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(12)

United States Design Patent

Van Manen

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(45) Date of Patent:

** May 27, 2025

(54) BRACHYTHERAPY APPLICATOR

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(NL)

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Veenendaal (NL)

(**) Term: 15 Years

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(51) LOC (15) Cl. 24-01

(52) U.S. Cl.
USPC D24/158

(58) Field of Classification Search
USPC D24/107, 112–114, 117, 127, 130, 133,
D24/138, 155, 157, 158, 231, 232, 152
(Continued)

(56) References Cited

U.S. PATENT DOCUMENTS

D249,549 S 9/1978 Pike

D393,715 S 4/1998 Strickland

(Continued)

FOREIGN PATENT DOCUMENTS

CN 304768787 * 8/2018

CN 306274662 * 1/2021

JP D1733444 * 12/2022

OTHER PUBLICATIONS

Drugs.com, Durysta Dosage, Published on: Nov. 16, 2023, Drugs.
com, Retrieved from Internet: <https://www.drugs.com/dosage/durysta.html> (Year: 2023).*

(Continued)

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Assistant Examiner — Edward P Jones

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Woessner, P.A.

(57) CLAIM

The ornamental design for a brachytherapy applicator, as
shown and described.

DESCRIPTION

NOTICE OF COPYRIGHTS AND TRADE DRESS: A
portion of the disclosure of this patent document contains
material which is subject to copyright protection. This patent
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trade dress owner has no objection to the facsimile repro-
duction by anyone of the patent disclosure as it appears in
the Patent and Trademark Office patent files or records, but
otherwise reserves all copyright and trade dress rights what-
soever.

FIG. 1 is a top-front-left perspective view of a brachytherapy
applicator (e.g., a rectal applicator for brachytherapy), show-
ing my new design.

FIG. 2 is an annotated top-front-left perspective view of the
brachytherapy applicator shown in FIG. 1.

FIG. 3 is an enlarged top-front-left perspective view of the
annotated portion of FIG. 2.

FIG. 4 is a top-front-right perspective view of the
brachytherapy applicator.

FIG. 5 is an annotated top-front-right perspective view of the
brachytherapy applicator shown in FIG. 4.

FIG. 6 is an enlarged top-front-right perspective view of the
annotated portion of FIG. 5.

FIG. 7 is a top-rear-right perspective view of the
brachytherapy applicator.

FIG. 8 is an annotated top-rear-right perspective view of the
brachytherapy applicator shown in FIG. 7.

FIG. 9 is an enlarged top-rear-right perspective view of the
annotated portion of FIG. 8.

FIG. 10 is a top-rear-left perspective view of the
brachytherapy applicator.

(Continued)

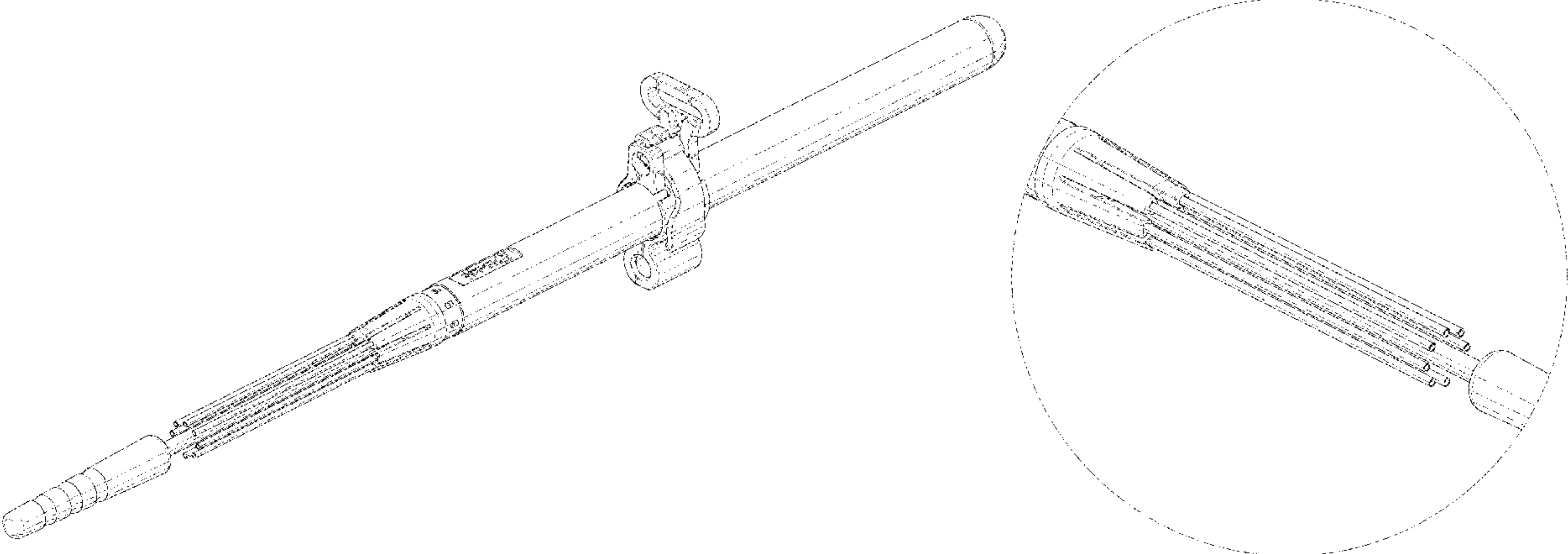


FIG. 11 is an annotated top-rear-left perspective view of the brachytherapy applicator shown in FIG. 10.

FIG. 12 is an enlarged top-rear-left perspective view of the annotated portion of FIG. 11.

FIG. 13 is a bottom-front-right perspective view of the brachytherapy applicator.

FIG. 14 is an annotated bottom-front-right perspective view of the brachytherapy applicator shown in FIG. 13.

FIG. 15 is an enlarged bottom-front-right perspective view of the annotated portion of FIG. 14.

FIG. 16 is a bottom-front-left perspective view of the brachytherapy applicator.

FIG. 17 is an annotated bottom-front-left perspective view of the brachytherapy applicator shown in FIG. 16.

FIG. 18 is an enlarged bottom-front-left perspective view of the annotated portion of FIG. 17.

FIG. 19 is a bottom-rear-left perspective view of the brachytherapy applicator.

FIG. 20 is an annotated bottom-rear-left perspective view of the brachytherapy applicator shown in FIG. 19.

FIG. 21 is an enlarged bottom-rear-left perspective view of the annotated portion of FIG. 20.

FIG. 22 is a bottom-rear-right perspective view of the brachytherapy applicator.

FIG. 23 is an annotated bottom-rear-right perspective view of the brachytherapy applicator shown in FIG. 22.

