673,122 S * 12/2012 Huss, Jr. D13/133
D675,570 S * 2/2013 Muller D13/147
D698,731 S * 2/2014 Muller D13/147
(Continued)

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(57) **CLAIM**

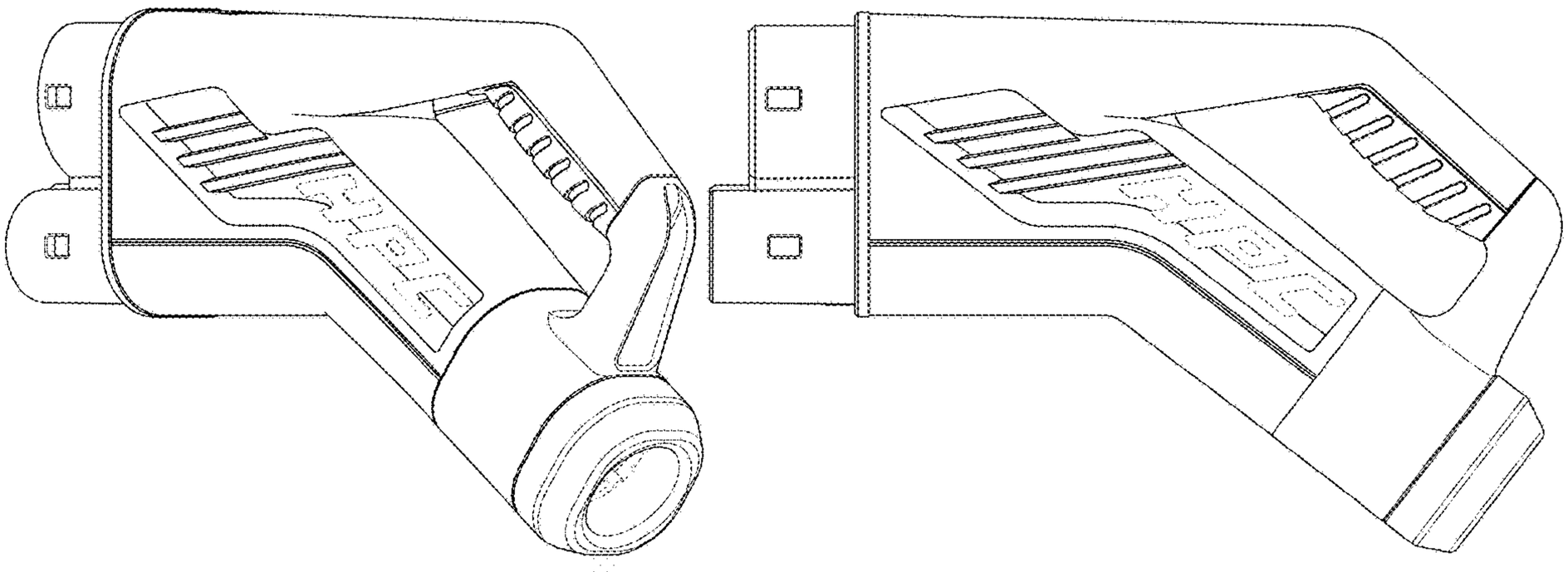
The ornamental design for an electrical connector, as shown and described.

DESCRIPTION

FIG. **1** is a left rear perspective view of the electrical connector showing a first embodiment of our new design;
FIG. **2** is a bottom plan view thereof;
FIG. **3** is a left side elevational view thereof;
FIG. **4** is a front elevational view thereof;
FIG. **5** is a right side elevational view thereof;
FIG. **6** is a rear elevation view thereof; and
FIG. **7** is a top plan view thereof;
FIG. **8** is a left front perspective view of the electrical connector showing a second embodiment of our new design;
FIG. **9** is a bottom plan view thereof;
FIG. **10** is a left side elevational view thereof;
FIG. **11** is a front elevational view thereof;
FIG. **12** is a right side elevational view thereof;
FIG. **13** is a rear elevation view thereof; and
FIG. **14** is a top plan view thereof;
FIG. **15** is a left front perspective view of the electrical connector showing a third embodiment of our new design;
FIG. **16** is a bottom plan view thereof;
FIG. **17** is a left side elevational view thereof;
FIG. **18** is a front elevational view thereof;
FIG. **19** is a right side elevational view thereof;
FIG. **20** is a rear elevation view thereof; and,
FIG. **21** is a top plan view thereof.

The broken lines shown in the views are included for the purpose of illustrating portions of the electrical connector that form no part of the claimed design.

