



US00D837373S

(12) **United States Design Patent** (10) **Patent No.:** **US D837,373 S**
Miller et al. (45) **Date of Patent:** **** Jan. 1, 2019**

(54) **SURGICAL STAPLER**(71) Applicant: **Ethicon LLC**, Guaynabo, PR (US)(72) Inventors: **Christopher C. Miller**, Loveland, OH (US); **Frederick E. Shelton, IV**, Hillsboro, OH (US); **Omar J. Vakharia**, Cincinnati, OH (US); **Matthew S. Corbin**, Loveland, OH (US); **Veronica J. Schlegel**, Cincinnati, OH (US); **Joshua Uth**, Mason, OH (US); **Nadja K. Briscoe Heller**, Cincinnati, OH (US)(73) Assignee: **Ethicon LLC**, Guaynabo, PR (US)(**) Term: **15 Years**(21) Appl. No.: **29/602,182**(22) Filed: **Apr. 28, 2017****Related U.S. Application Data**

(63) Continuation-in-part of application No. 29/584,321, filed on Nov. 14, 2016, which is a continuation-in-part of application No. 29/584,327, filed on Nov. 14, 2016.

(51) **LOC (11) Cl.** **24-02**(52) **U.S. Cl.**USPC **D24/145**(58) **Field of Classification Search**USPC **D24/145**

CPC A61B 17/064; A61B 17/07207; A61B 17/105; A61B 17/1155; A61B 17/115

See application file for complete search history.

References Cited**U.S. PATENT DOCUMENTS**

- | | | |
|----------------|---------|--------------------|
| 5,205,459 A | 4/1993 | Brinkerhoff et al. |
| 5,271,544 A | 12/1993 | Fox et al. |
| 5,292,053 A | 3/1994 | Bilotti et al. |
| 5,333,773 A | 8/1994 | Main et al. |
| 7,168,604 B2 * | 1/2007 | Milliman |

7,364,060 B2 *	4/2008	Milliman	A61B 17/1155 227/175.1
8,408,441 B2 *	4/2013	Wenchell	A61B 17/1155 227/175.1
8,453,906 B2 *	6/2013	Huang	A61B 17/1155 227/175.2
8,613,383 B2	12/2013	Beckman et al.	
D700,325 S *	2/2014	Nalagatla	D24/145
8,684,252 B2	4/2014	Patel et al.	
8,794,497 B2	8/2014	Zingman	
9,055,942 B2	6/2015	Balbierz et al.	
9,168,042 B2	10/2015	Milliman	
9,597,083 B2	3/2017	Penna	
9,757,133 B2	9/2017	Latimer et al.	
2012/0016413 A1	1/2012	Timm et al.	
2014/0158747 A1	6/2014	Measamer et al.	
2015/0366562 A1 *	12/2015	Williams	
2016/0022267 A1	1/2016	Milliman	
2016/0030046 A1	2/2016	Williams	
2016/0113653 A1	4/2016	Zingman	
2016/0242785 A1 *	8/2016	Prior	A61B 17/1155
2016/0374665 A1 *	12/2016	Dinardo	A61B 17/1155 227/175.2
2016/0374669 A1 *	12/2016	Overmyer	A61B 17/1155 227/176.1
2017/0055997 A1	3/2017	Swayze et al.	
2017/0086822 A1 *	3/2017	Scheib	A61B 17/1155
2017/0258471 A1 *	9/2017	Dinardo	A61B 17/1155
2017/0281163 A1	10/2017	Shelton, IV et al.	
2017/0281169 A1	10/2017	Harris et al.	
2017/0281179 A1	10/2017	Shelton, IV et al.	

OTHER PUBLICATIONS

Design U.S. Appl. No. 29/584,321, filed Nov. 14, 2016.

Design U.S. Appl. No. 29/584,327, filed Nov. 14, 2016.

Non-Provisional U.S. Appl. No. 15/350,513, filed Nov. 14, 2016.

* cited by examiner

Primary Examiner — Wan Laymon

(74) Attorney, Agent, or Firm — Frost Brown Todd LLC

CLAIM

The ornamental design for a surgical stapler, as shown and described.

DESCRIPTION

FIG. 1 is a top perspective view of a surgical stapler, showing our new design;

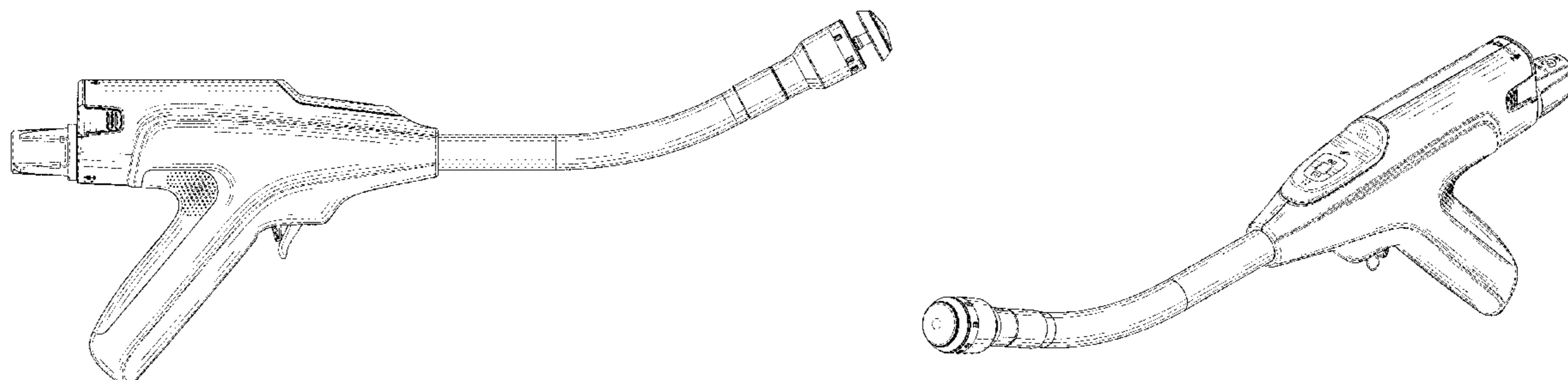


FIG. 2 is an enlarged perspective view of a distal portion of the surgical stapler of FIG. 1, the portion being indicated by the broken line circle labeled as "FIG. 2" in FIG. 1; FIG. 3 is a rear perspective view of the surgical stapler of FIG. 1; FIG. 4 is a right elevational view of the surgical stapler of FIG. 1; FIG. 5 is an enlarged plan view of a distal portion of the surgical stapler of FIG. 1, viewed from the plane 5-5 of FIG. 4; FIG. 6 is an enlarged right elevational view of a distal portion of the surgical stapler of FIG. 1, the portion being indicated by the broken line circle labeled as "FIG. 6" in FIG. 4; FIG. 7 is a left elevational view of the surgical stapler of FIG. 1; FIG. 8 is a front elevational view of the surgical stapler of FIG. 1; FIG. 9 is a rear elevational view of the surgical stapler of FIG. 1; FIG. 10 is a top plan view of the surgical stapler of FIG. 1; FIG. 11 is a bottom plan view of the surgical stapler of FIG. 1; FIG. 12 is an enlarged top view of an intermediate portion of the surgical stapler of FIG. 1, the portion being indicated by the broken line circle labeled as "FIG. 12" in FIG. 10; FIG. 13 is an enlarged top view of a proximal portion of the surgical stapler of FIG. 1, the portion being indicated by the broken line circle labeled as "FIG. 13" in FIG. 10; FIG. 14 is an enlarged bottom view of a proximal portion of the surgical stapler of FIG. 1, the portion being indicated by the broken line circle labeled as "FIG. 14" in FIG. 11; FIG. 15 is a top perspective view of the surgical stapler of FIG. 1, with an anvil coupled with the distal end of the surgical stapler of FIG. 1, with the anvil in an open position; FIG. 16 is another top perspective view of the surgical stapler of FIG. 1, with the anvil of FIG. 15 coupled with the distal end of the surgical stapler of FIG. 1, with the anvil in the open position; FIG. 17 is a side elevational view of the surgical stapler of FIG. 1, with the anvil of FIG. 15 coupled with the distal end of the surgical stapler of FIG. 1, with the anvil in the open position; FIG. 18 is a top perspective view of the surgical stapler of FIG. 1, with the anvil of FIG. 15 coupled with the distal end of the surgical stapler of FIG. 1, with the anvil in a closed position; FIG. 19 is another top perspective view of the surgical stapler of FIG. 1, with the anvil of FIG. 15 coupled with the distal end of the surgical stapler of FIG. 1, with the anvil in the closed position; FIG. 20 is a side elevational view of the surgical stapler of FIG. 1, with the anvil of FIG. 15 coupled with the distal end of the surgical stapler of FIG. 1, with the anvil in the closed position; FIG. 21 is a top perspective view of another embodiment of a surgical stapler, showing our new design;

FIG. 22 is an enlarged perspective view of a distal portion of the surgical stapler of FIG. 21, the portion being indicated by the broken line circle labeled as "FIG. 22" in FIG. 21; FIG. 23 is a rear perspective view of the surgical stapler of FIG. 21; FIG. 24 is a right elevational view of the surgical stapler of FIG. 21; FIG. 25 is an enlarged plan view of a distal portion of the surgical stapler of FIG. 21, viewed from the plane 25-25 of FIG. 24; FIG. 26 is an enlarged right elevational view of a distal portion of the surgical stapler of FIG. 21, the portion being indicated by the broken line circle labeled as "FIG. 26" in FIG. 24; FIG. 27 is a left elevational view of the surgical stapler of FIG. 21; FIG. 28 is a front elevational view of the surgical stapler of FIG. 21; FIG. 29 is a rear elevational view of the surgical stapler of FIG. 21; FIG. 30 is a top plan view of the surgical stapler of FIG. 21; FIG. 31 is a bottom plan view of the surgical stapler of FIG. 21; FIG. 32 is an enlarged top view of an intermediate portion of the surgical stapler of FIG. 21, the portion being indicated by the broken line circle labeled as "FIG. 32" in FIG. 30; FIG. 33 is an enlarged top view of a proximal portion of the surgical stapler of FIG. 21, the portion being indicated by the broken line circle labeled as "FIG. 33" in FIG. 30; FIG. 34 is an enlarged bottom view of a proximal portion of the surgical stapler of FIG. 21, the portion being indicated by the broken line circle labeled as "FIG. 34" in FIG. 31; FIG. 35 is a top perspective view of the surgical stapler of FIG. 21, with an anvil coupled with the distal end of the surgical stapler of FIG. 21, with the anvil in an open position; FIG. 36 is another top perspective view of the surgical stapler of FIG. 21, with the anvil of FIG. 35 coupled with the distal end of the surgical stapler of FIG. 21, with the anvil in the open position; FIG. 37 is a side elevational view of the surgical stapler of FIG. 21, with the anvil of FIG. 35 coupled with the distal end of the surgical stapler of FIG. 21, with the anvil in the open position; FIG. 38 is a top perspective view of the surgical stapler of FIG. 21, with the anvil of FIG. 35 coupled with the distal end of the surgical stapler of FIG. 21, with the anvil in a closed position; FIG. 39 is another top perspective view of the surgical stapler of FIG. 21, with the anvil of FIG. 35 coupled with the distal end of the surgical stapler of FIG. 21, with the anvil in the closed position; and, FIG. 40 is a side elevational view of the surgical stapler of FIG. 21, with the anvil of FIG. 35 coupled with the distal end of the surgical stapler of FIG. 21, with the anvil in the closed position.

The stapler features shown in broken lines are unclaimed environment, and form no part of the claimed design.