FIG. 24 is an enlarged bottom-rear-right perspective view of the annotated portion of FIG. 23.

FIG. 25 is a right side view of the brachytherapy applicator.

FIG. 26 is an annotated right side view of the brachytherapy applicator shown in FIG. 25.

FIG. 27 is an enlarged right side view of the annotated portion of FIG. 26.

FIG. 28 is a left side view of the brachytherapy applicator.

FIG. 29 is an annotated left side view of the brachytherapy applicator shown in FIG. 28.

FIG. 30 is an enlarged left side view of the annotated portion of FIG. 29.

FIG. 31 is a rear view of the brachytherapy applicator.

FIG. 32 is a front view of the brachytherapy applicator.

FIG. 33 is a top view of the brachytherapy applicator.

FIG. 34 is an annotated top view of the brachytherapy applicator shown in FIG. 33.

FIG. 35 is an enlarged top view of the annotated portion of FIG. 34.

FIG. 36 is a bottom view of the brachytherapy applicator.

FIG. 37 is an annotated bottom view of the brachytherapy applicator shown in FIG. 36; and,

FIG. 38 is an enlarged bottom view of the annotated portion of FIG. 37.

The word “Elekta” with its associated icon forming part of the claimed design is a registered trademark of Elekta AB.

The short-dash long-dash lines shown in the drawings depict boundaries of the enlarged view indicators and form no parts of the claimed design. The dash-dash broken lines depict unclaimed portions of the brachytherapy applicator and form no parts of the claimed design.

1 Claim, 37 Drawing Sheets

(58) Field of Classification Search

CPC A61N 5/10; A61N 5/1001; A61N 5/01;
A61N 5/00; A61N 5/1027; A61B
17/1227; A61B 17/122; A61K 9/0002;
A61K 9/025; A61K 9/0024; A61M
31/002

See application file for complete search history.

(56) References Cited

U.S. PATENT DOCUMENTS

D402,031	S	12/1998	Roberts et al.	
5,860,909	A	1/1999	Mick et al.	
6,450,937	B1	9/2002	Mercereau et al.	
D493,530	S	7/2004	Reschke	
D521,641	S	5/2006	Reschke et al.	
D655,406	S *	3/2012	Ma	D24/112
D664,251	S *	7/2012	Ruiz, Sr.	D28/7
D669,981	S *	10/2012	Ruiz, Sr.	D9/725
9,072,542	B2 *	7/2015	Ducharme	A61M 37/0069
D753,290	S *	4/2016	Shimon	D24/112
D766,432	S	9/2016	Schuerger	
D781,420	S	3/2017	Korenfeld et al.	
D810,281	S	2/2018	Holmqvist et al.	
D814,637	S *	4/2018	Lohrenz	D24/158
D902,387	S *	11/2020	Oellgaard	D24/112
D908,866	S *	1/2021	Fuentes-Ortega	D24/112
D975,844	S *	1/2023	Hildinger	D24/112
D1,017,805	S	3/2024	O'heney et al.	
2007/0265488	A1 *	11/2007	Lamoureux	A61M 37/0069 600/7
2014/0121443	A1 *	5/2014	van Erp	A61N 5/1007 600/3

OTHER PUBLICATIONS

Mick, Mick® TP/TPV Applicator System, Published: Dec. 2018, bebig.com, Retrieved from Internet: https://www.bebig.com/fileadmin/bebig_neu/user_uploads/Products/Seed_Brachytherapy/Fact_sheet_Mick_TTPPV_Applicator_System_Rev.04_English.pdf (Year: 2018).*

Eckert & Ziegler Radiation Therapy, Training Film Mick TP/TPV Applicator, Published: Jul. 20, 2017, YouTube, Retrieved from Internet: <https://www.youtube.com/watch?v=pwhqM5ShMZk> (Year: 2017).*

“U.S. Appl. No. 29 867,871, Non Final Office Action mailed Sep. 19, 2024”, 8 pgs.