1 Claim, 21 Drawing Sheets



(56) **References Cited**

U.S. PATENT DOCUMENTS

D702,186	S *	4/2014	Muller	D13/133
D702,190	S *	4/2014	Muller	D13/146
D711,831	S *	8/2014	Muller	D13/146
D711,832	S *	8/2014	Muller	D13/146
D713,792	S *	9/2014	Muller	D13/147
D714,219	S *	9/2014	Muller	D13/133
D718,247	S *	11/2014	Muller	D13/147
D720,297	S *	12/2014	Meis	D13/146
D720,697	S *	1/2015	Mueller	D13/146
D731,974	S *	6/2015	Hori	D13/146
2011/0260684	A1 *	10/2011	Xiaofeng	A61K 31/661 320/109
2013/0012054	A1 *	1/2013	Andresen	H01R 4/28 439/476.1

* cited by examiner

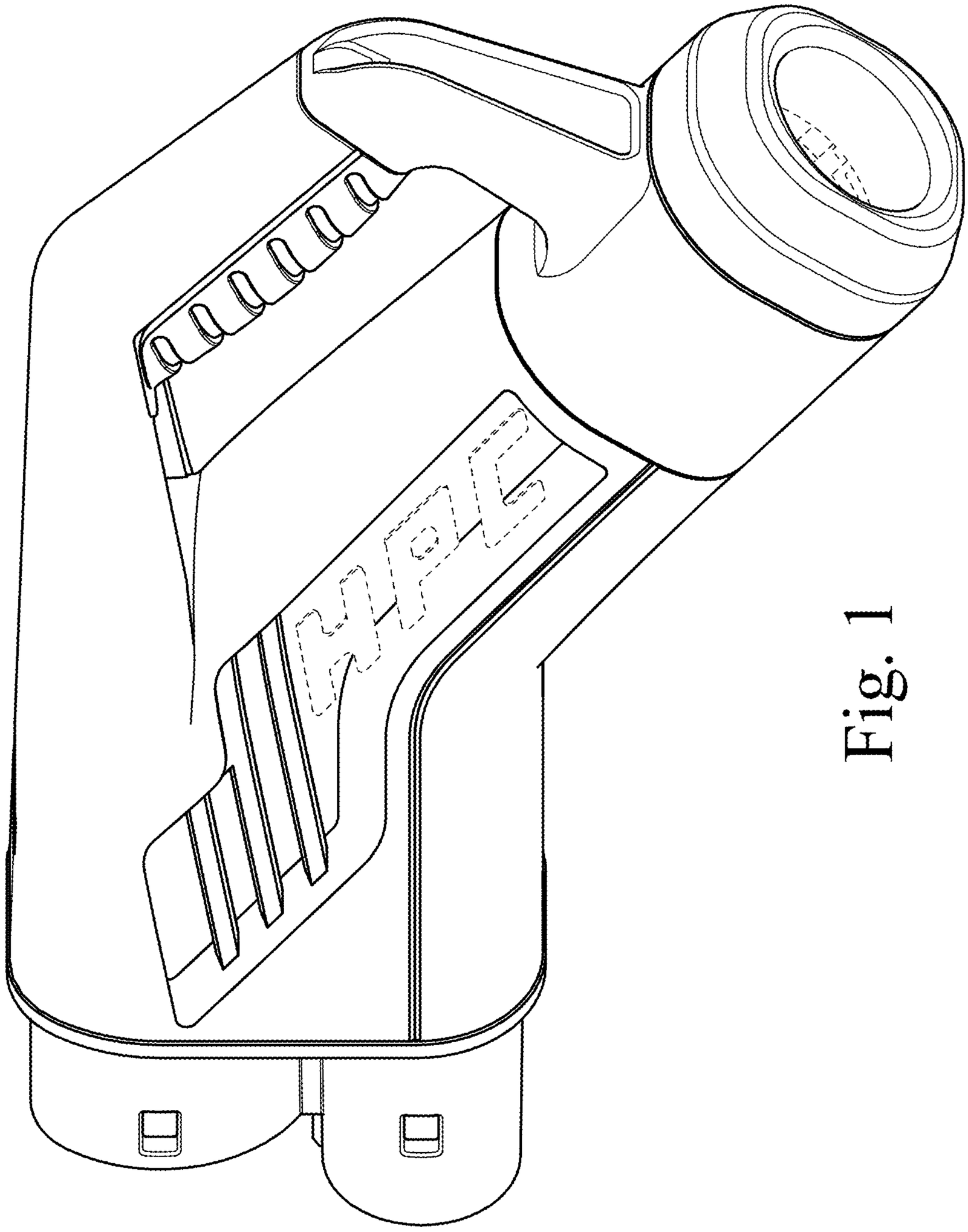


Fig. 1

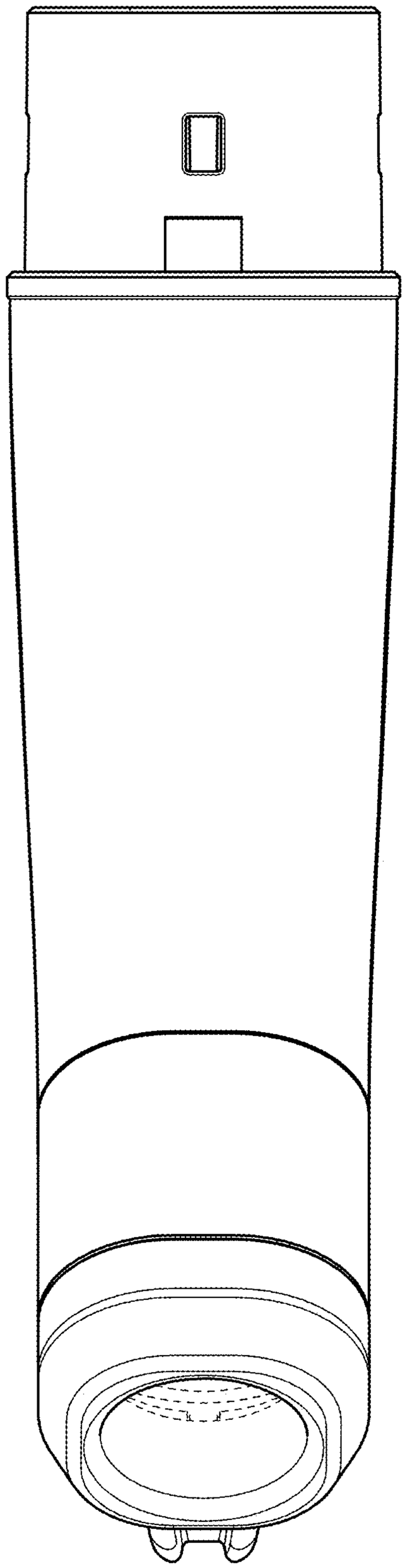


Fig. 2