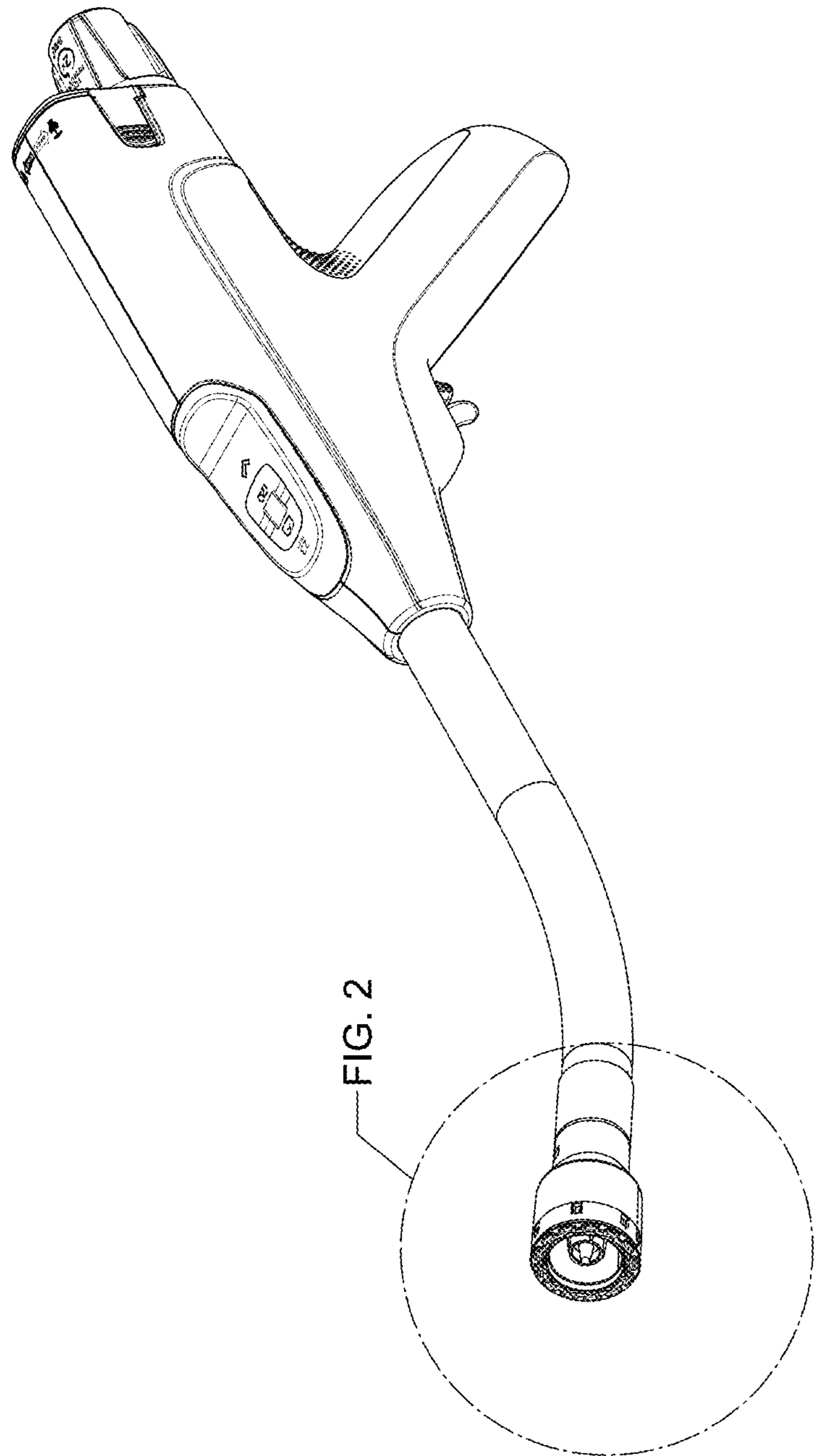


FIG. 1

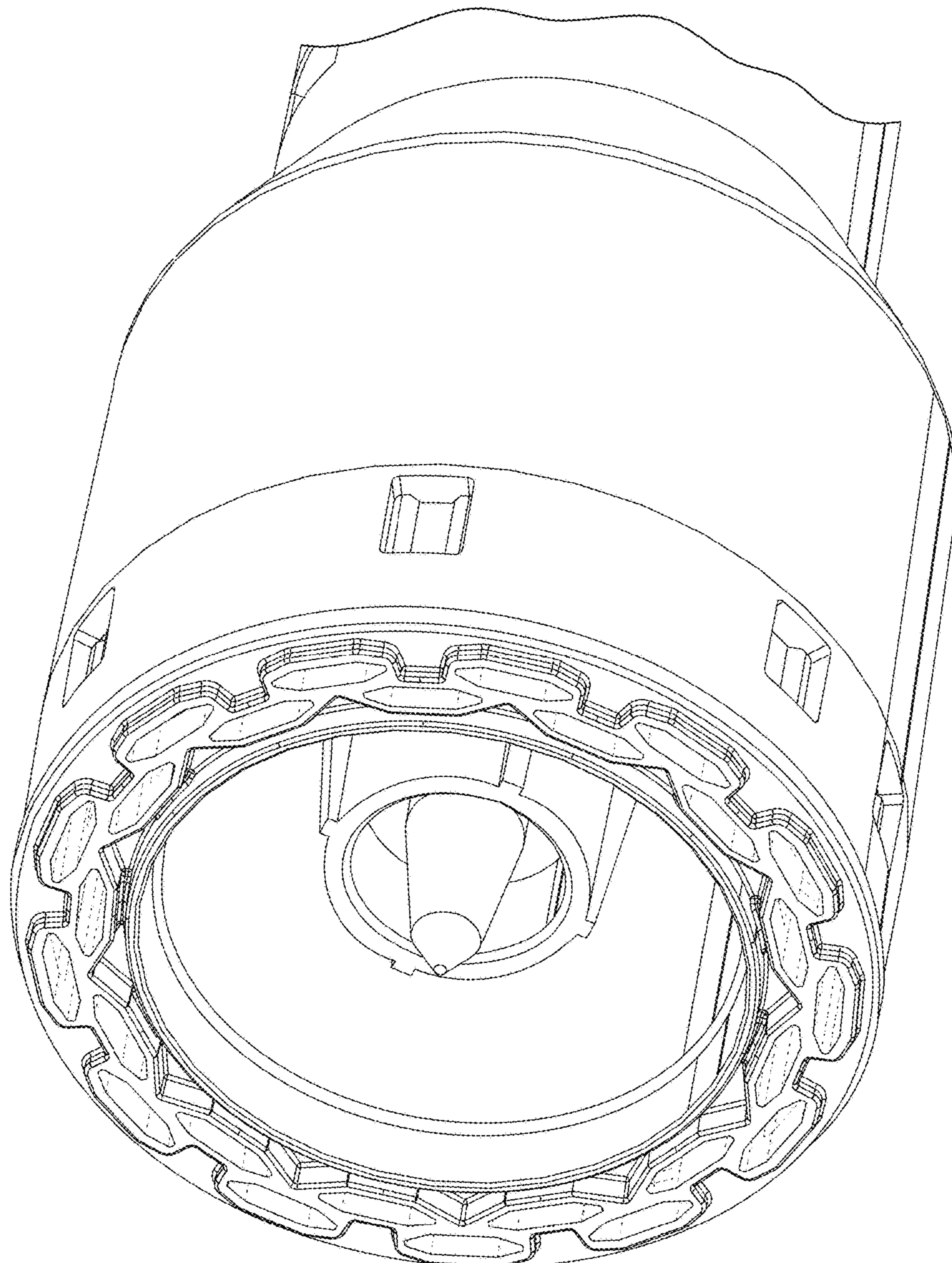


FIG. 2

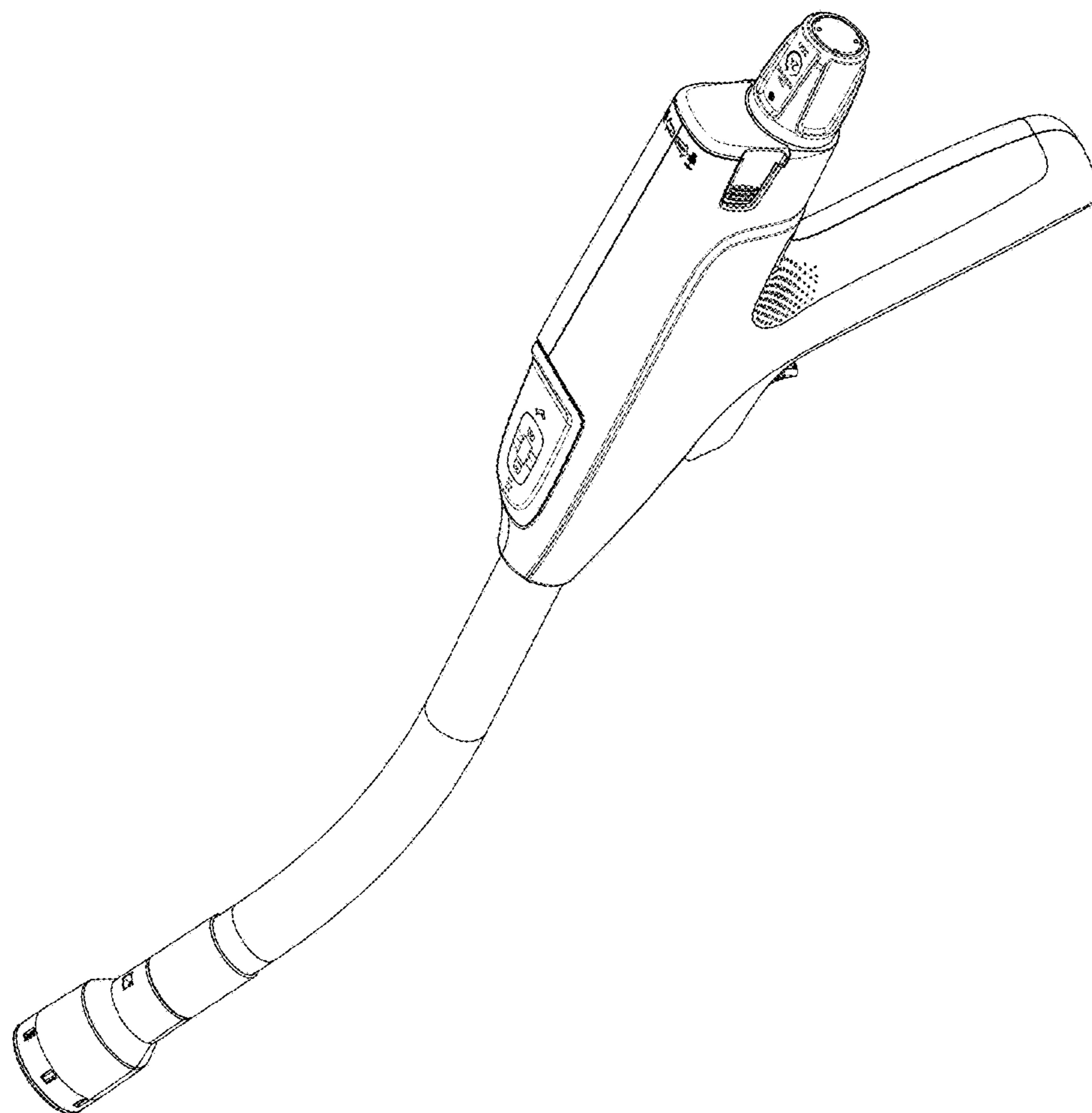


FIG. 3

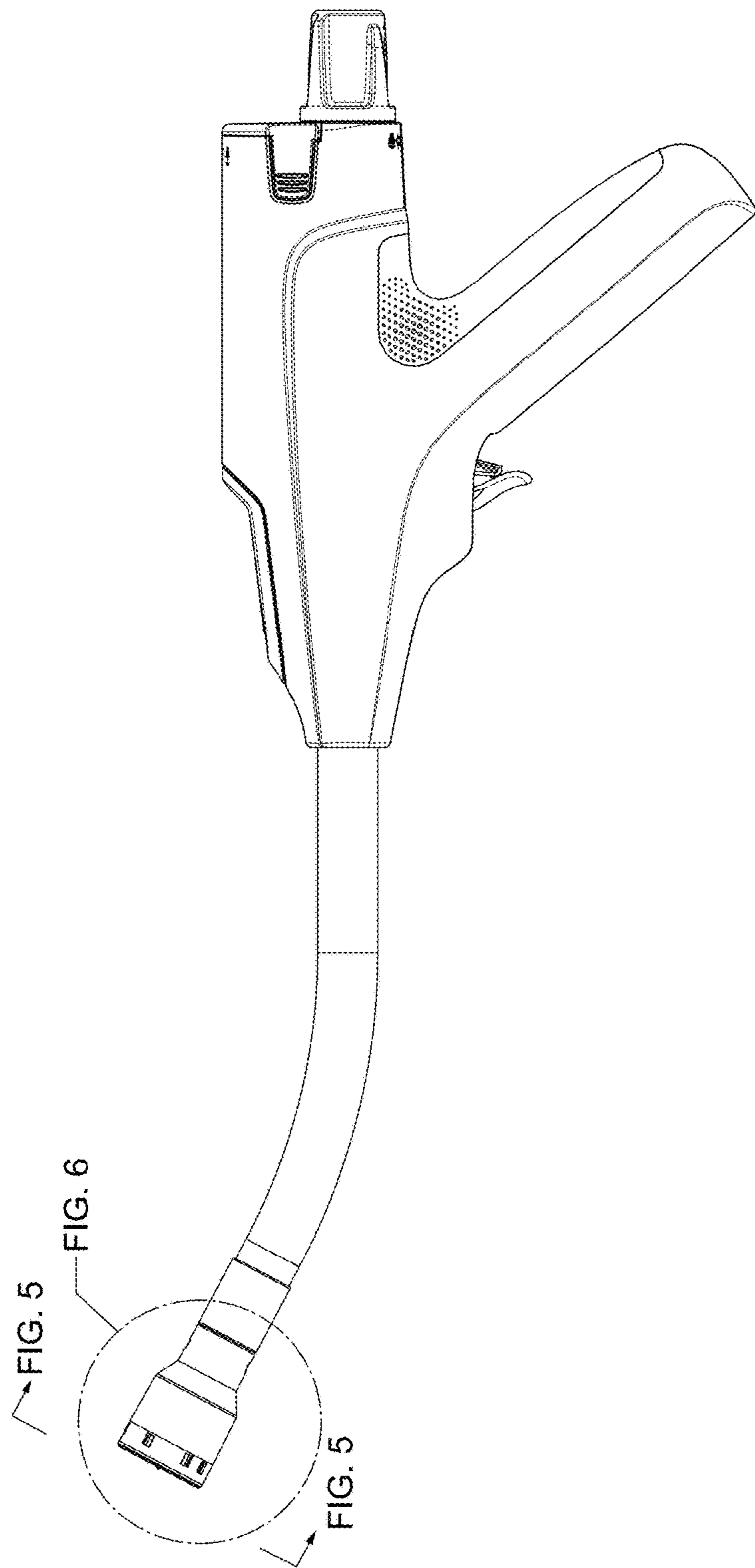
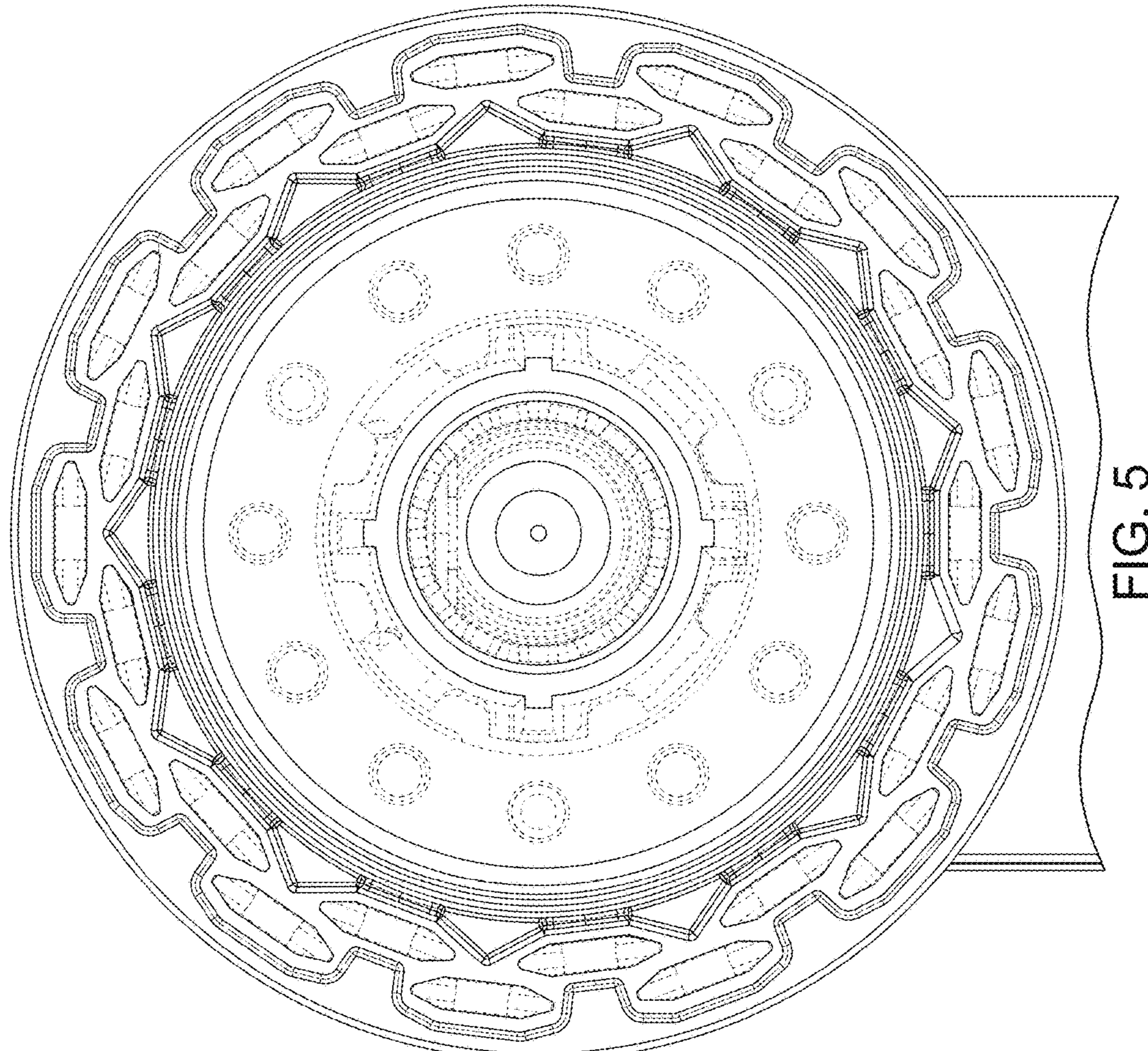