* cited by examiner

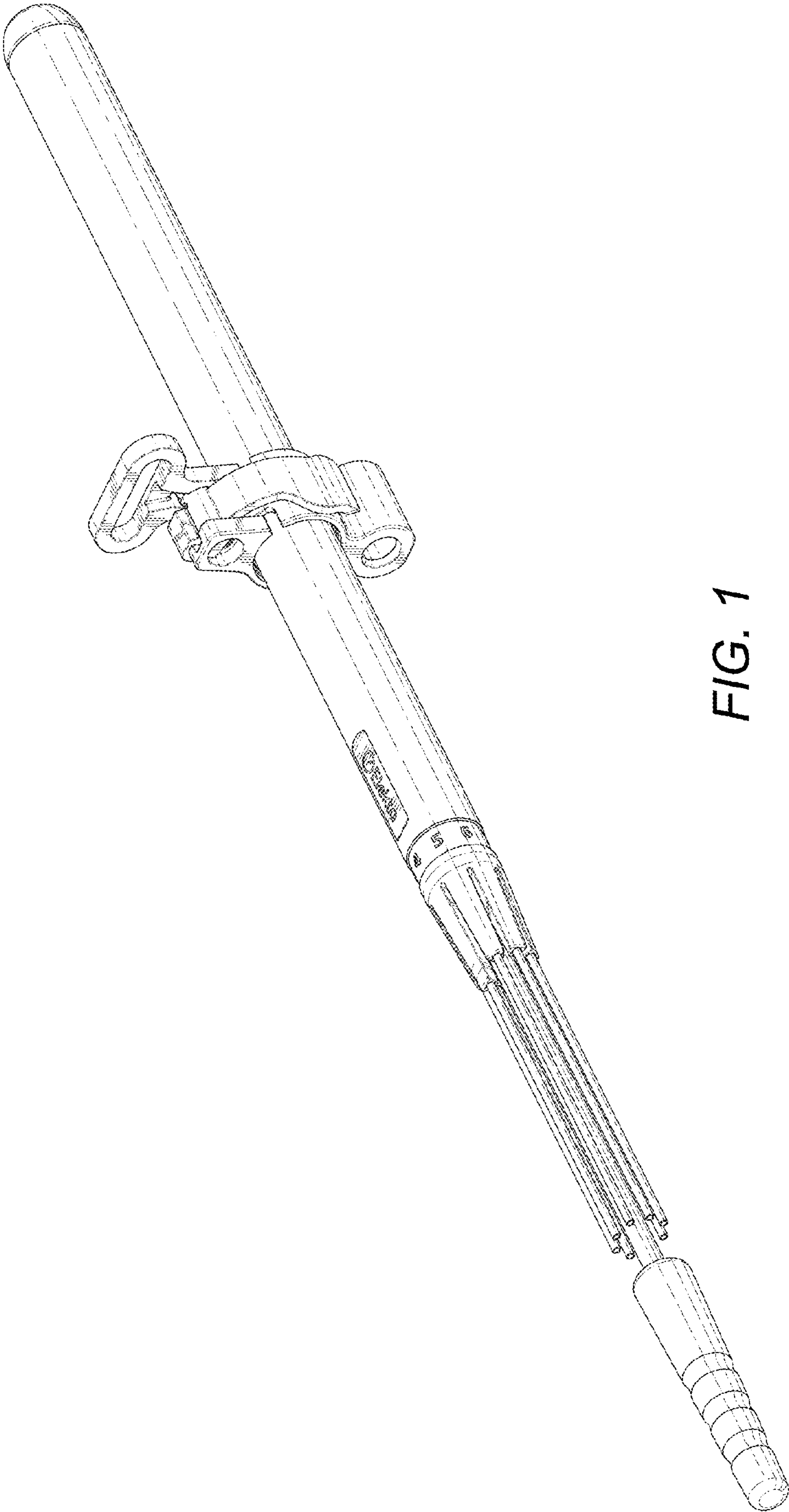


FIG. 1

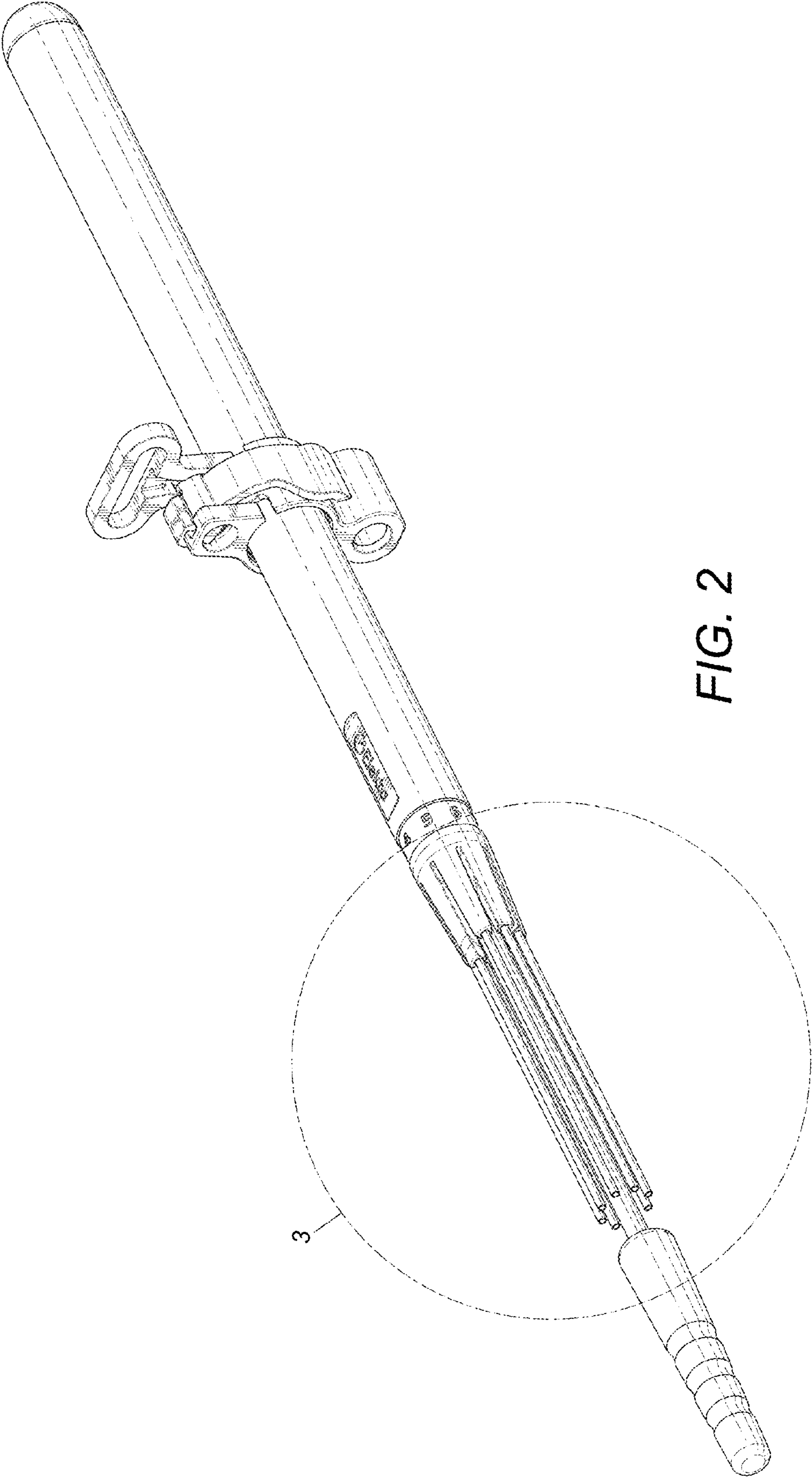