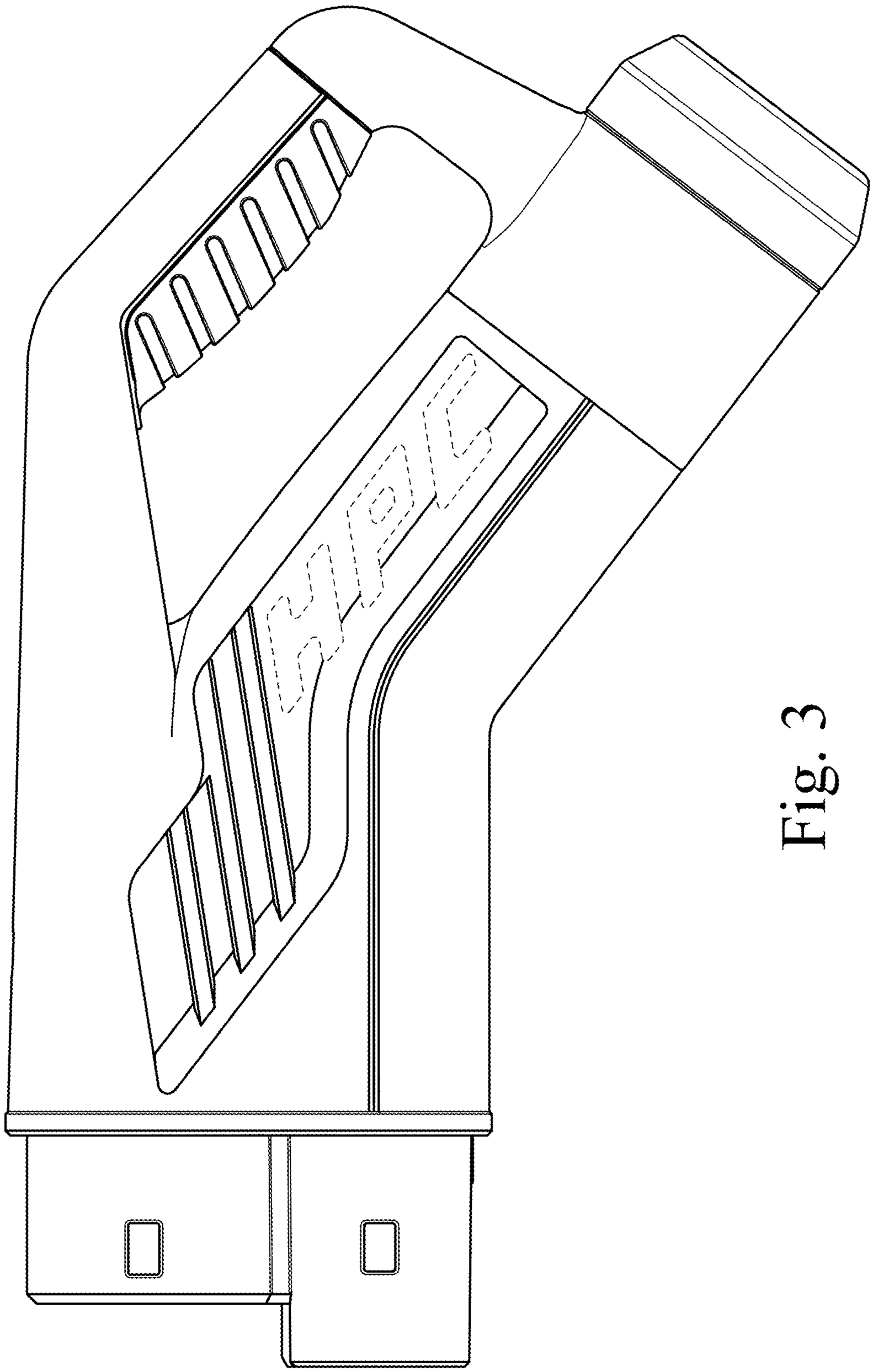


Fig. 3

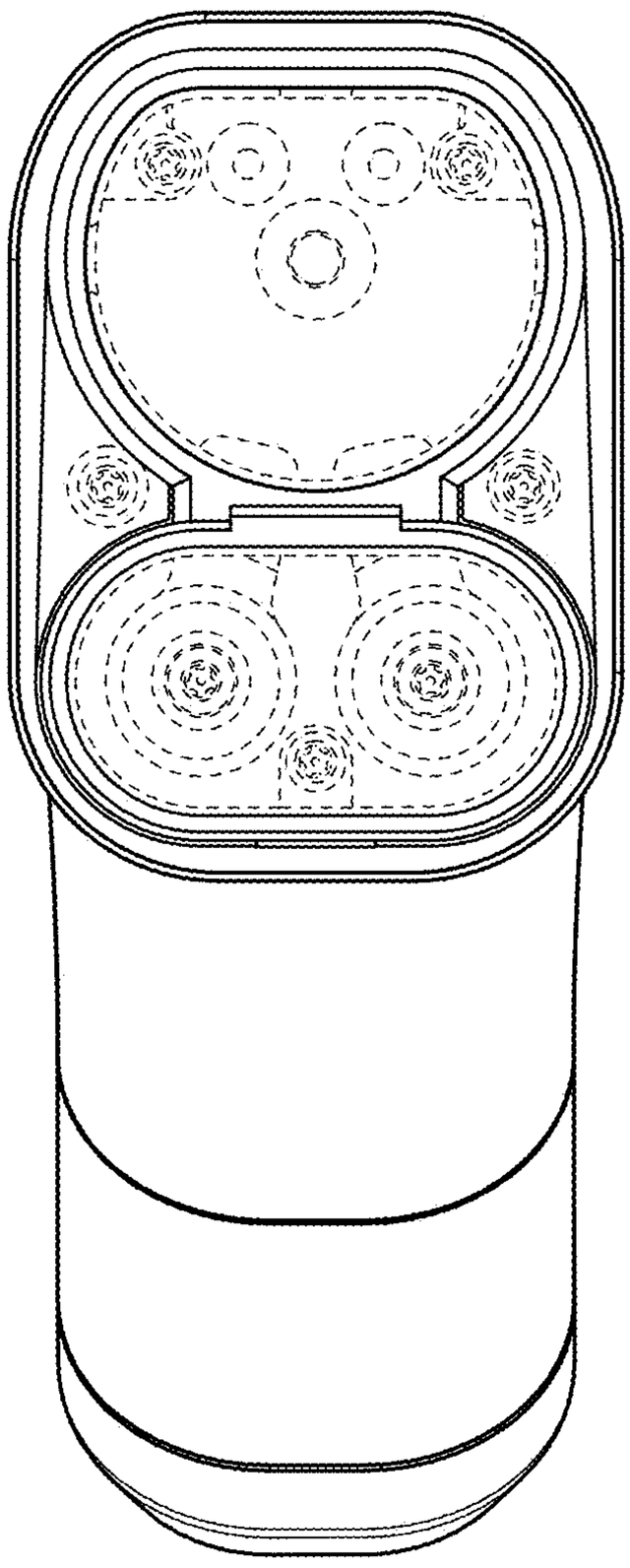


Fig. 4

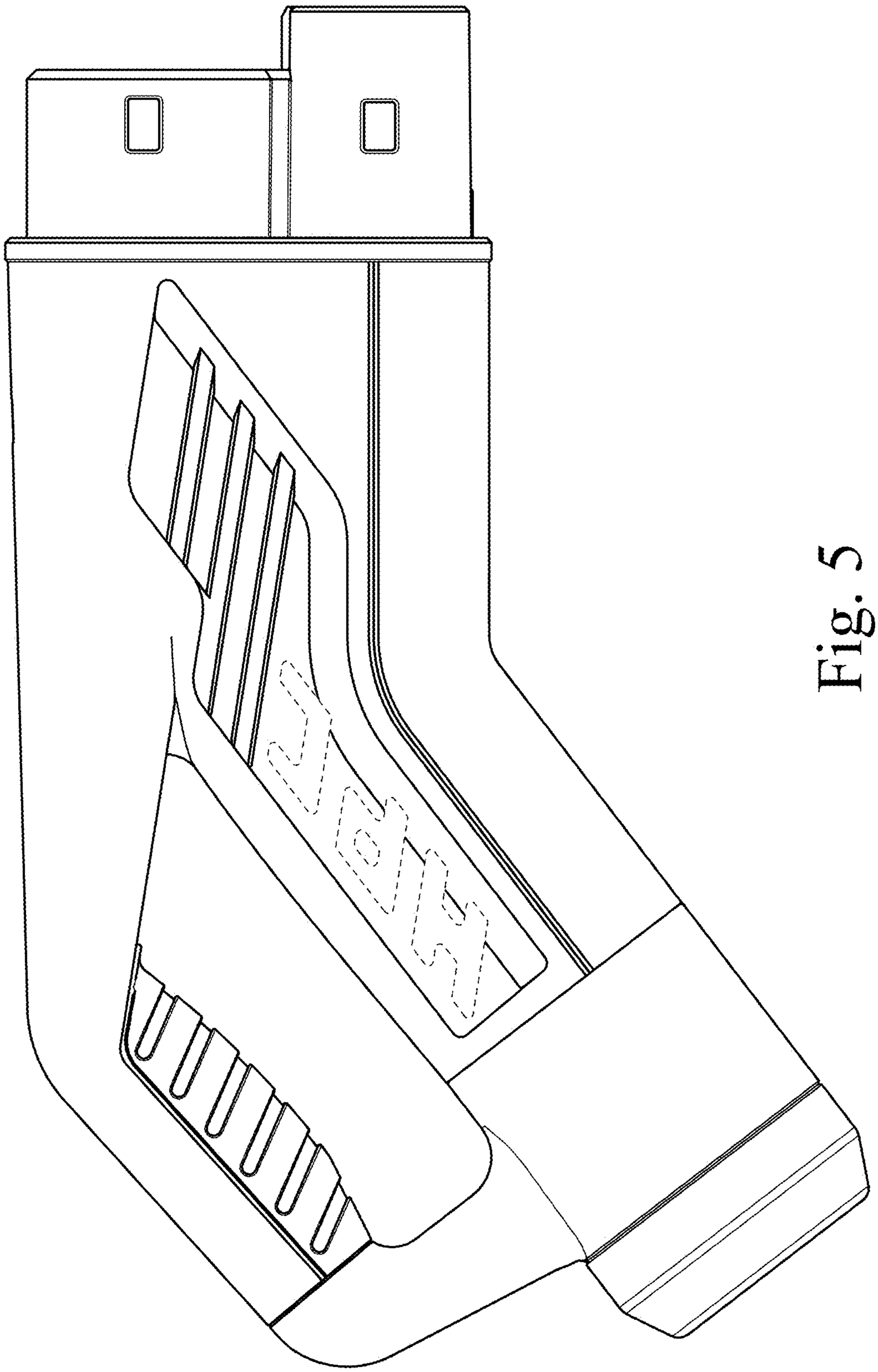


Fig. 5