FIG. 4



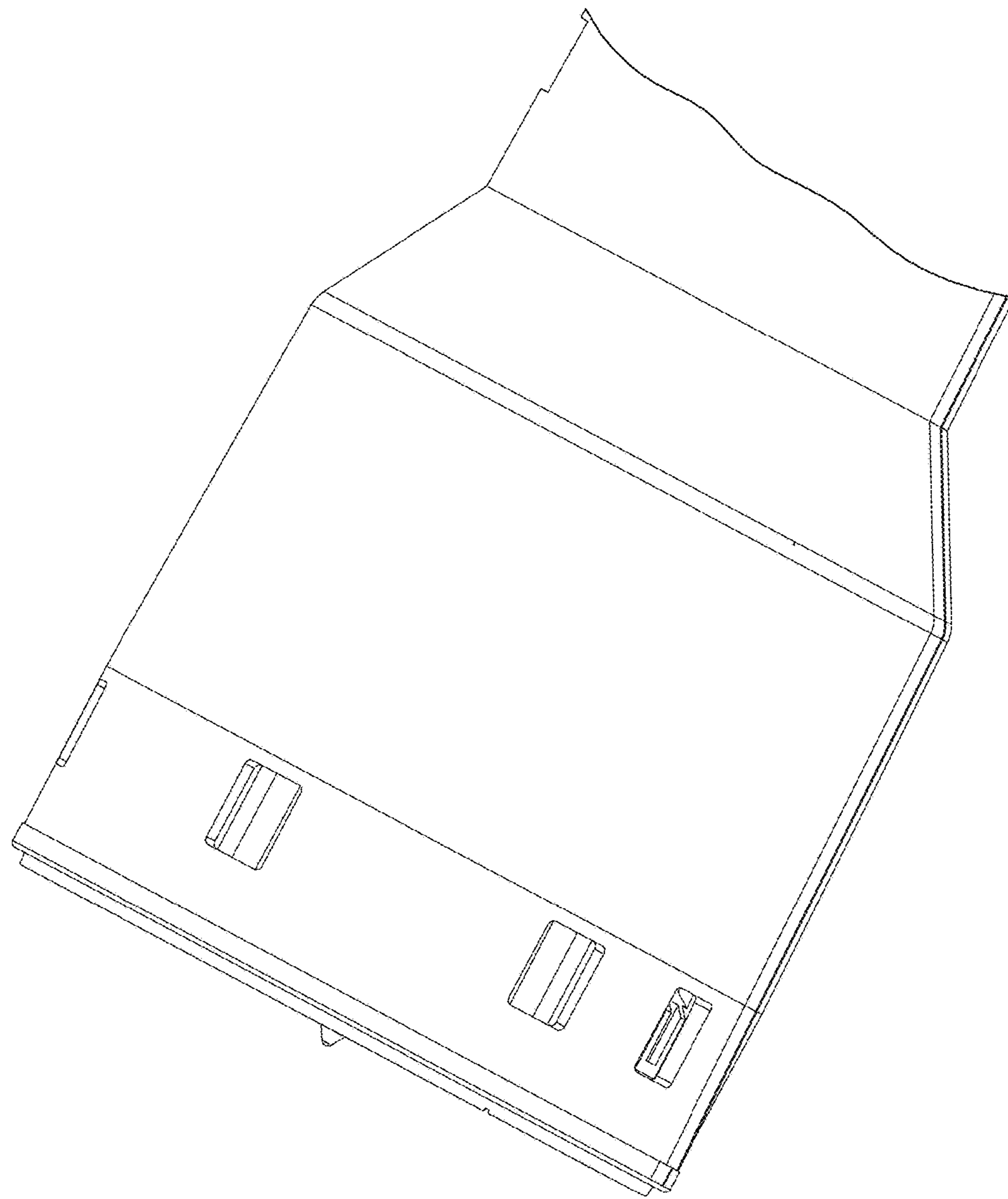


FIG. 6

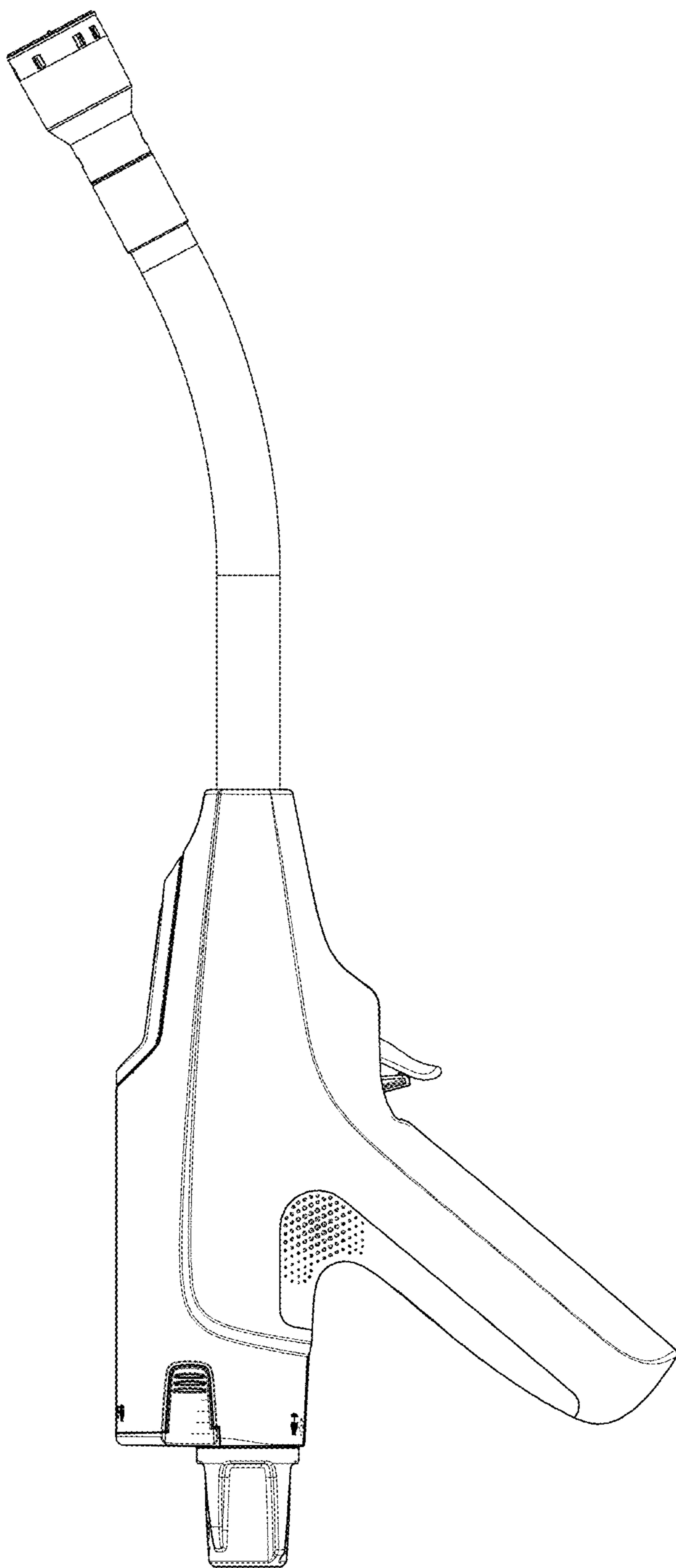


FIG. 7

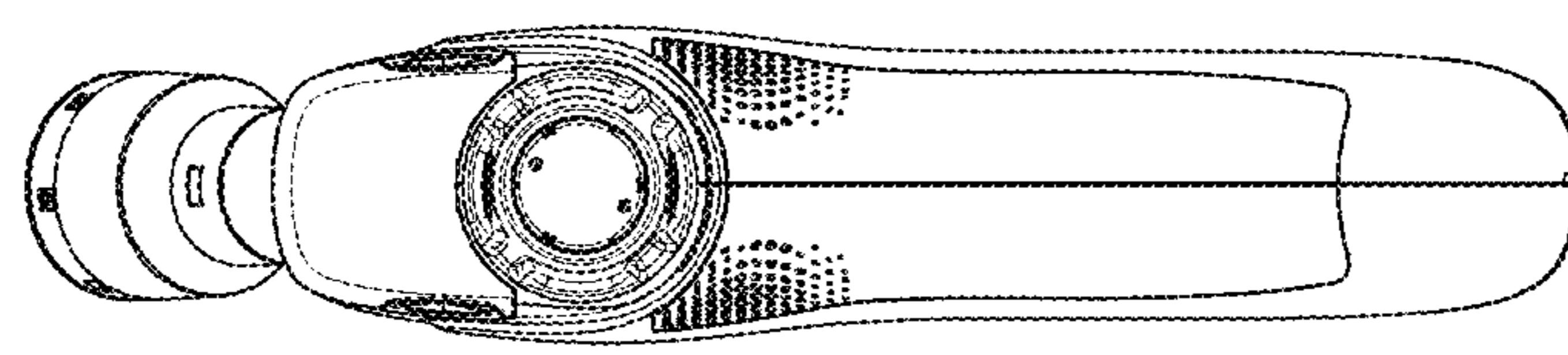


FIG. 9

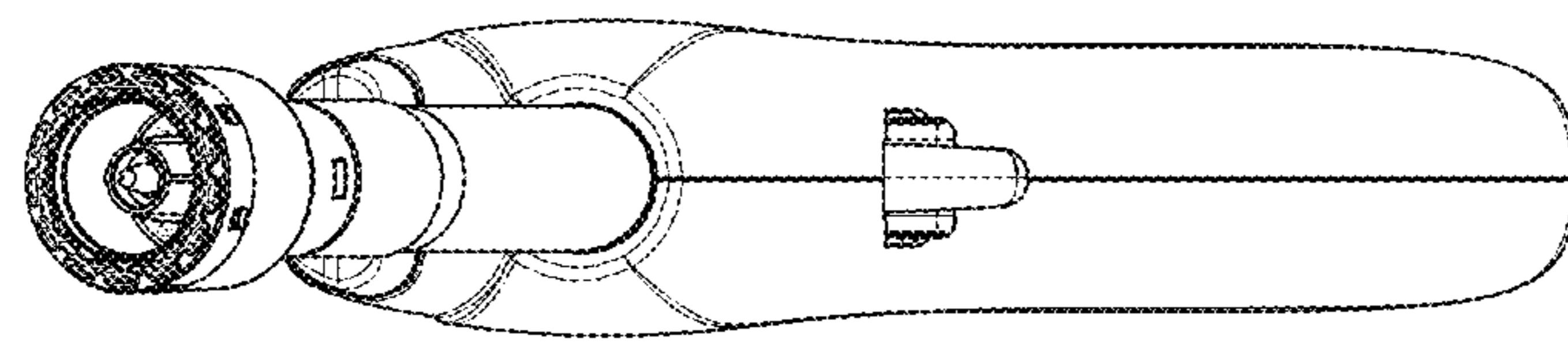


FIG. 8

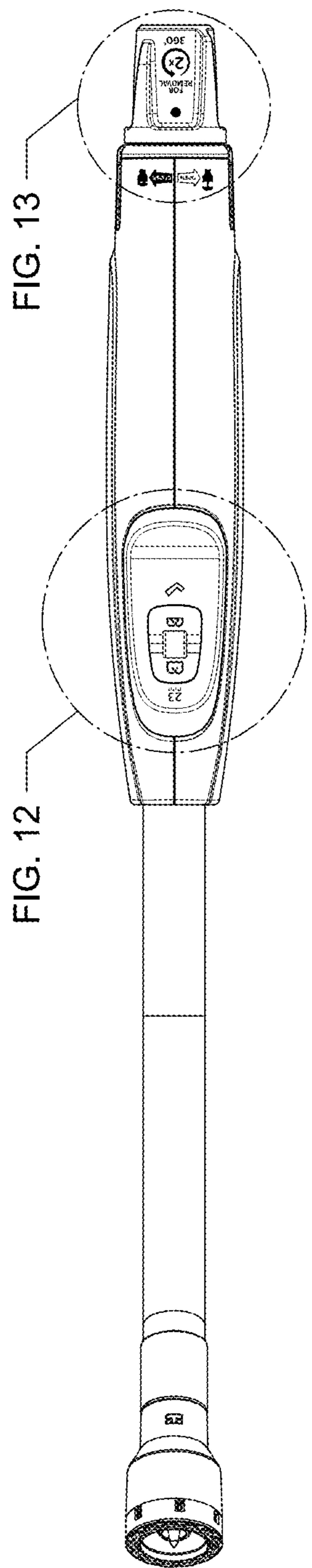


FIG. 10