FIG. 2

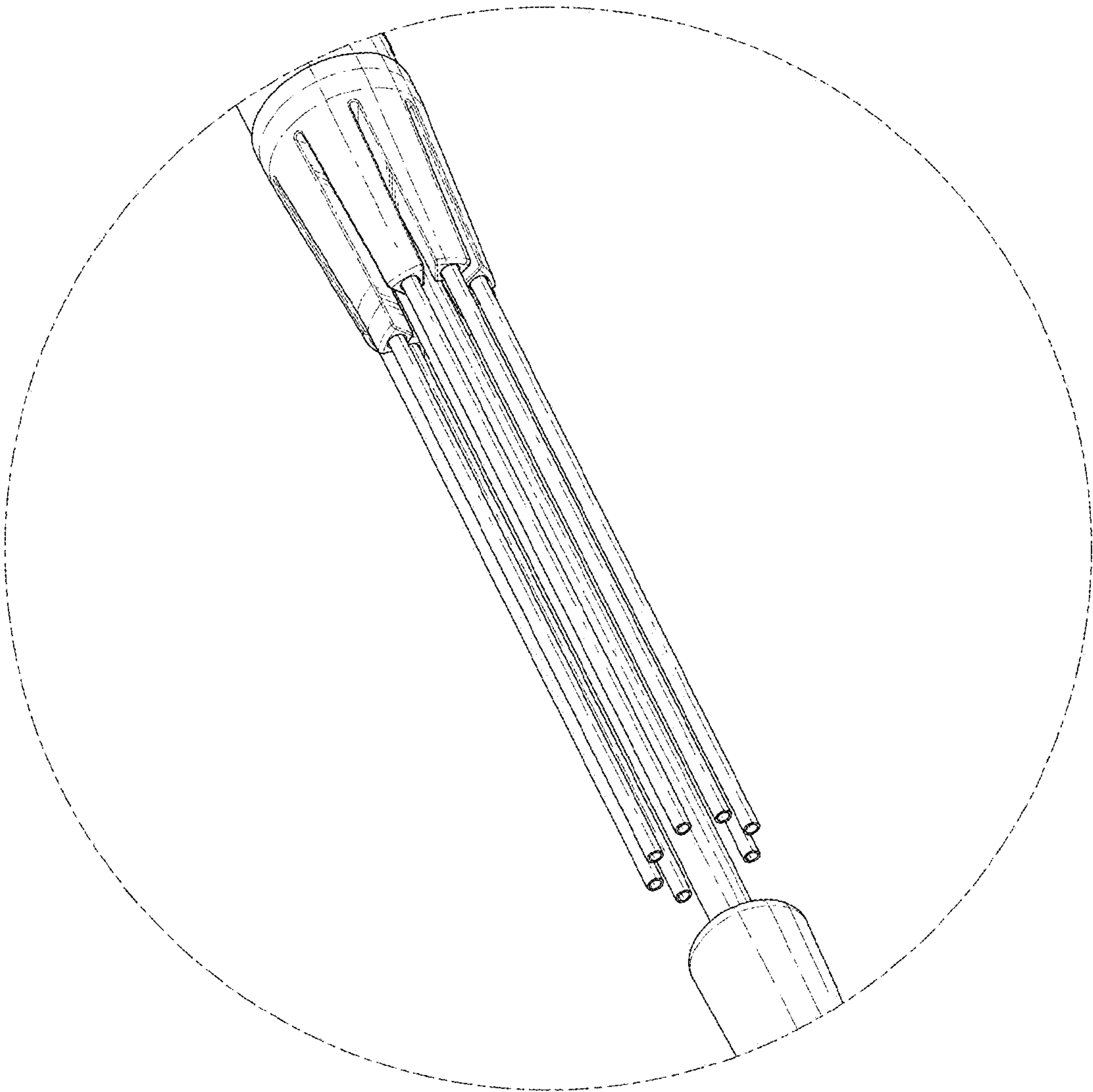


FIG. 3

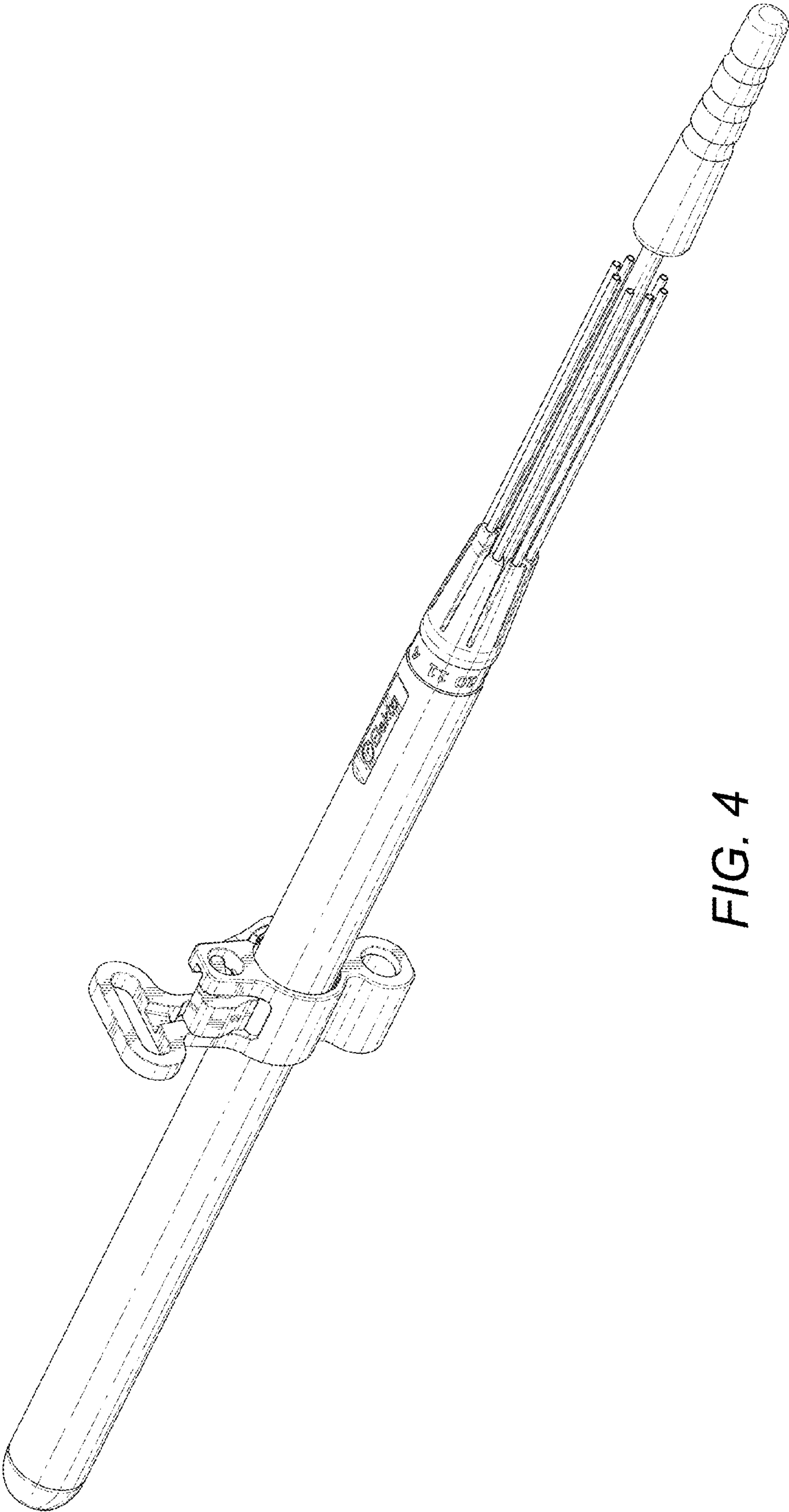