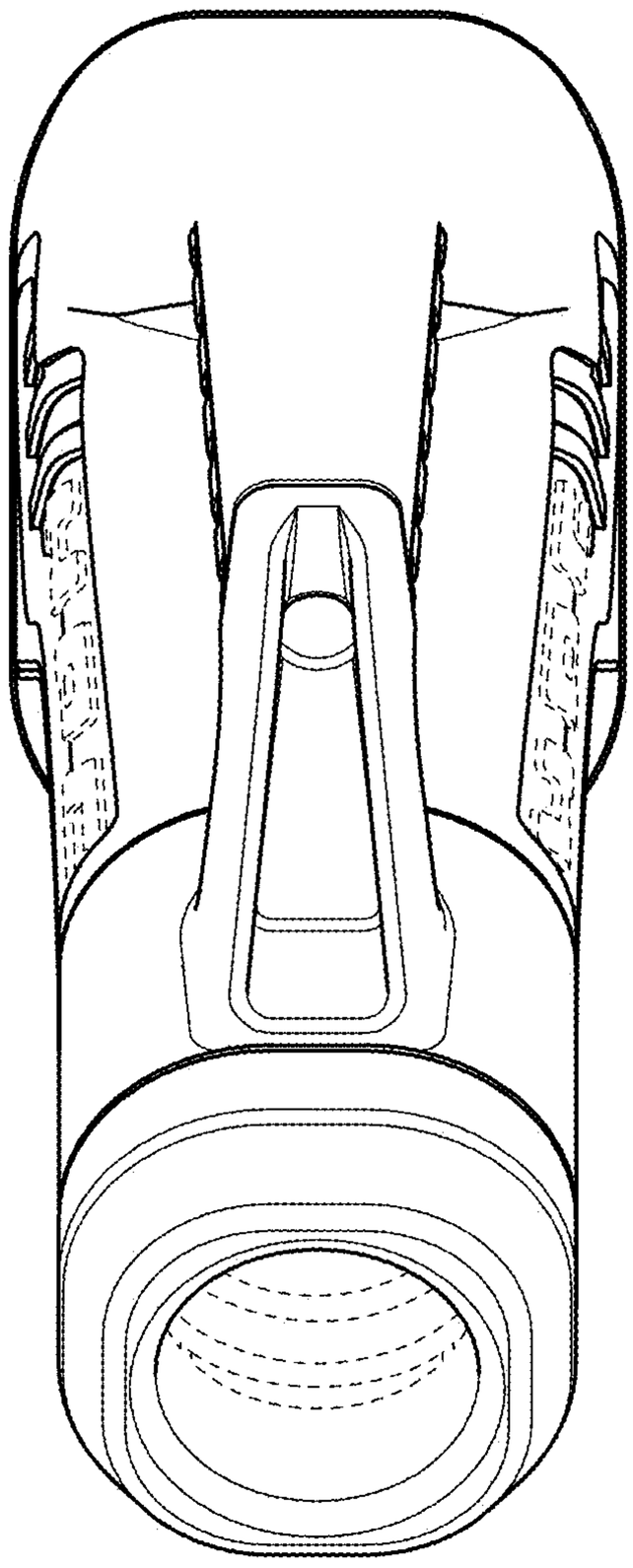


Fig. 6

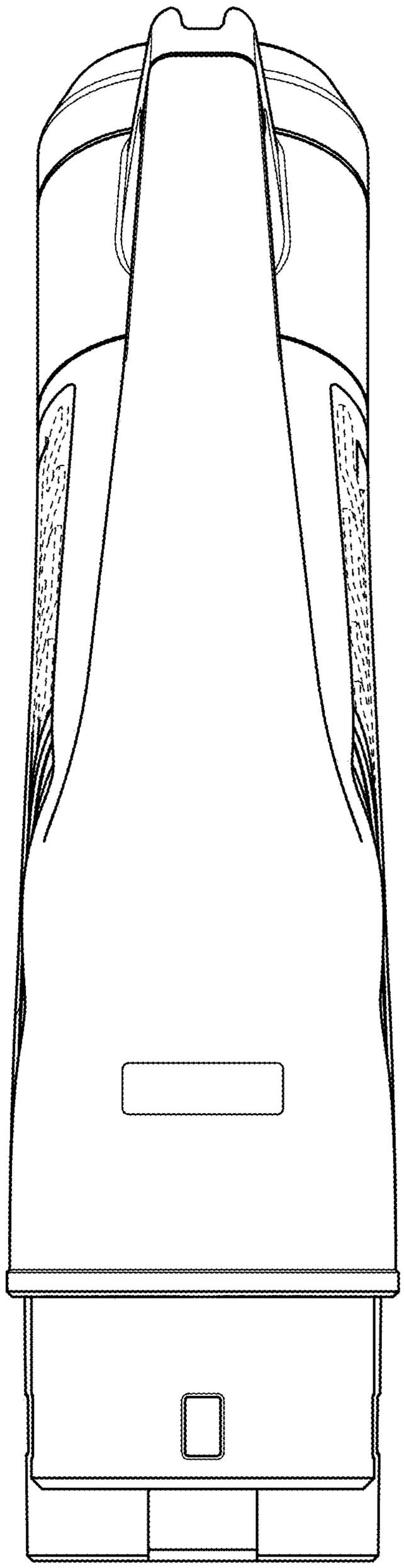


Fig. 7

Fig. 8

Fig. 9

Fig. 10

Fig. 11

Fig. 12

Fig. 13

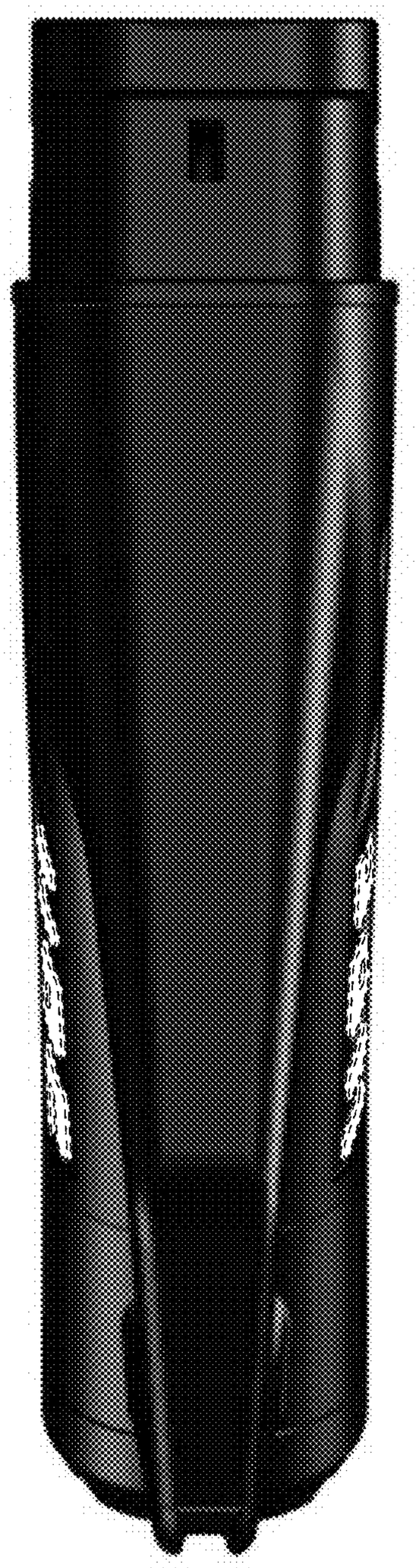