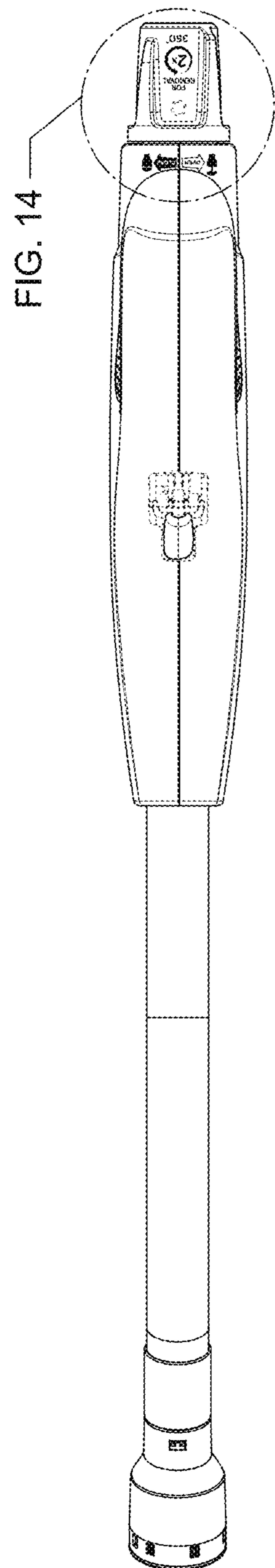


FIG. 11

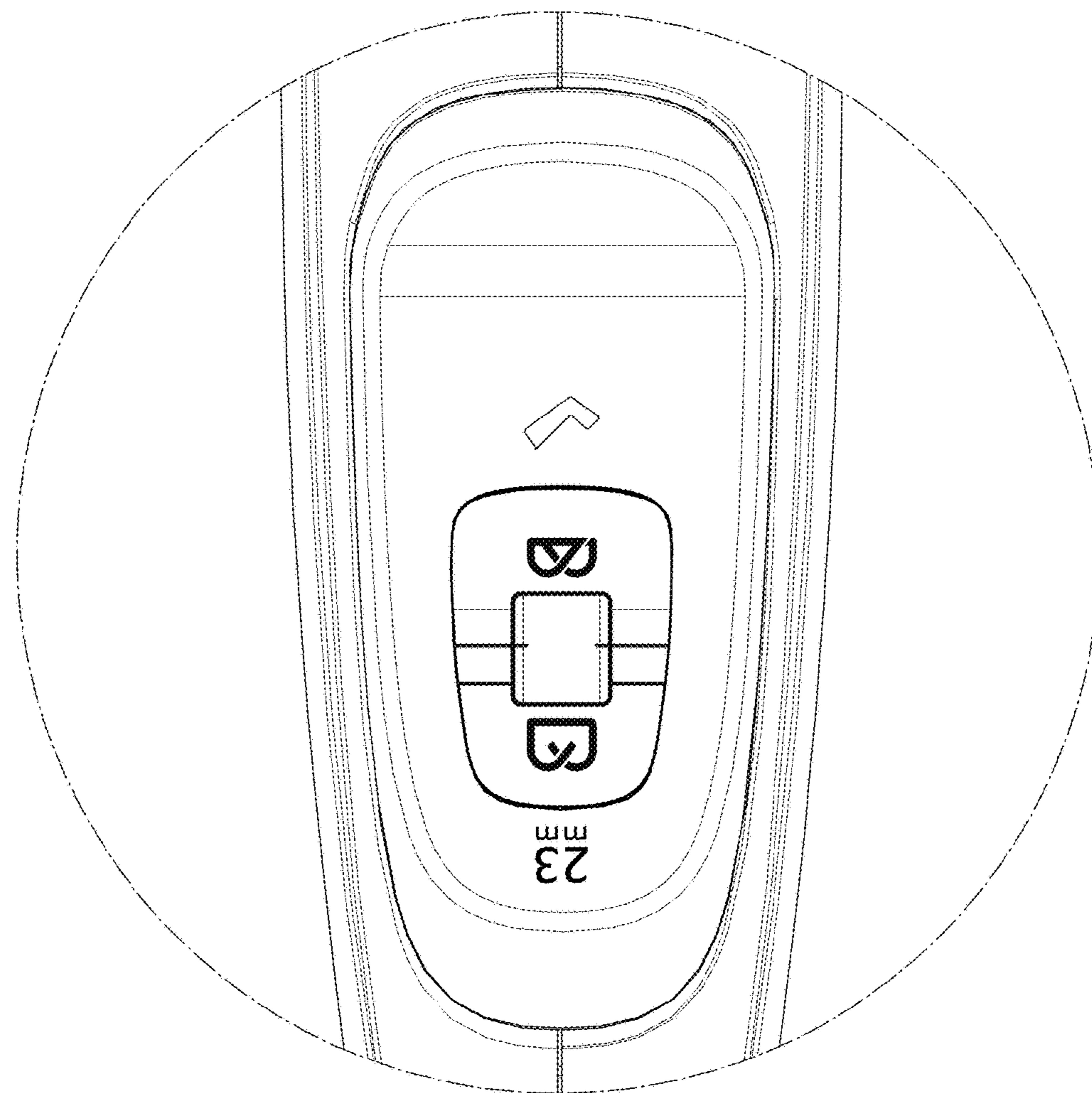


FIG. 12



FIG. 13



FIG. 14

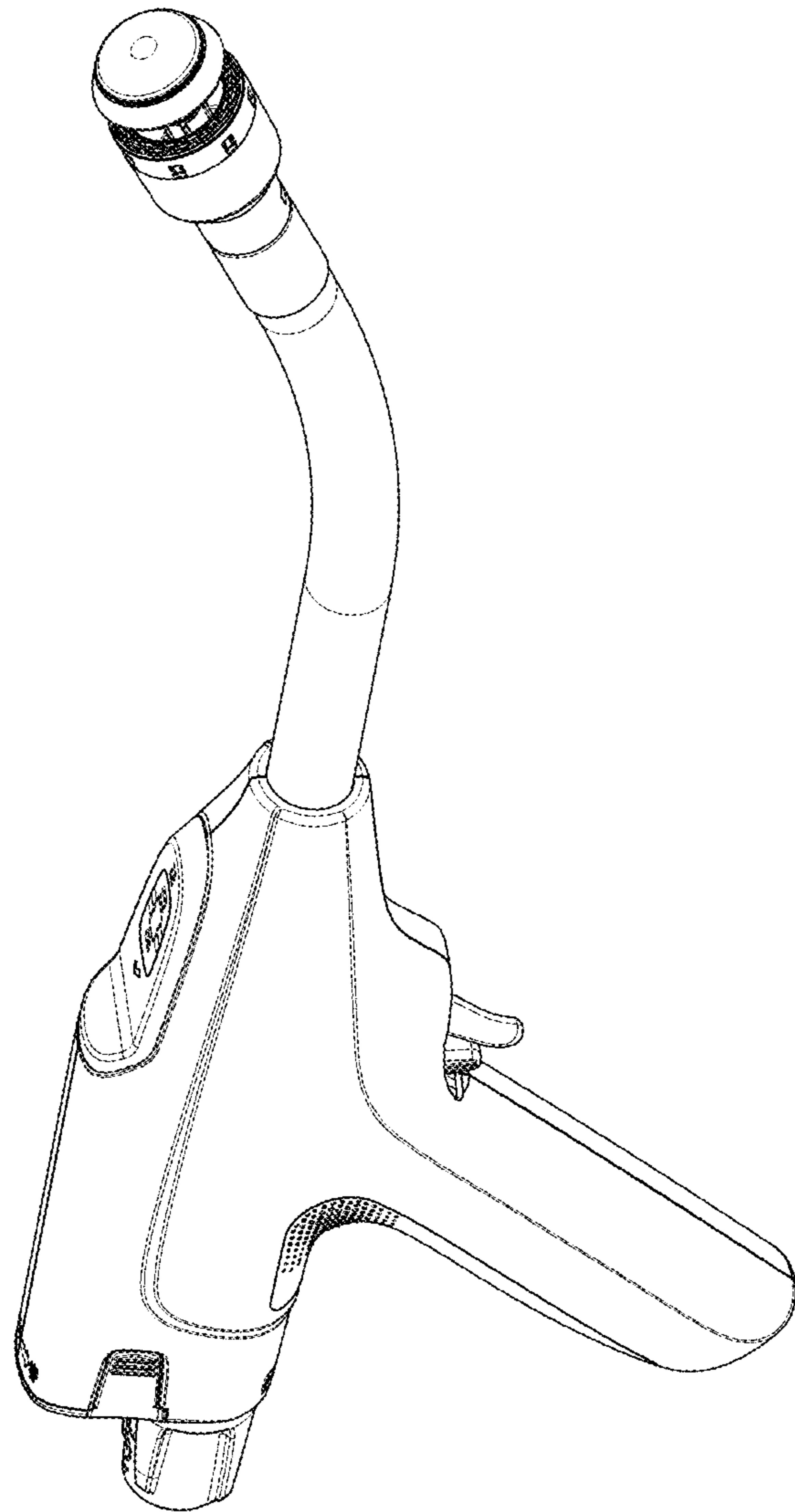


FIG. 15

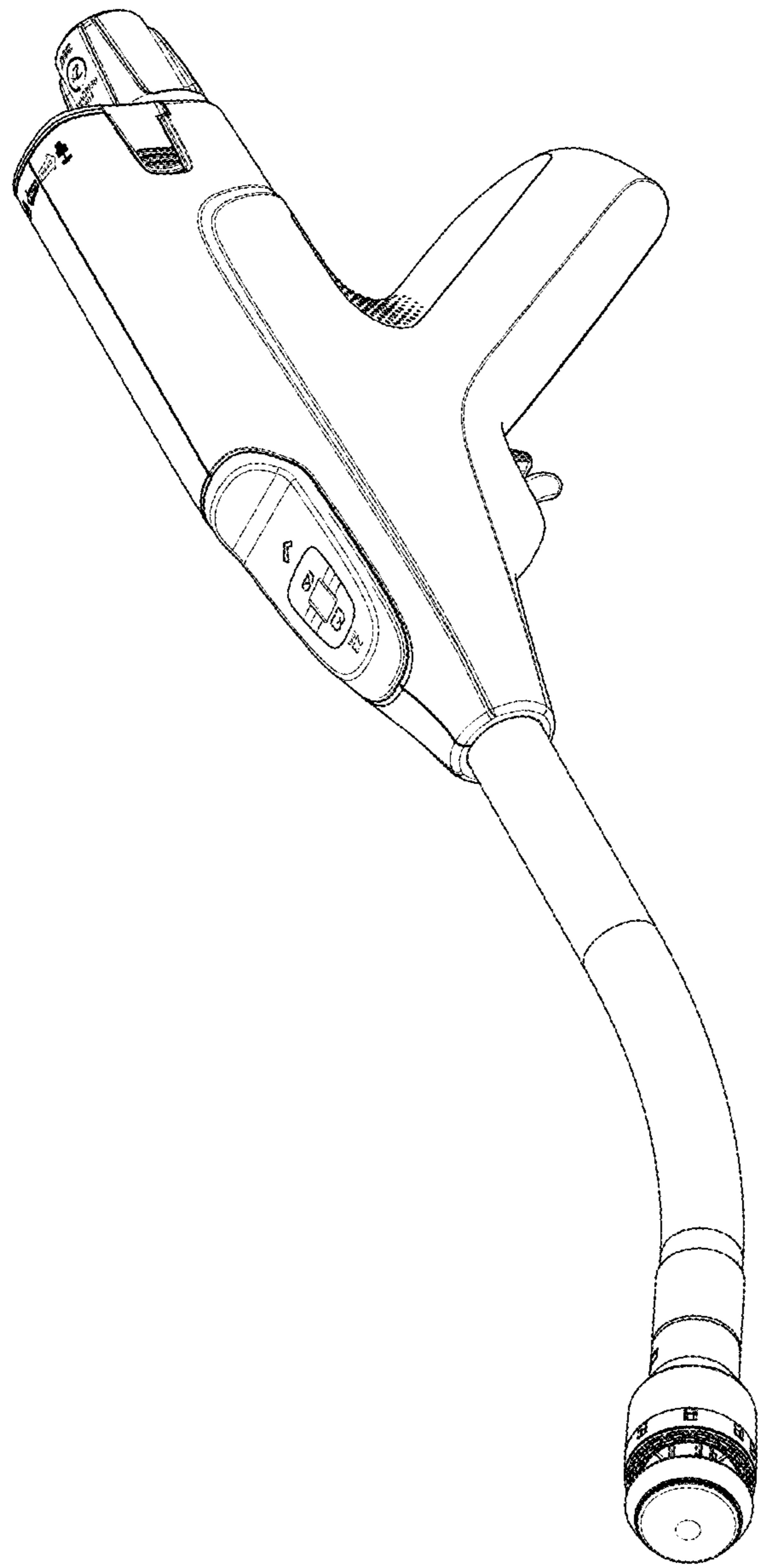


FIG. 16

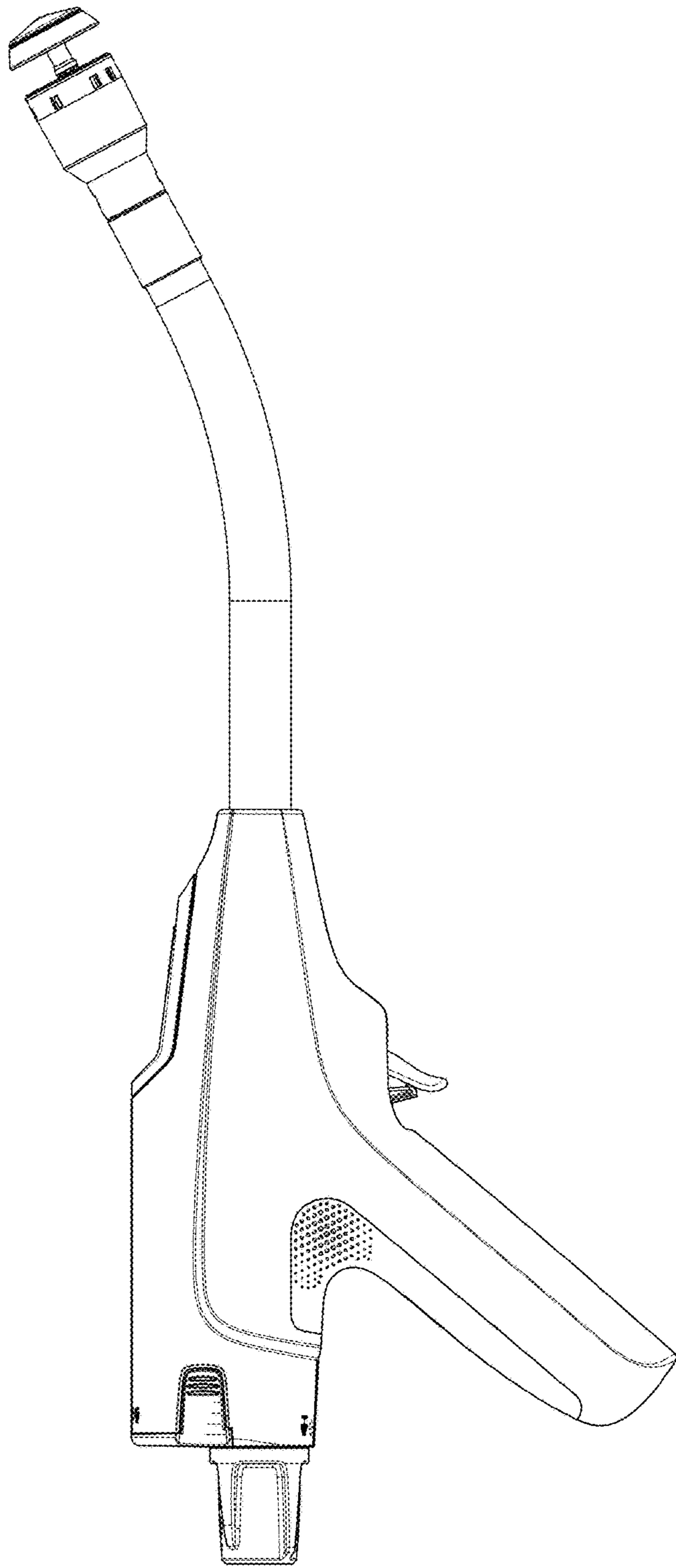