FIG. 4

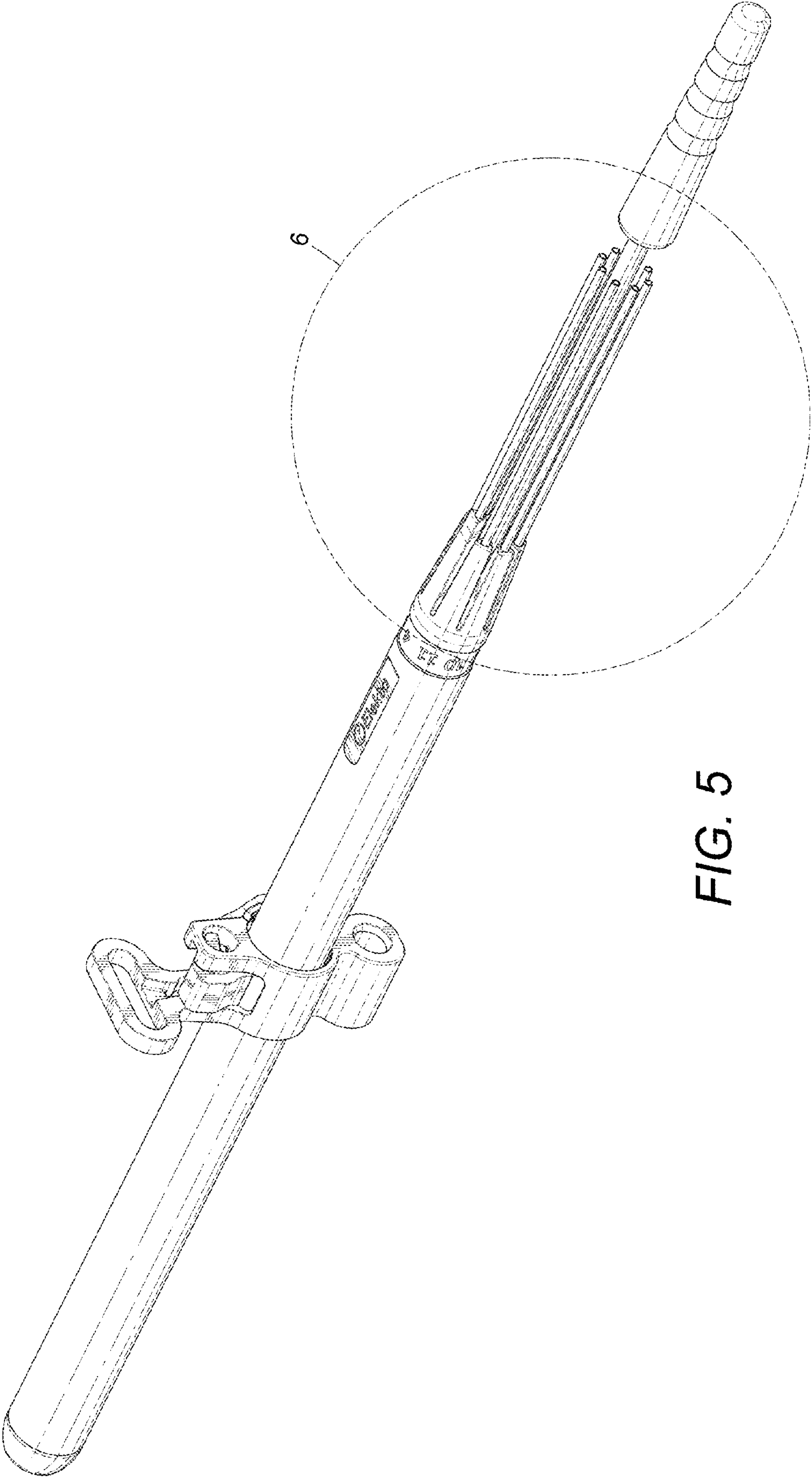


FIG. 5