Fig. 14

Fig. 15

Fig. 16

Fig. 17

Fig. 18

Fig. 19

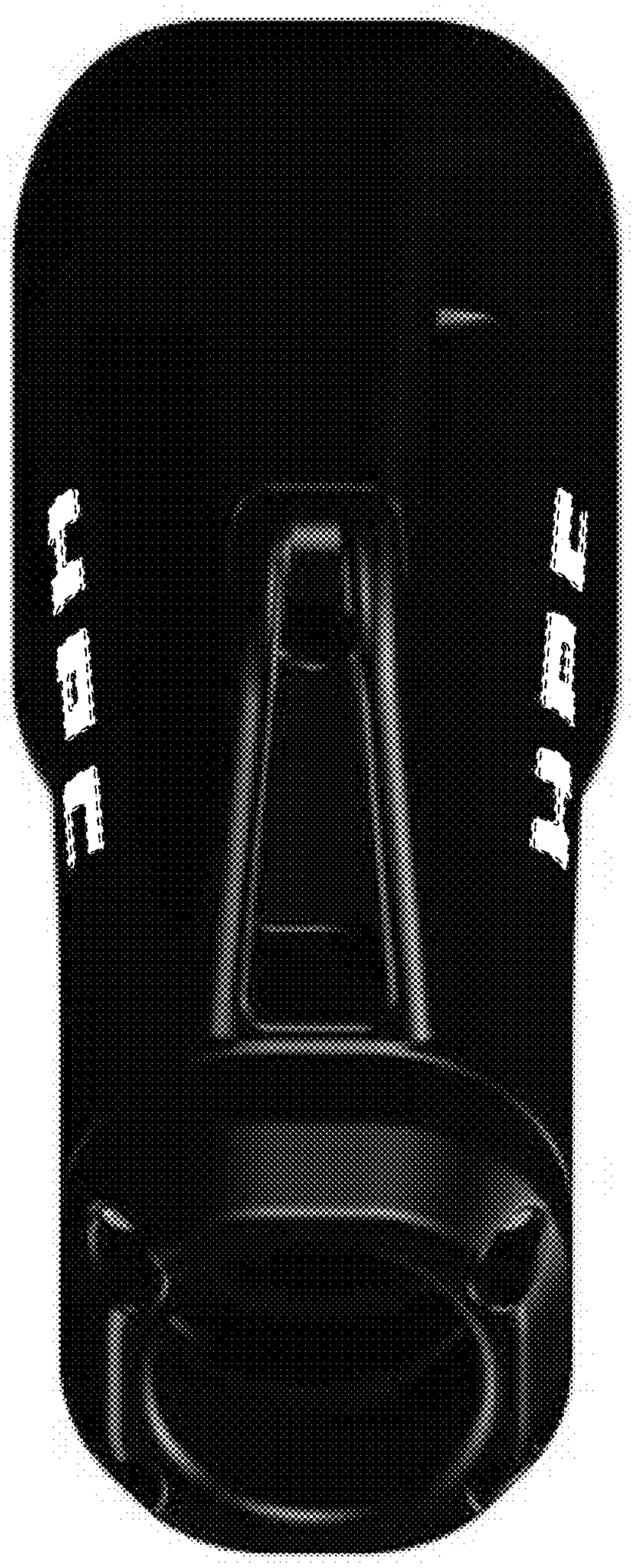


Fig. 20

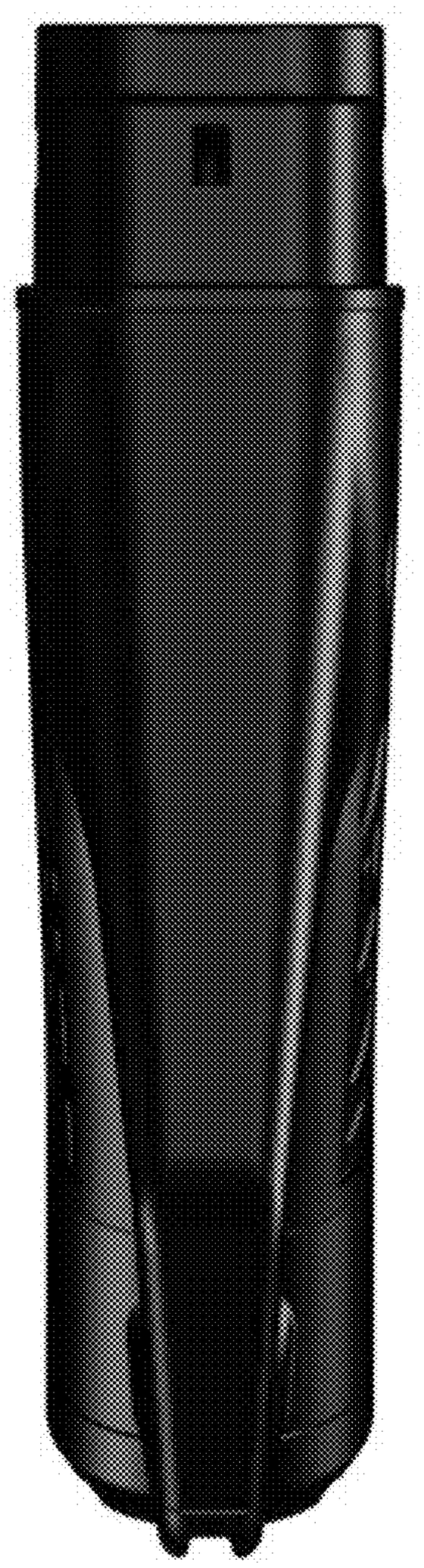


Fig. 21