FIG. 17

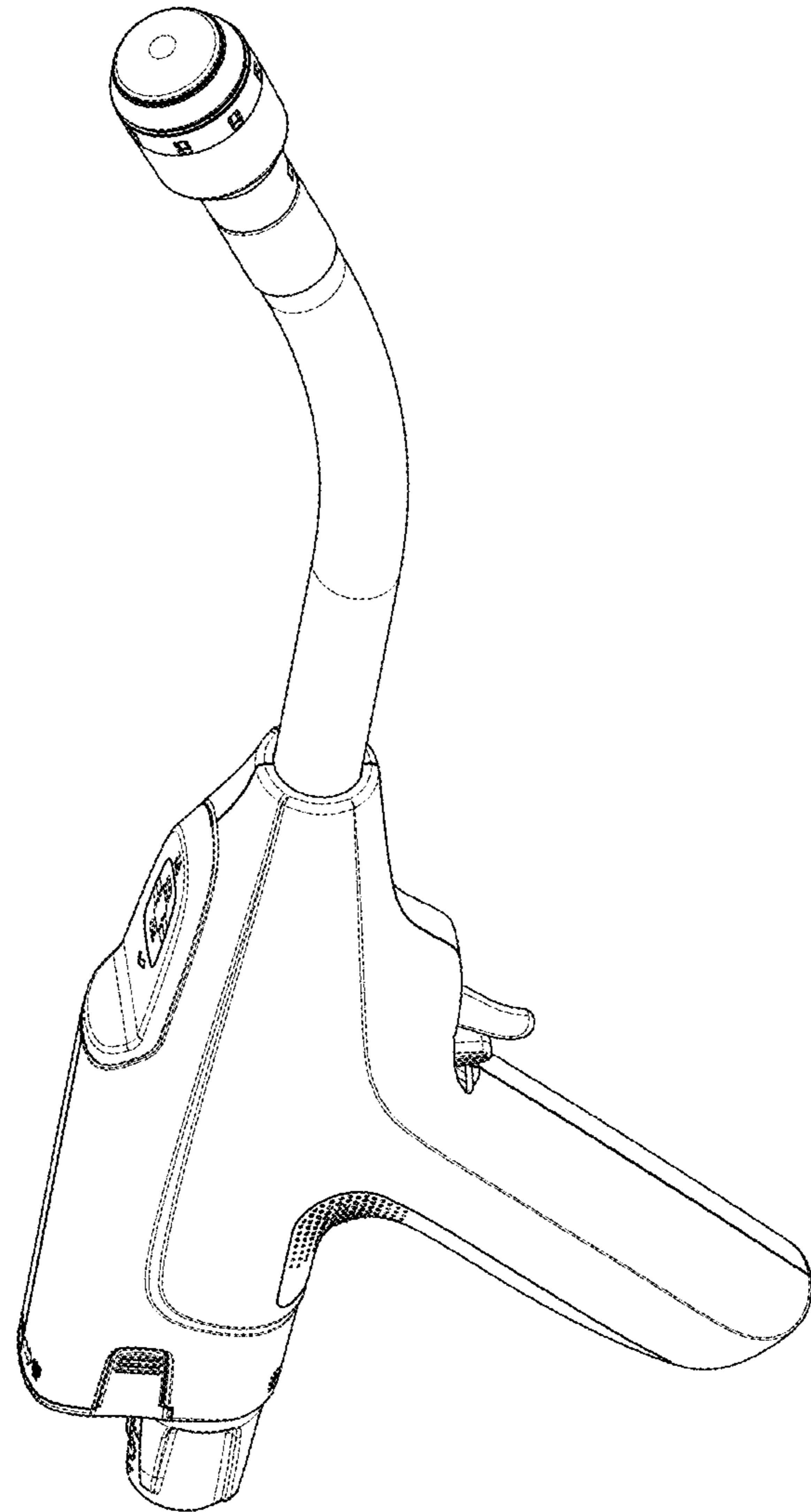


FIG. 18

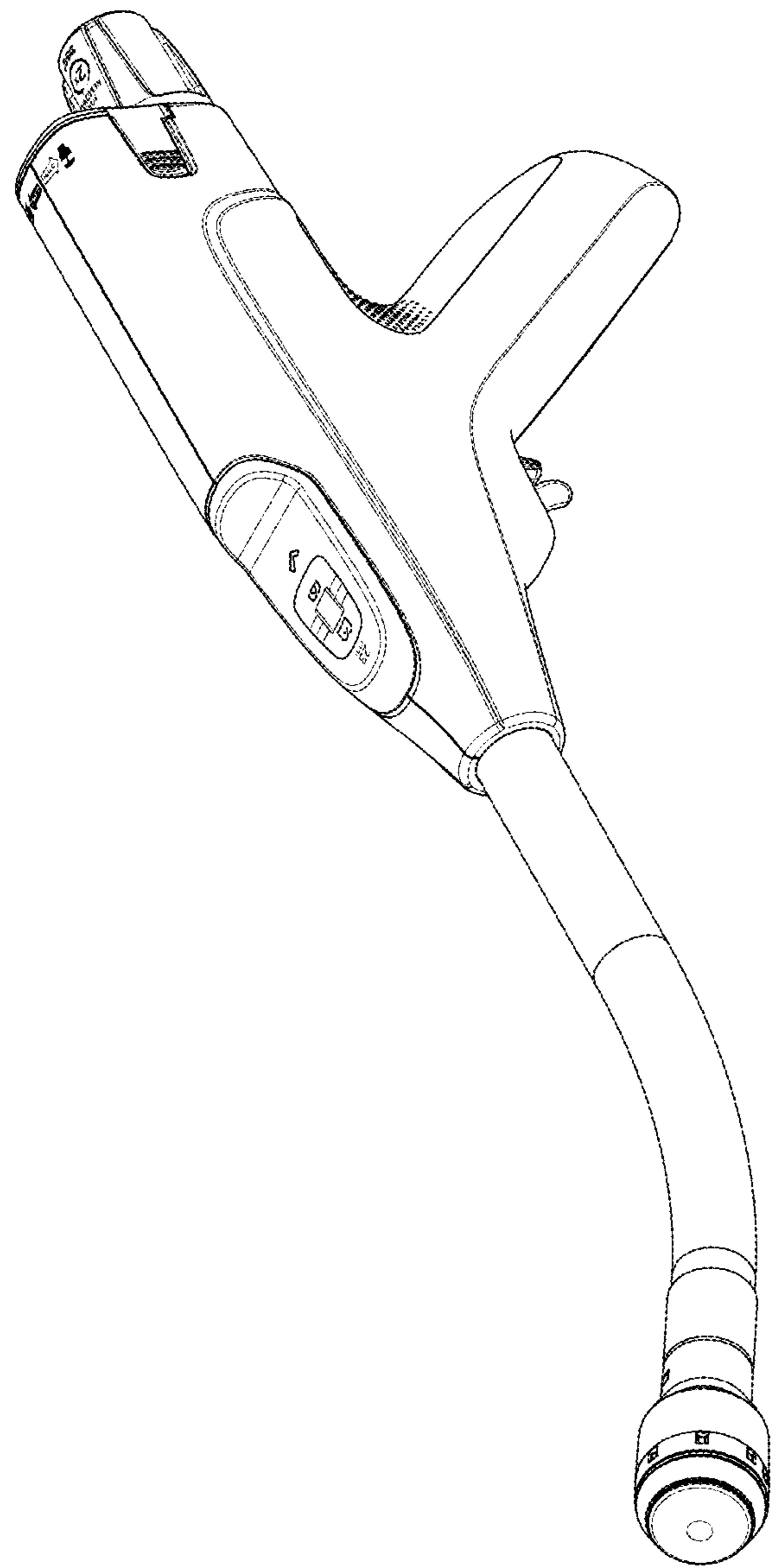


FIG. 19

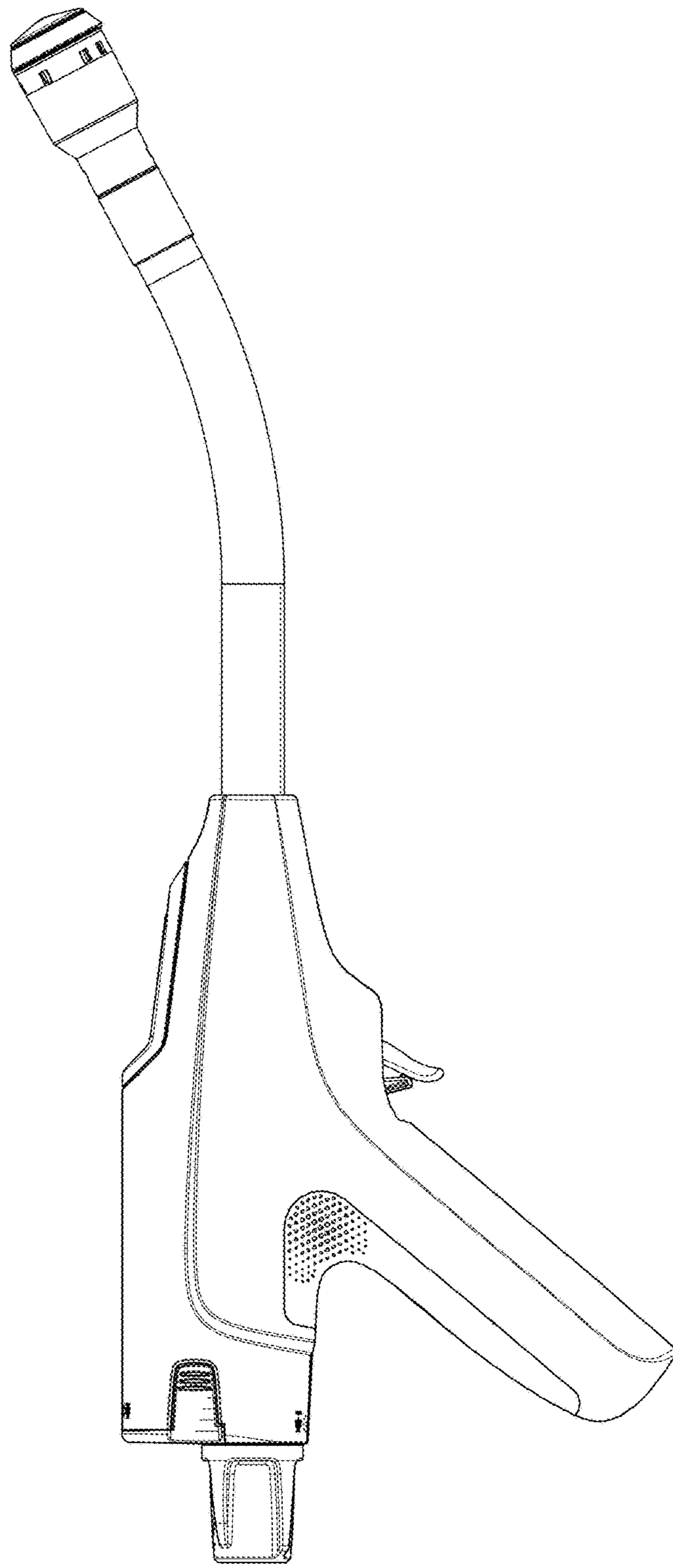


FIG. 20

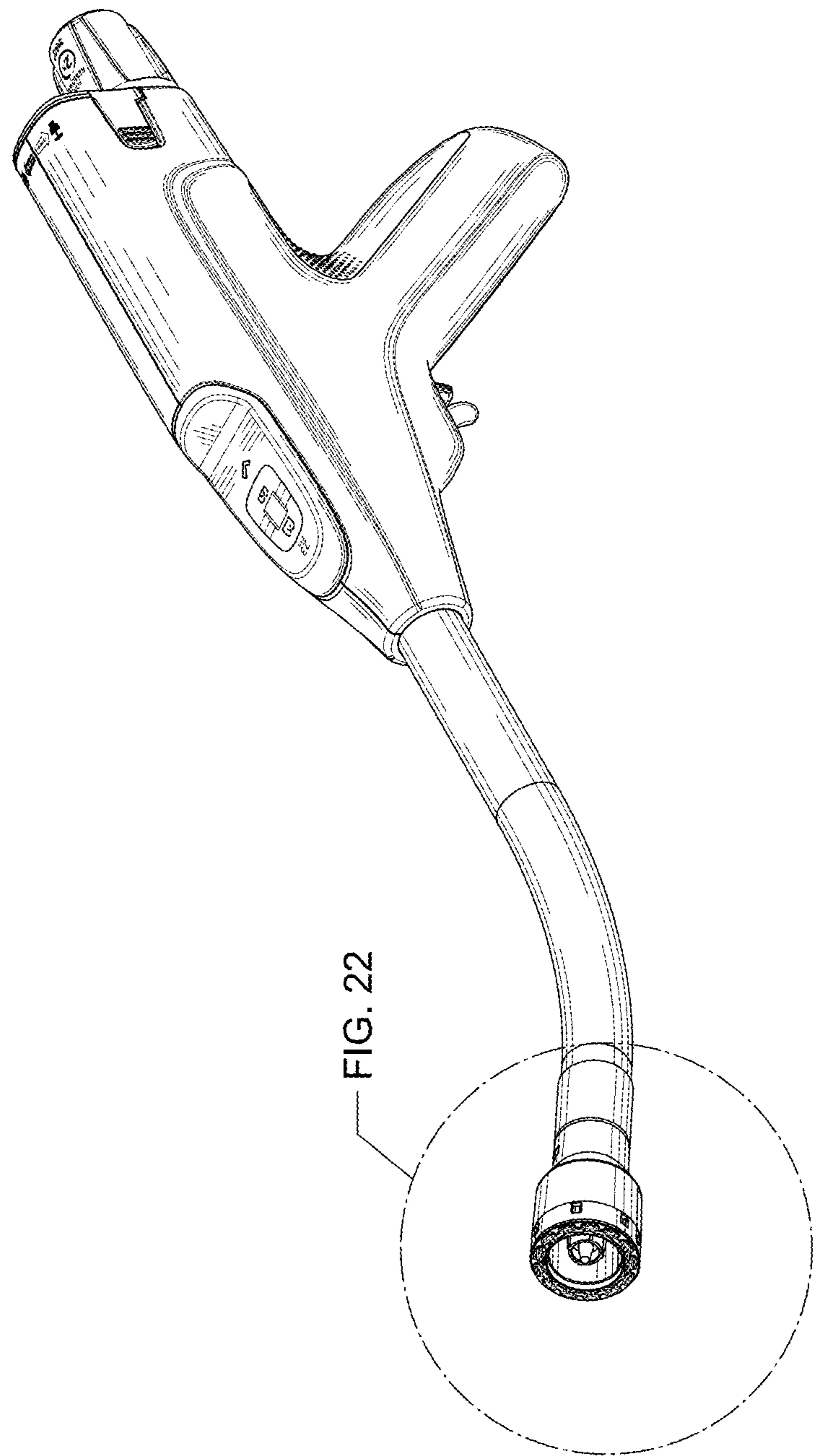
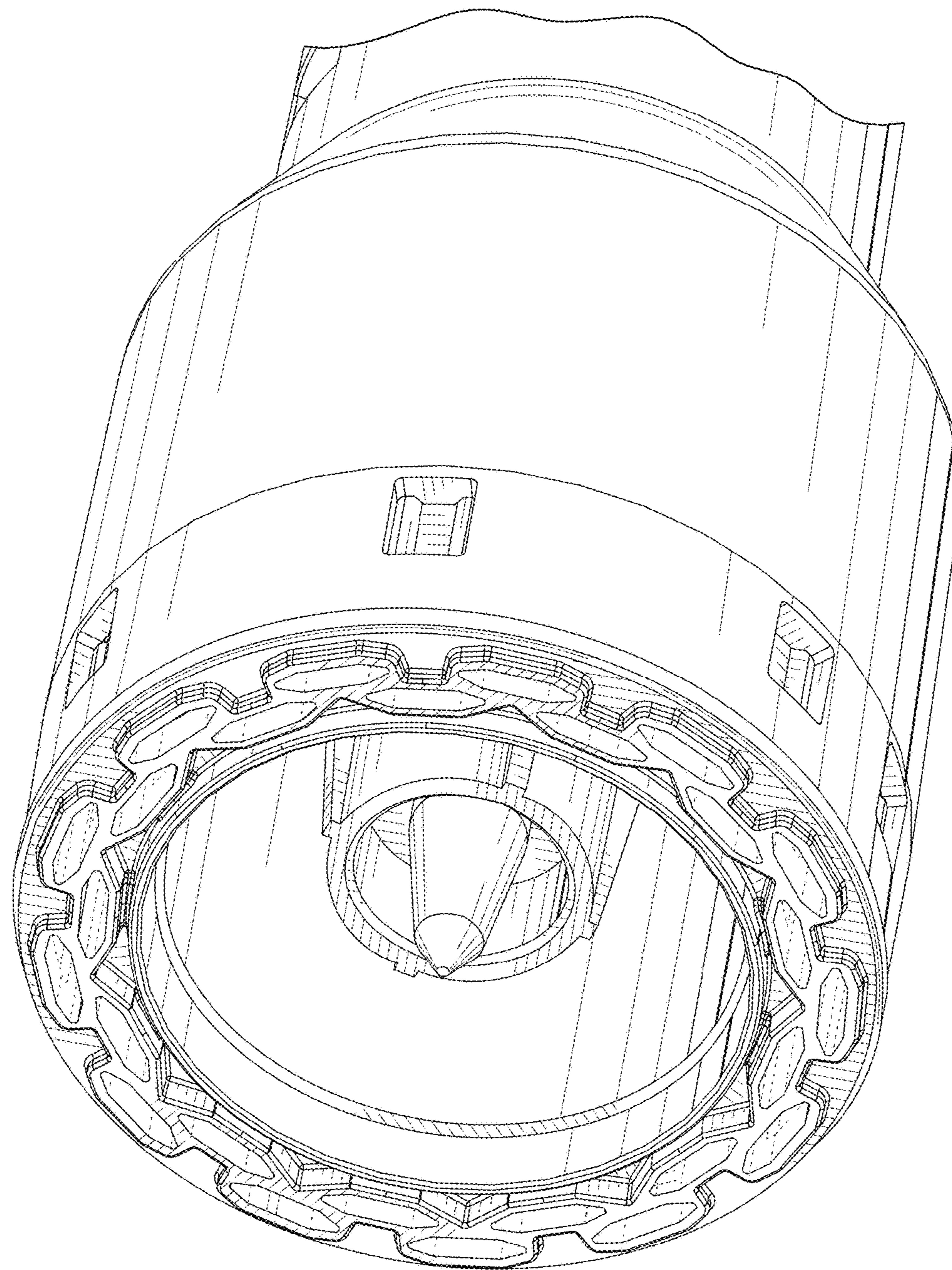