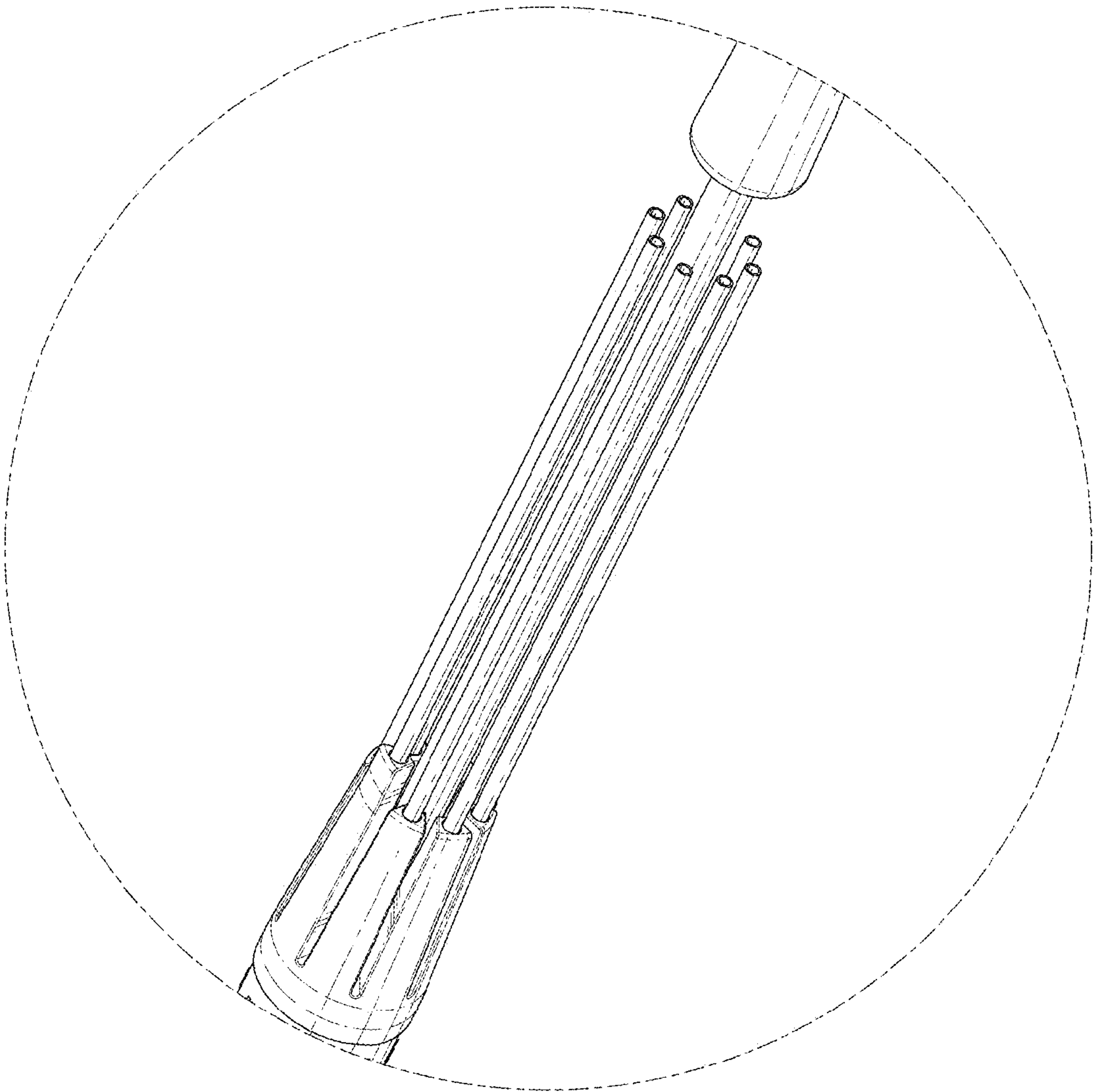


FIG. 6

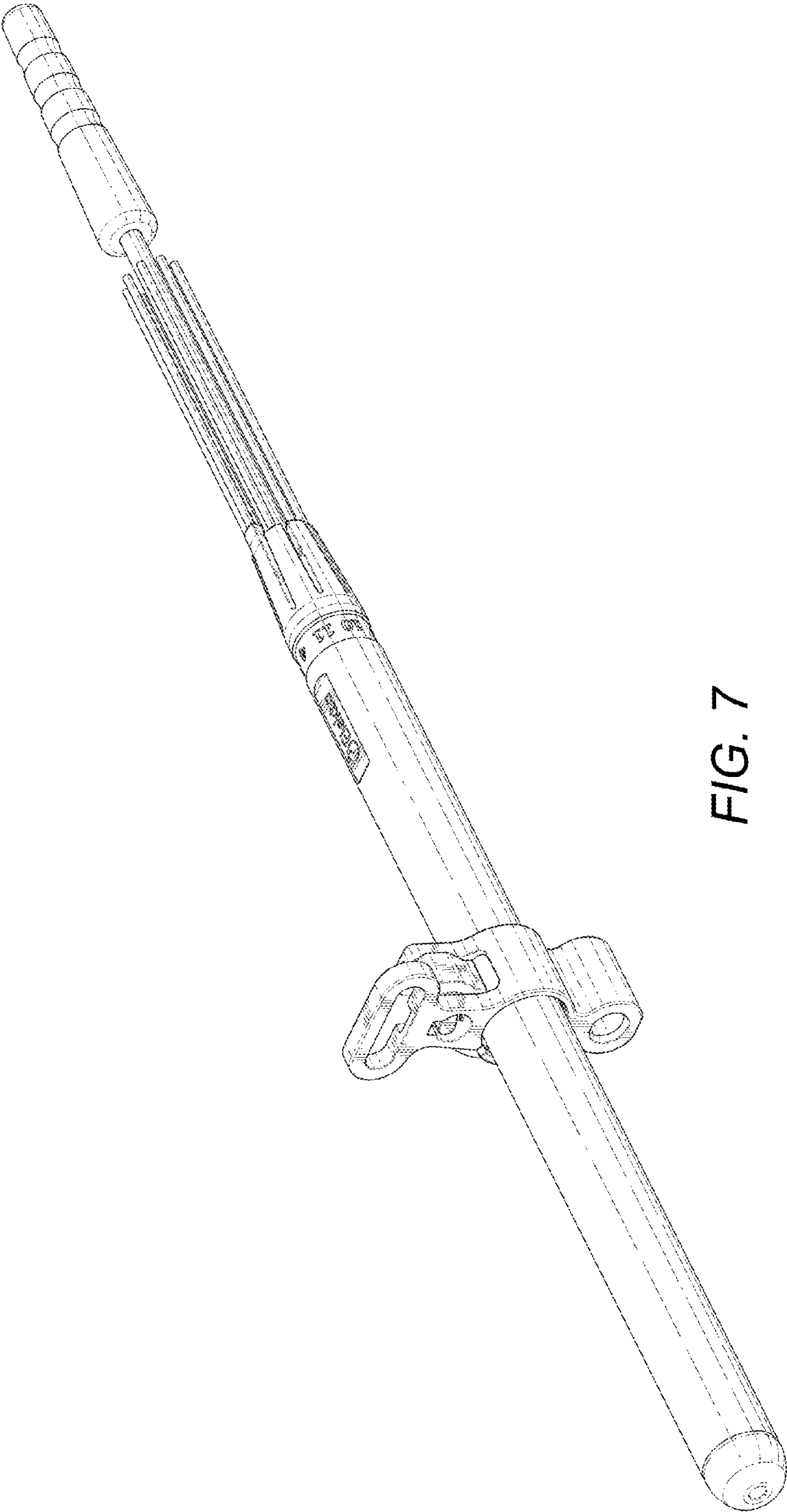


FIG. 7

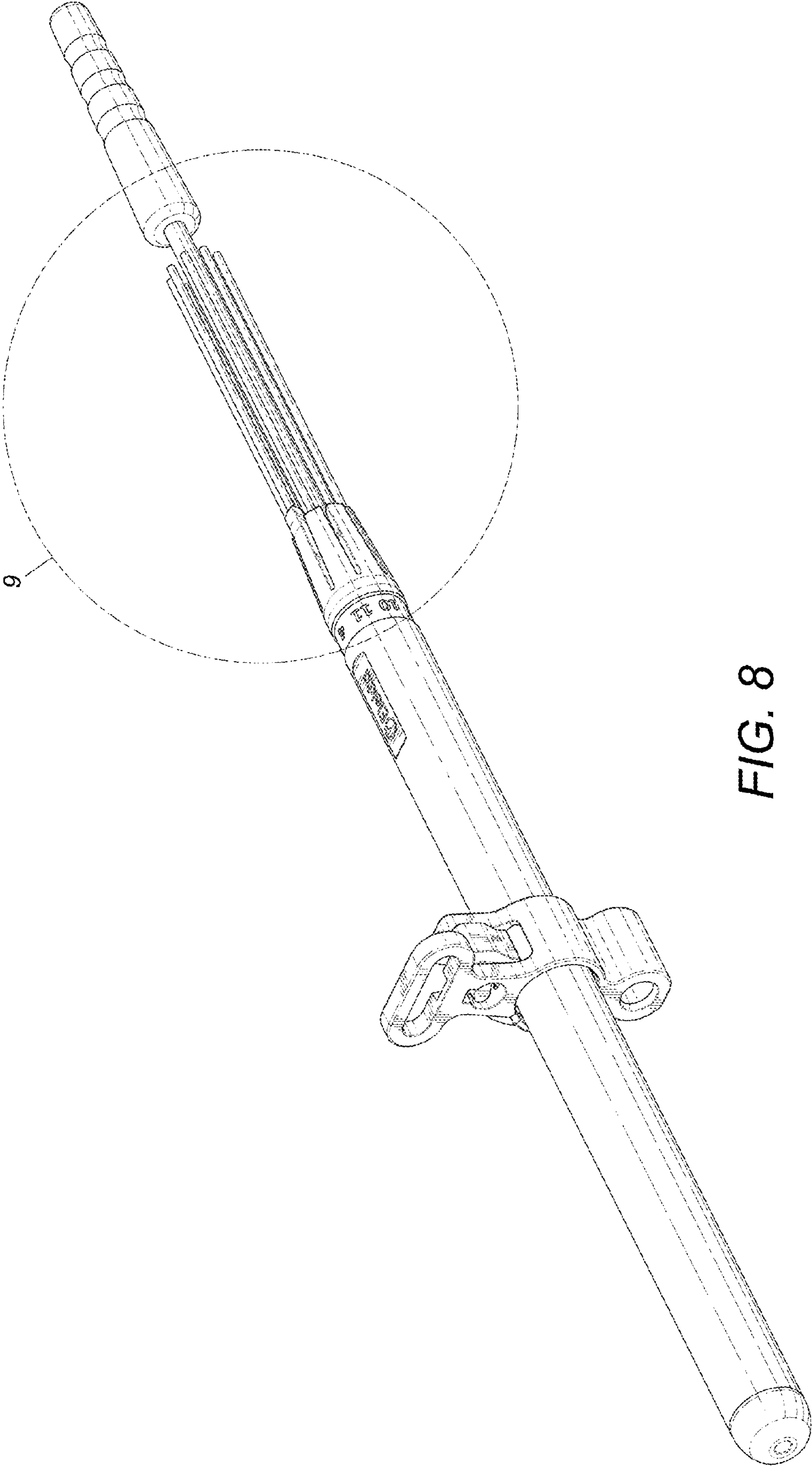


FIG. 8

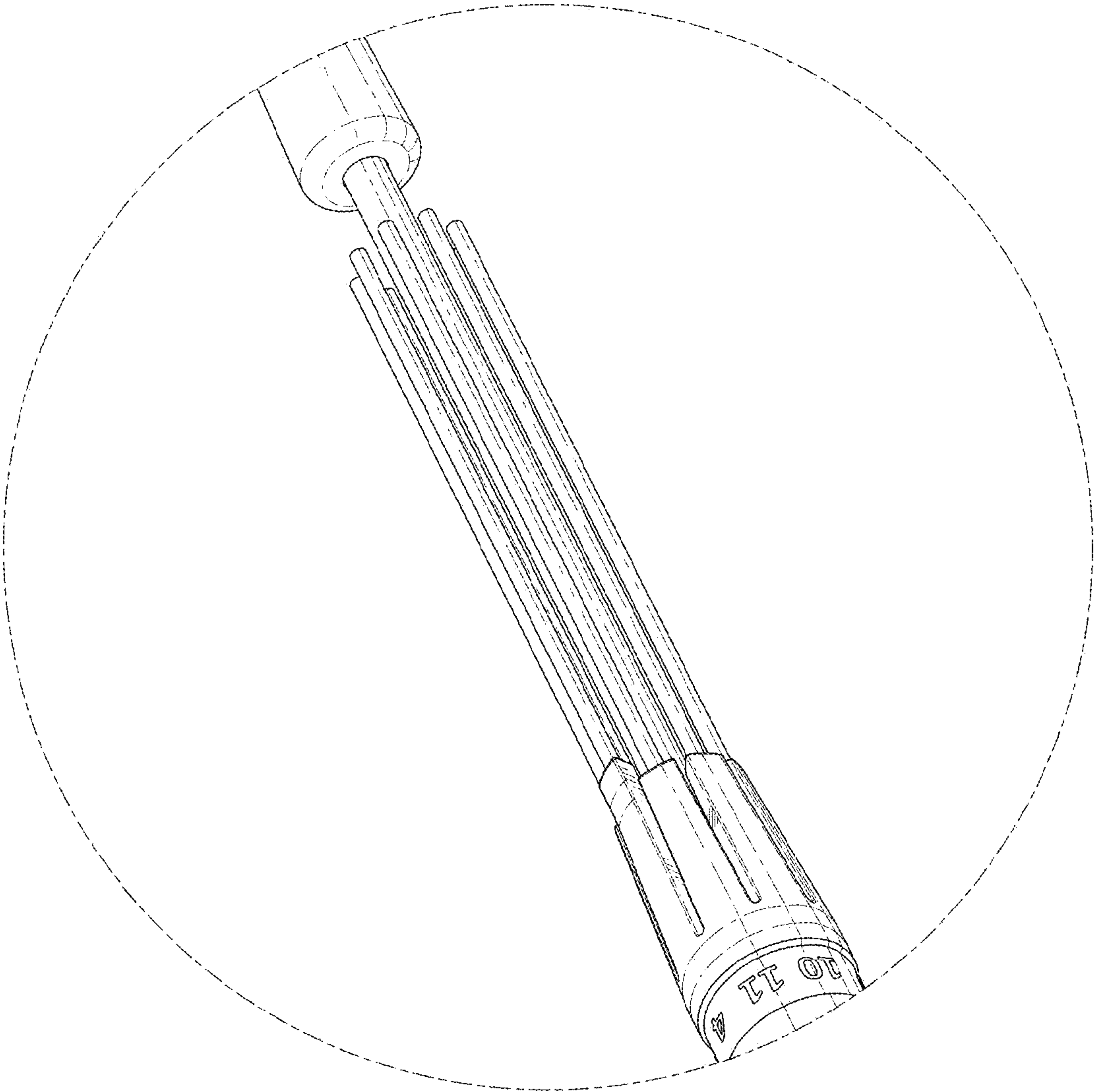


FIG. 9