FIG. 21



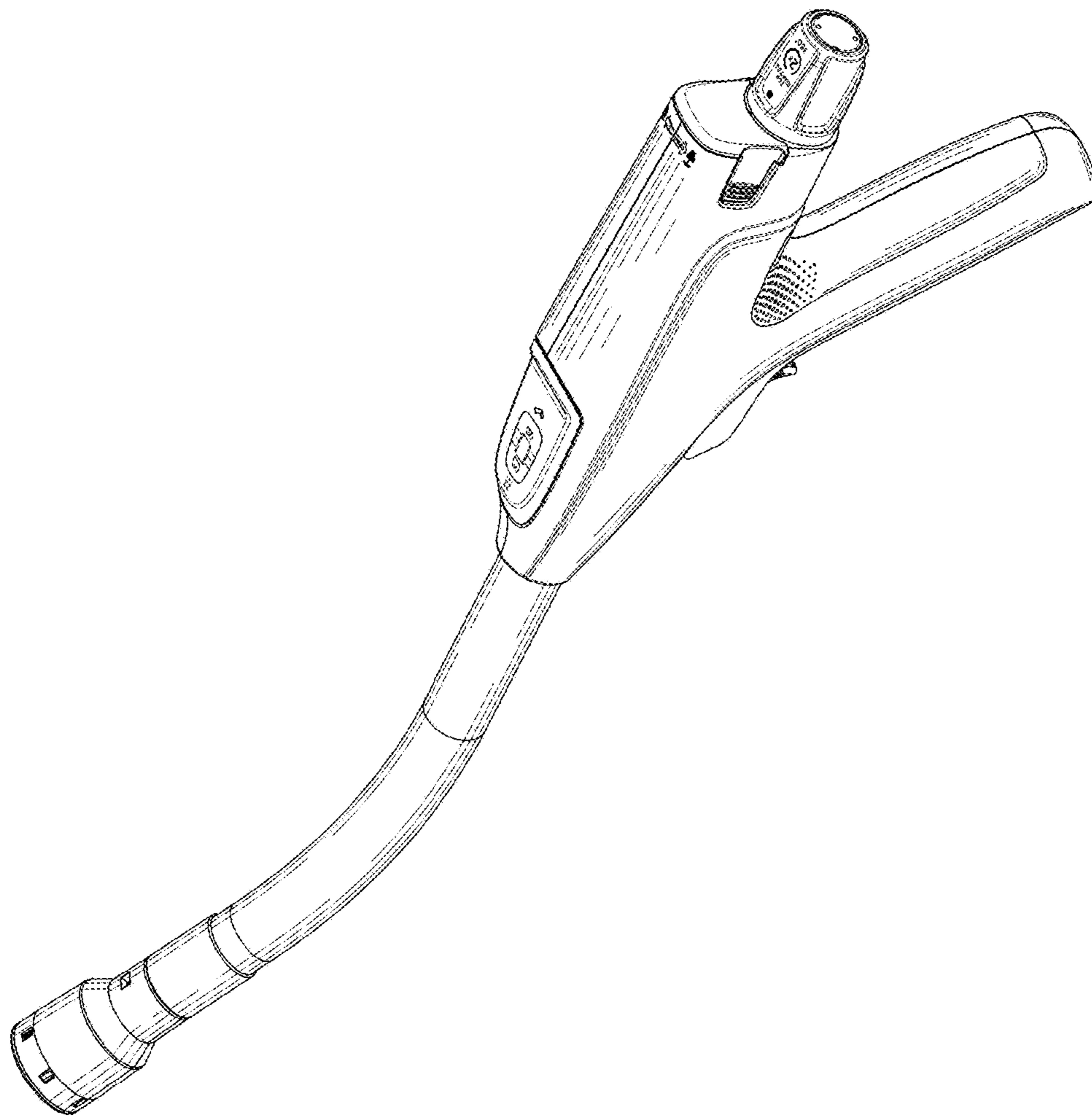


FIG. 23

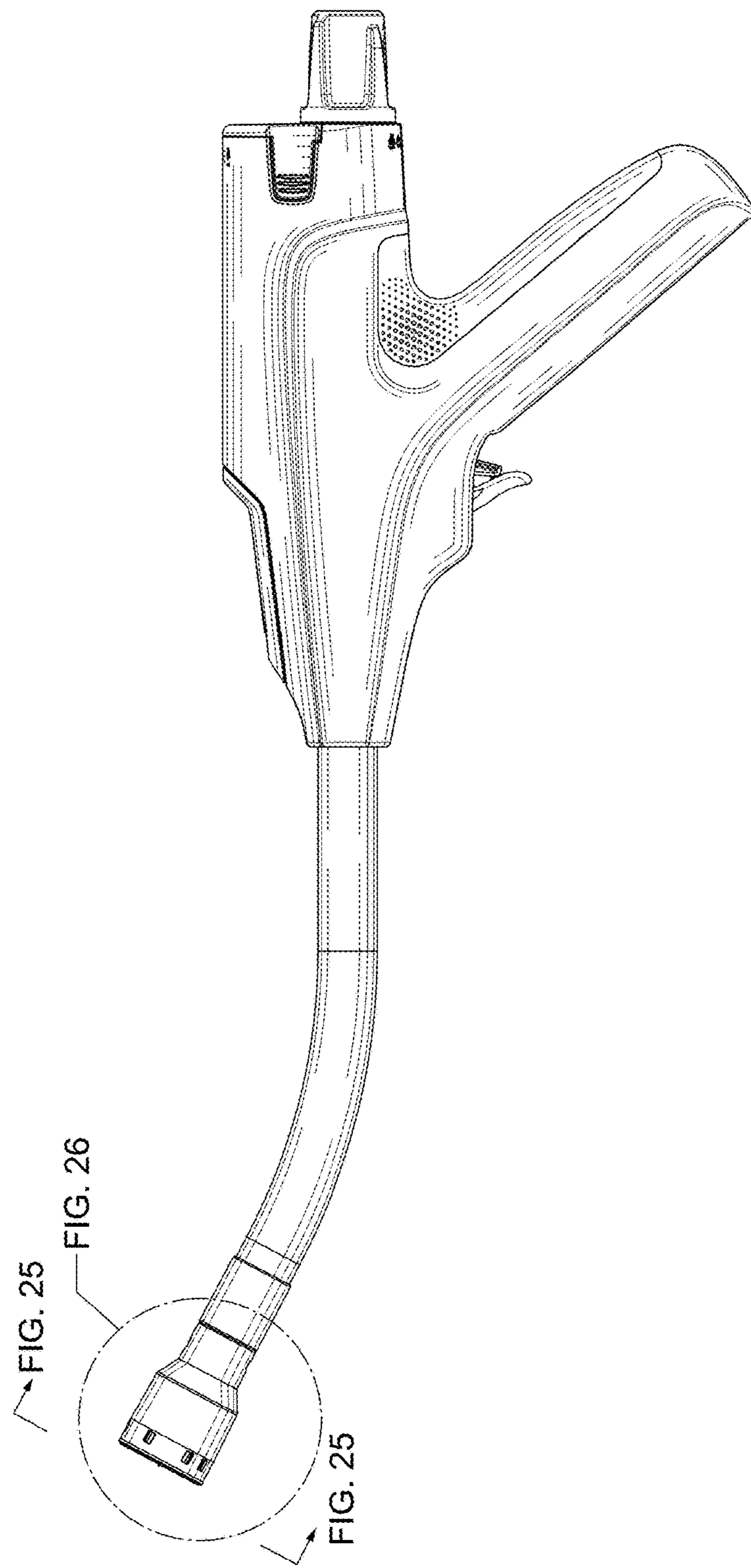


FIG. 24

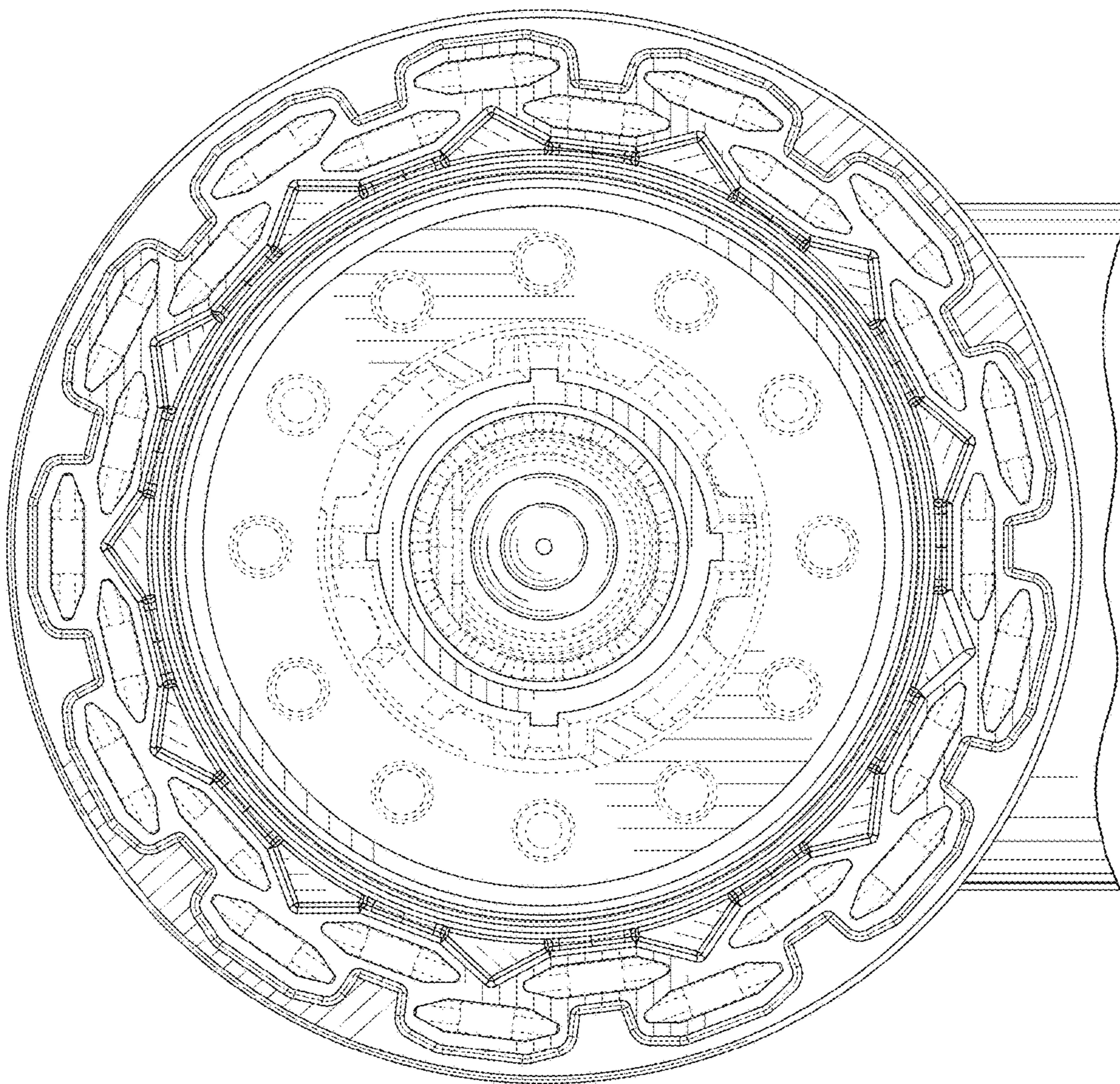


FIG. 25

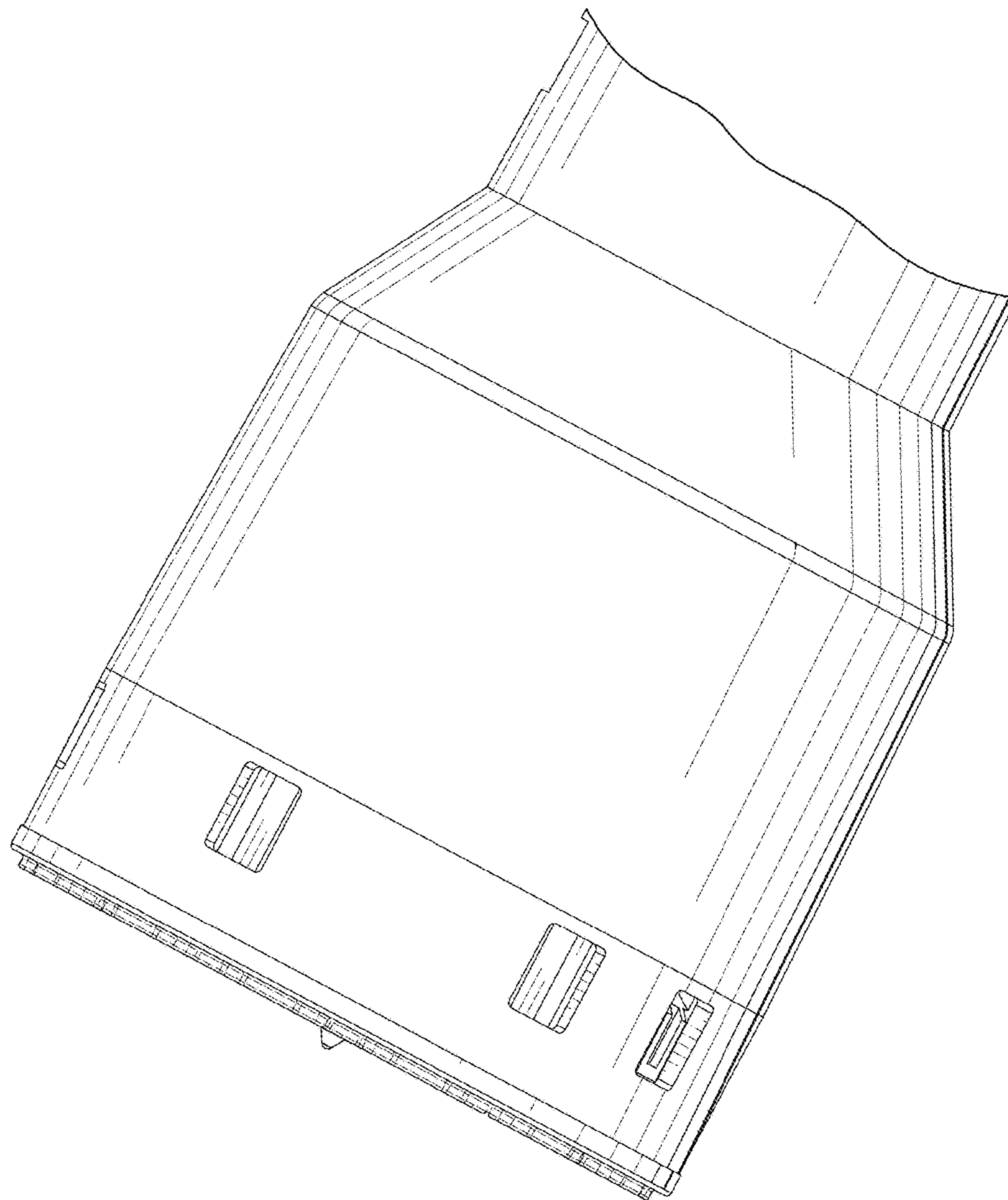


FIG. 26

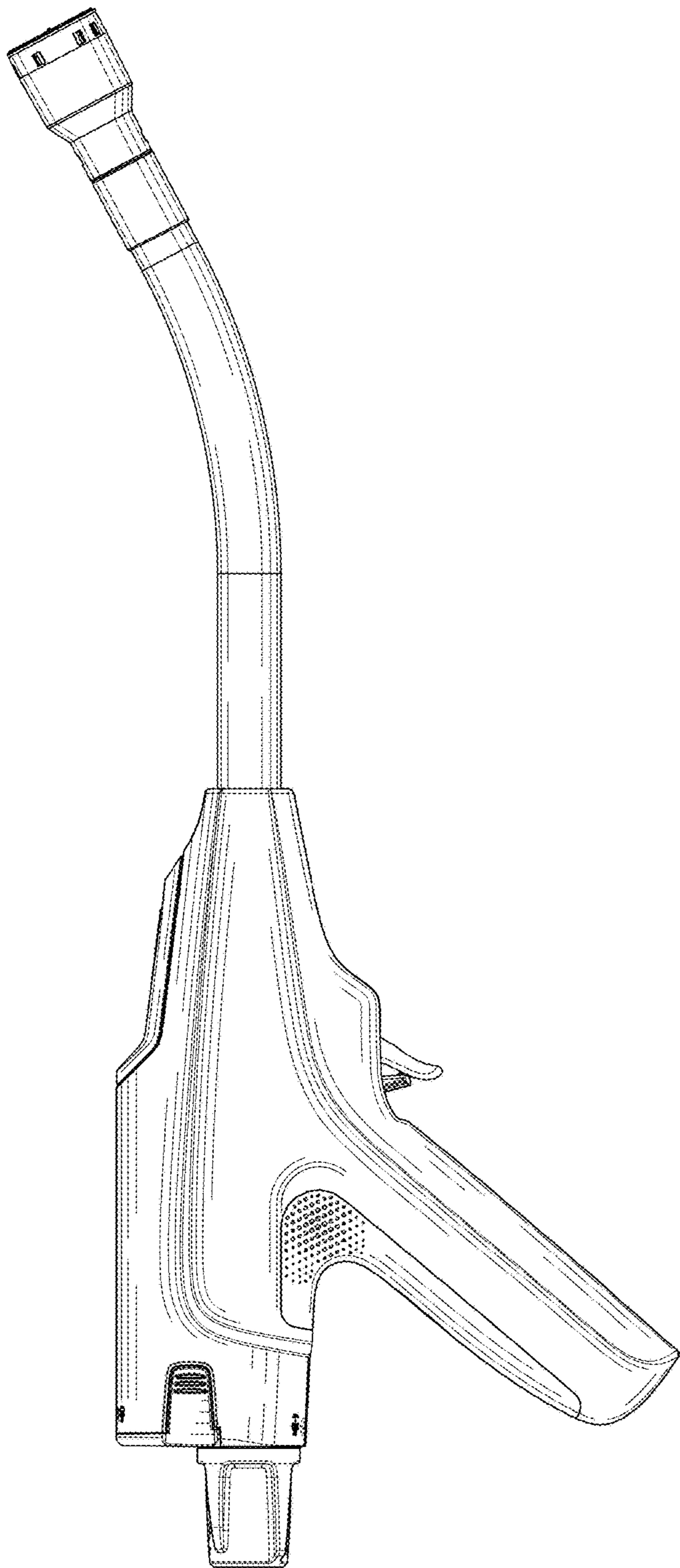


FIG. 27

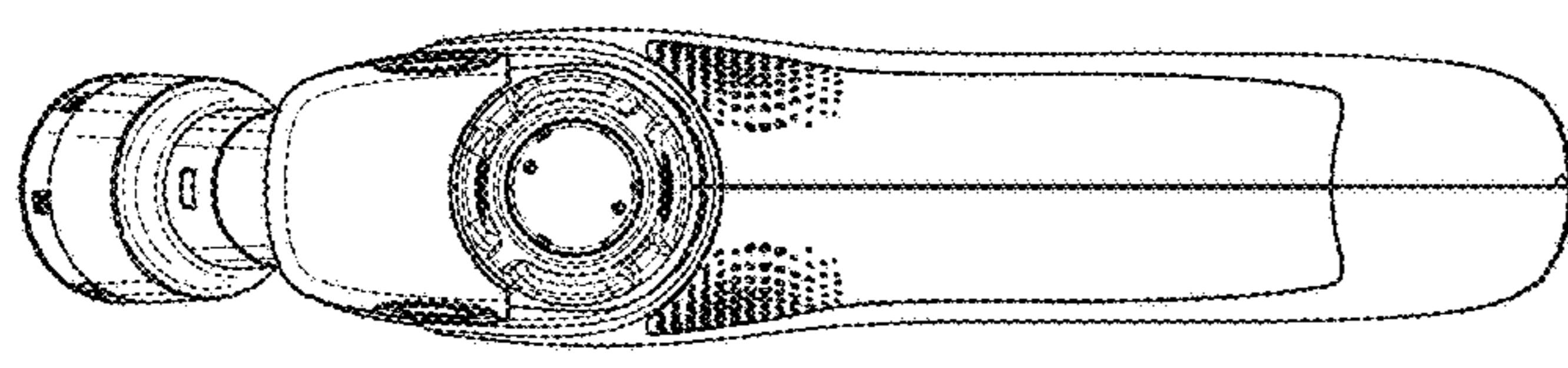


FIG. 28

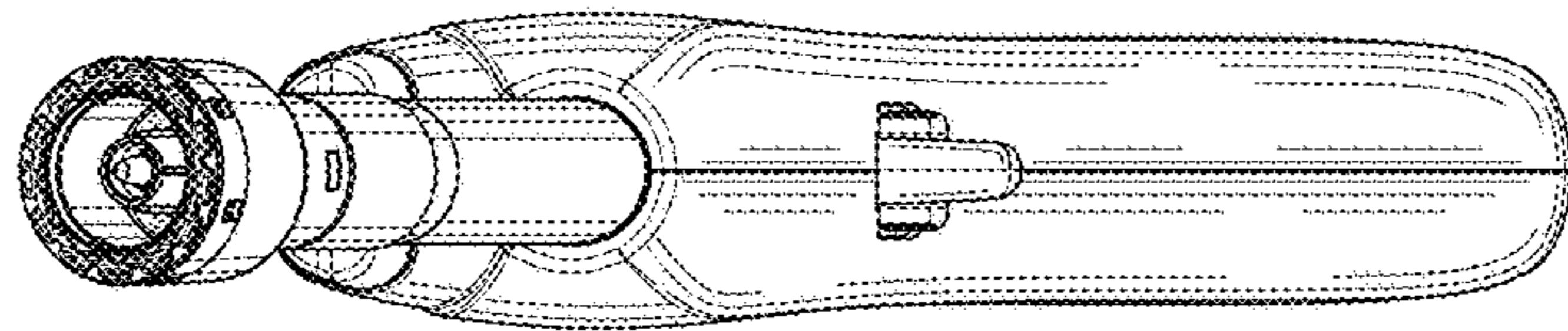
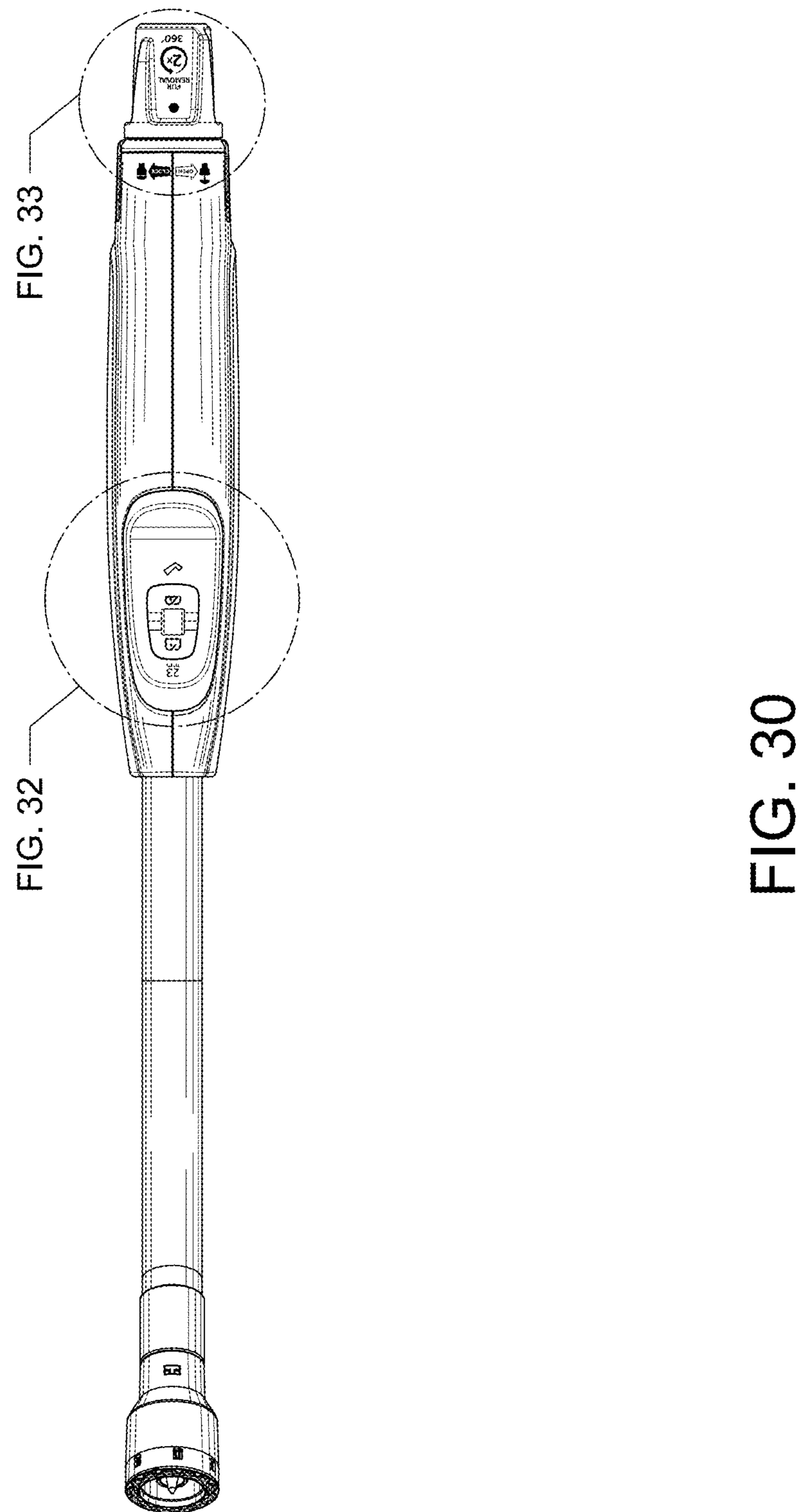


FIG. 29



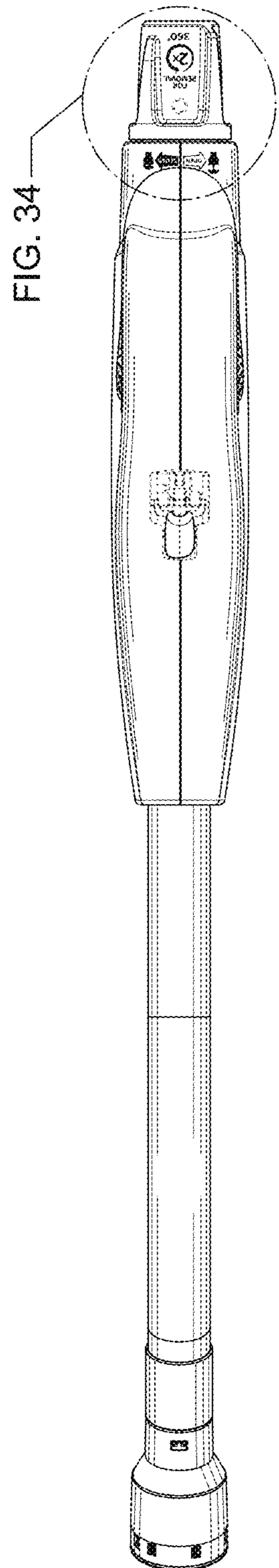


FIG. 31

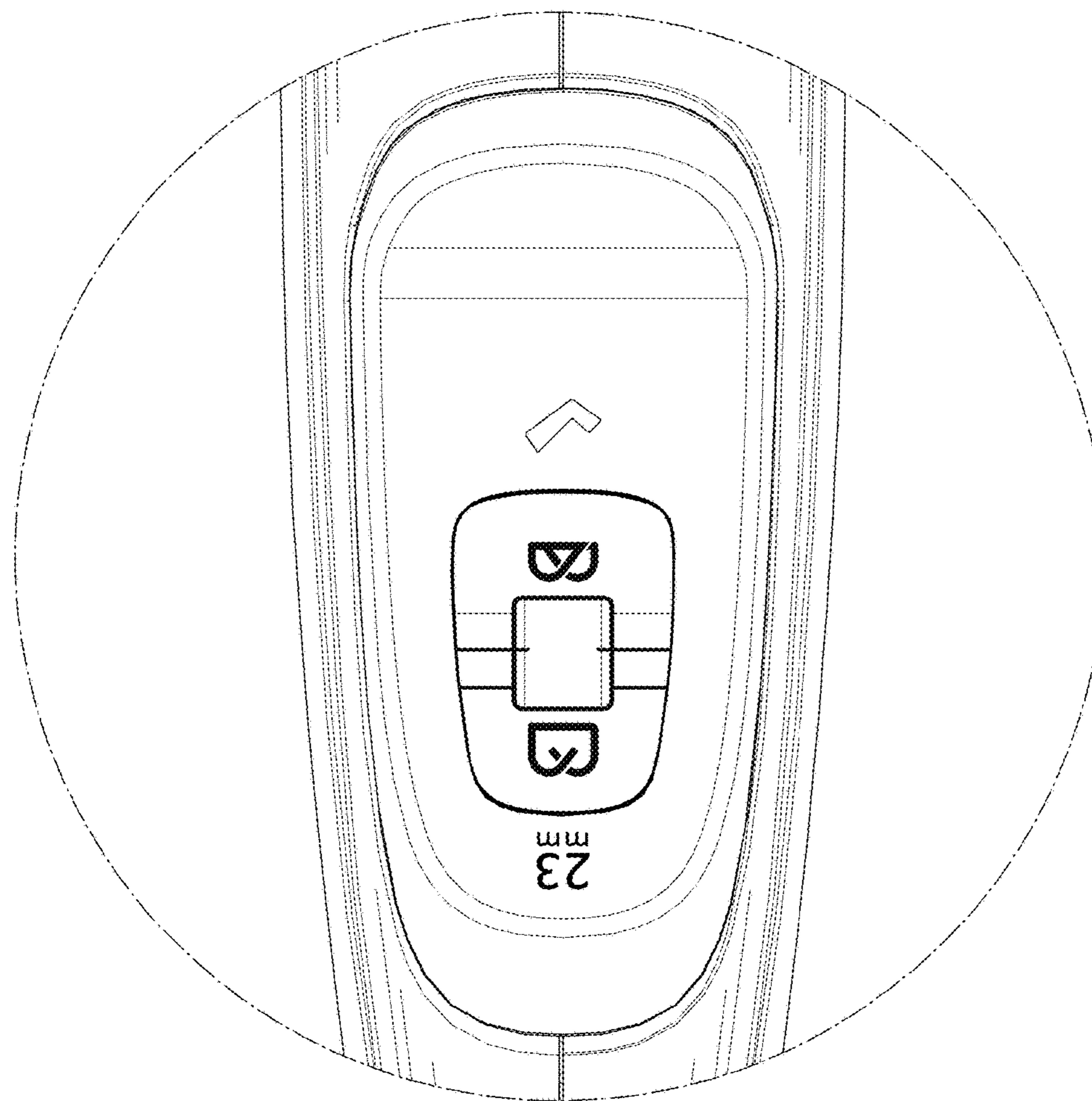


FIG. 32



FIG. 33



FIG. 34

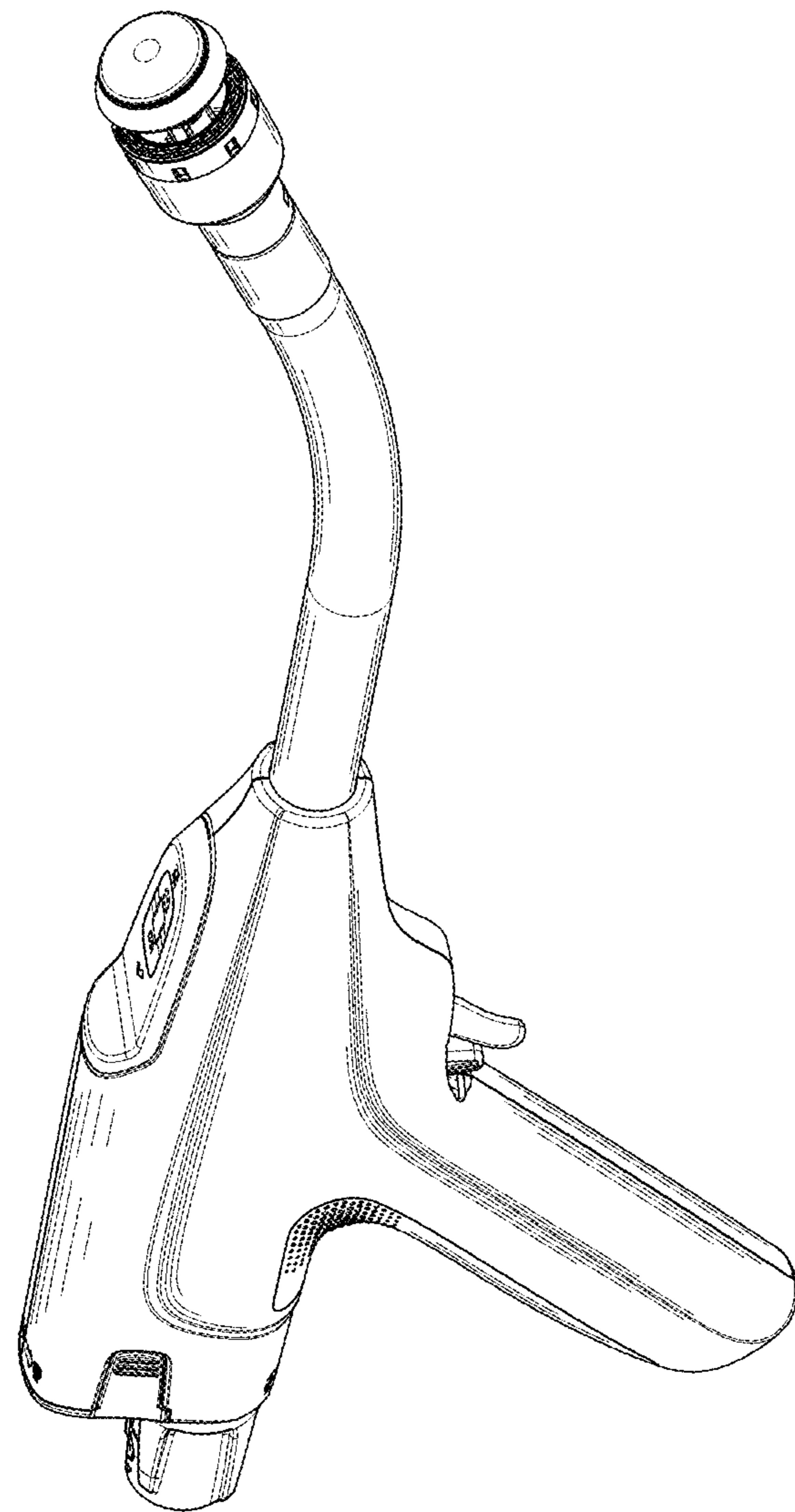


FIG. 35

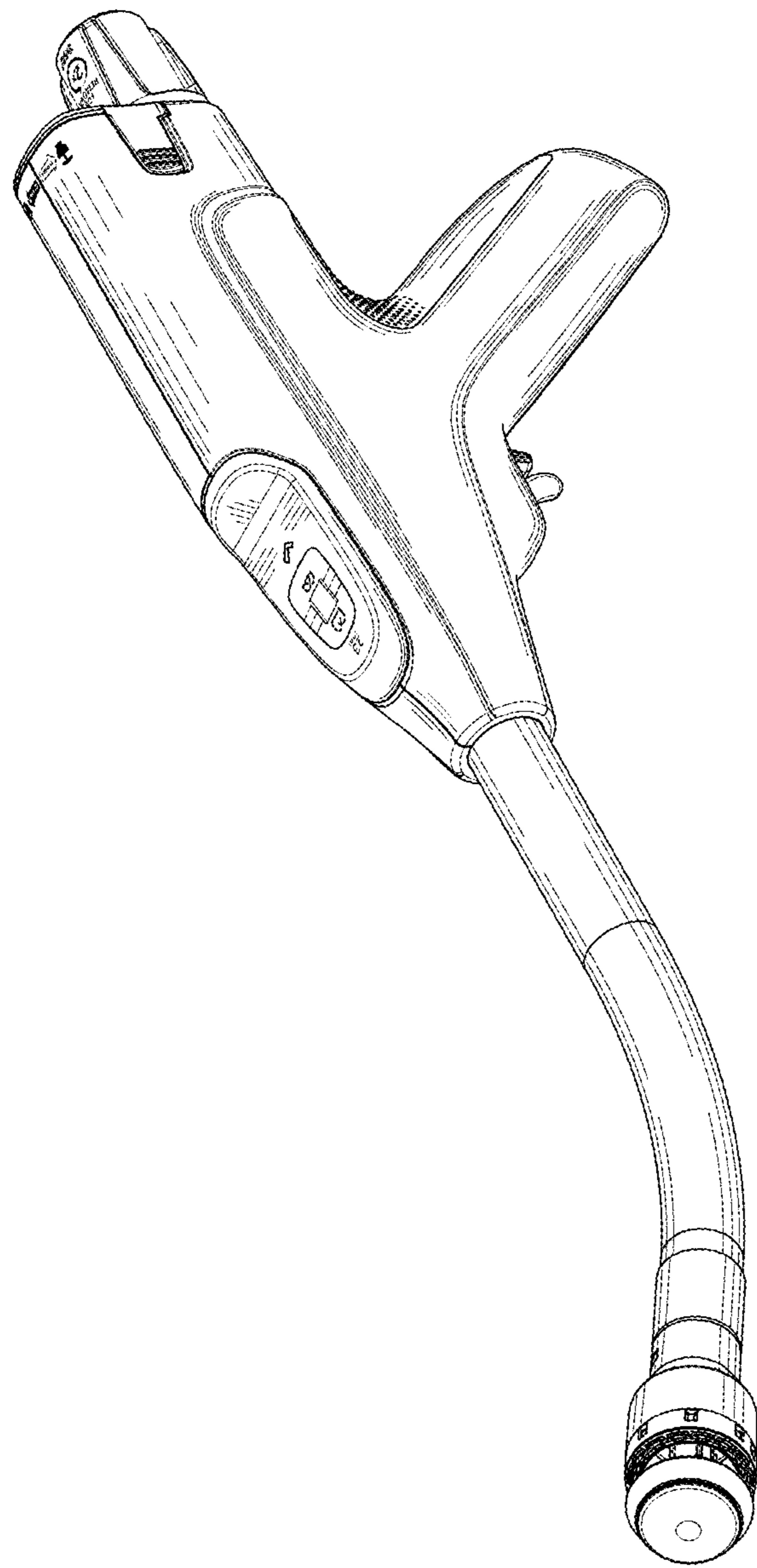


FIG. 36

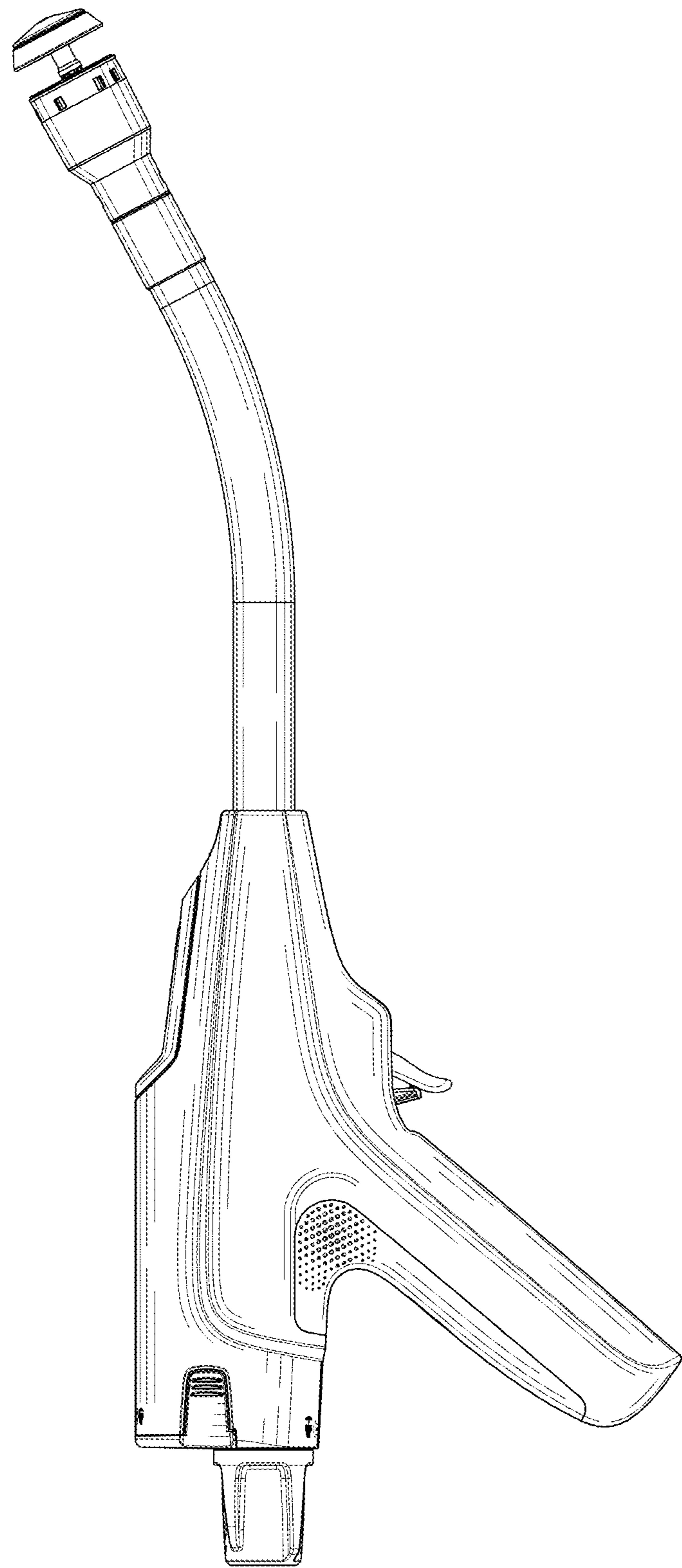


FIG. 37

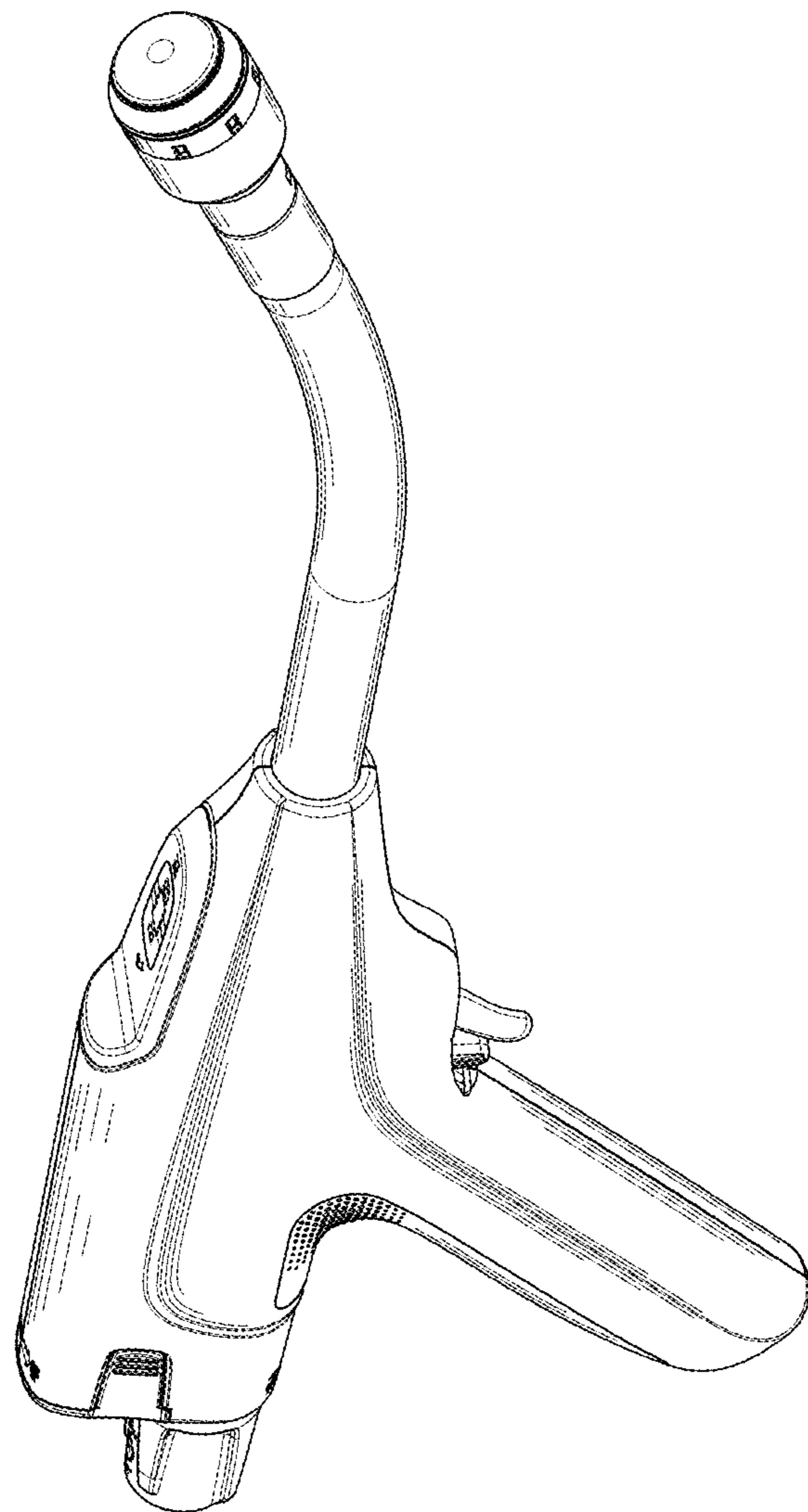


FIG. 38

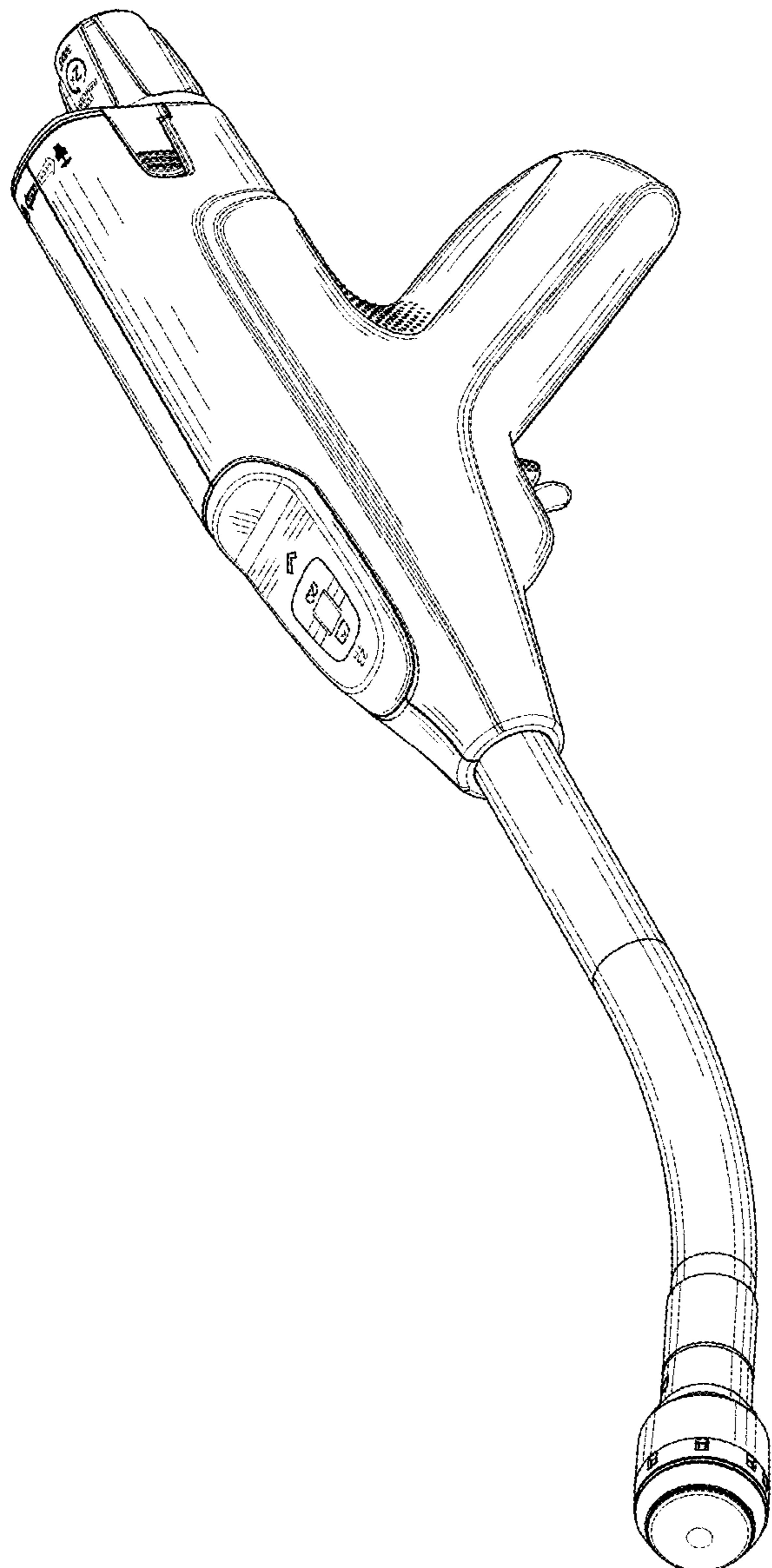


FIG. 39

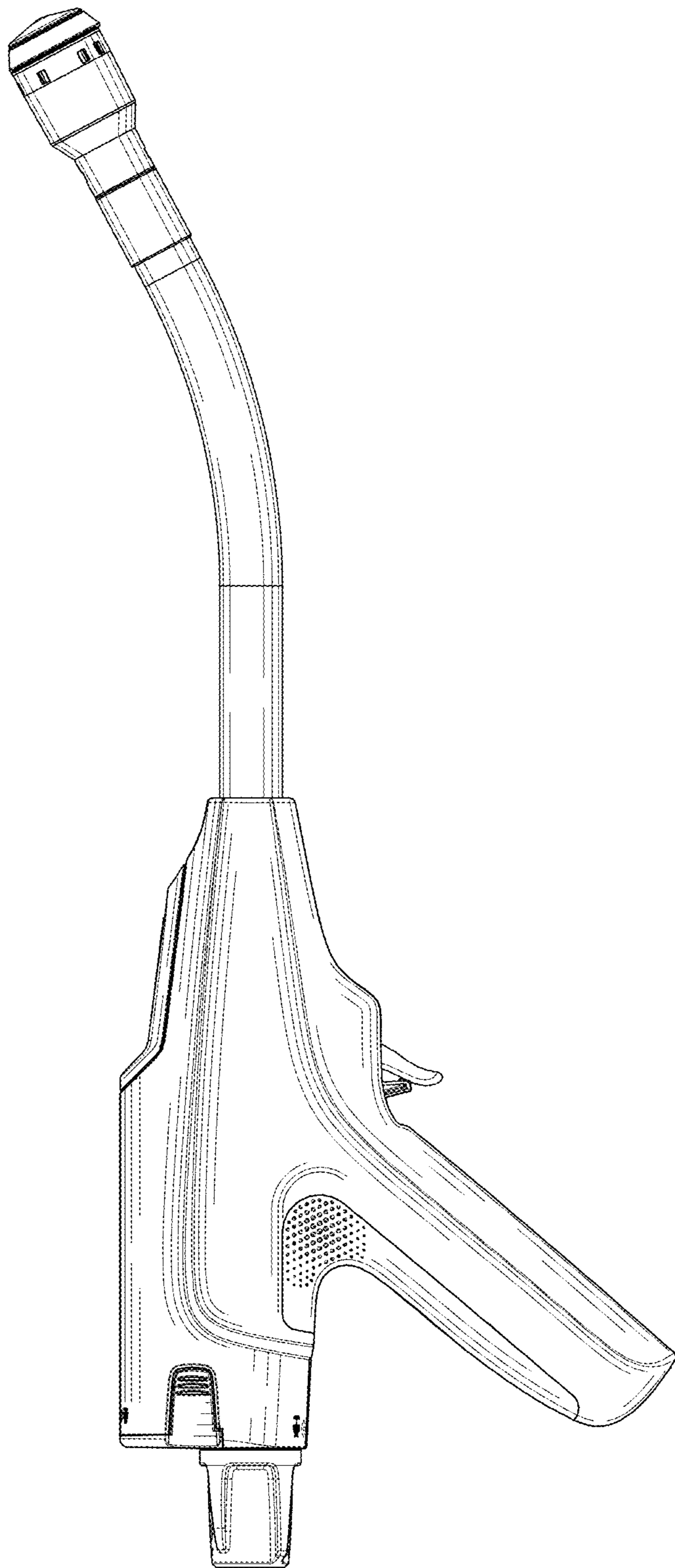


FIG. 40