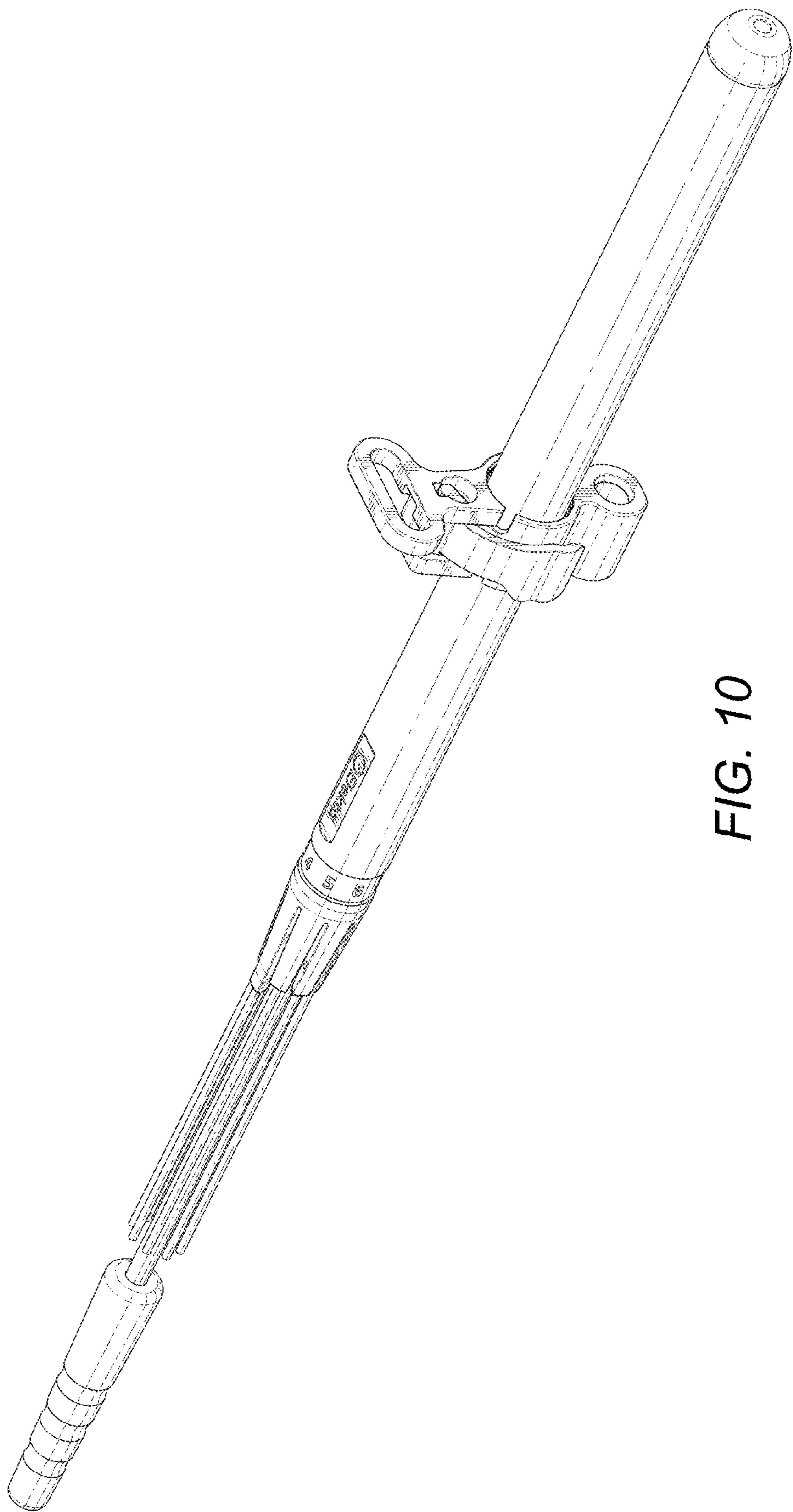


FIG. 10

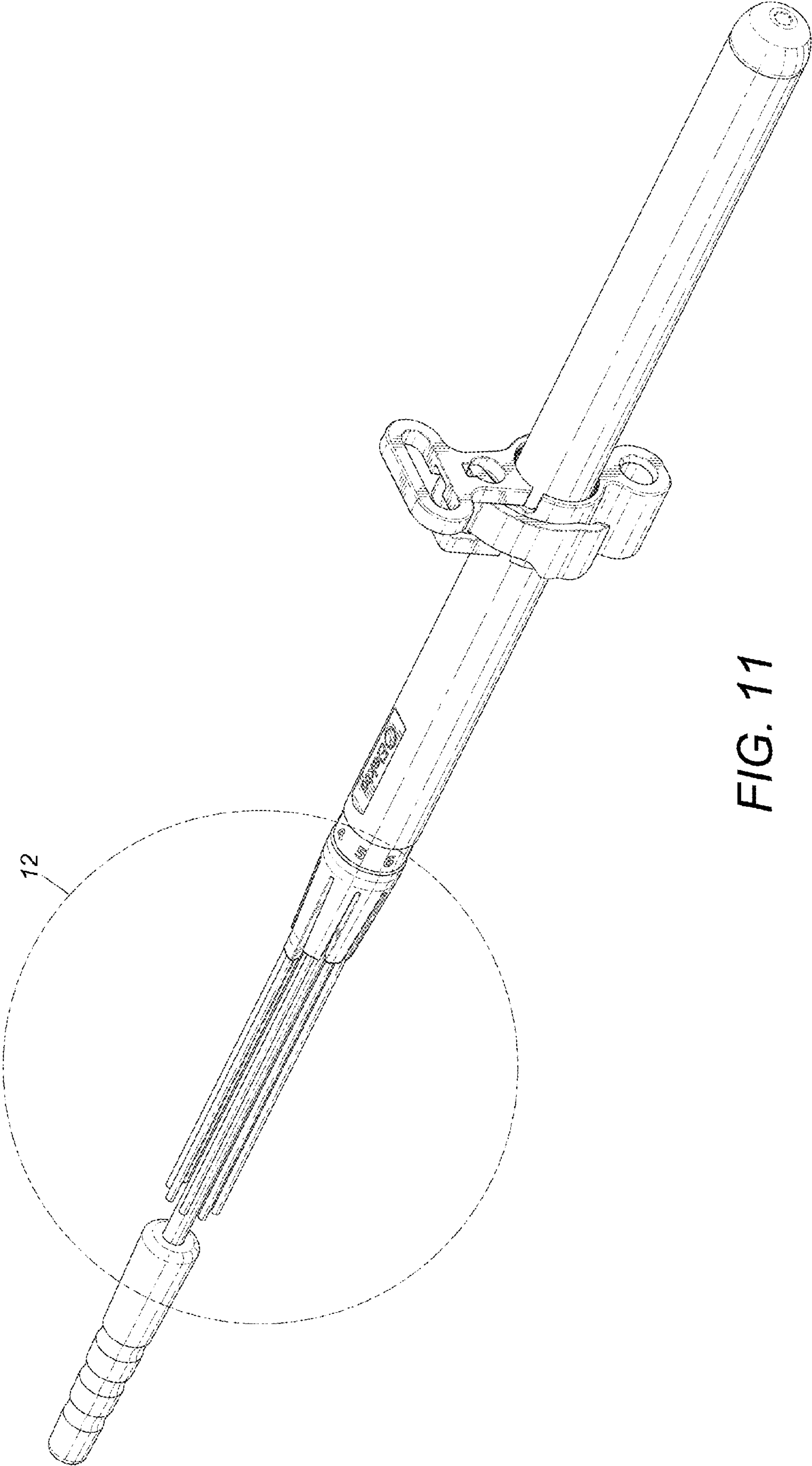


FIG. 11

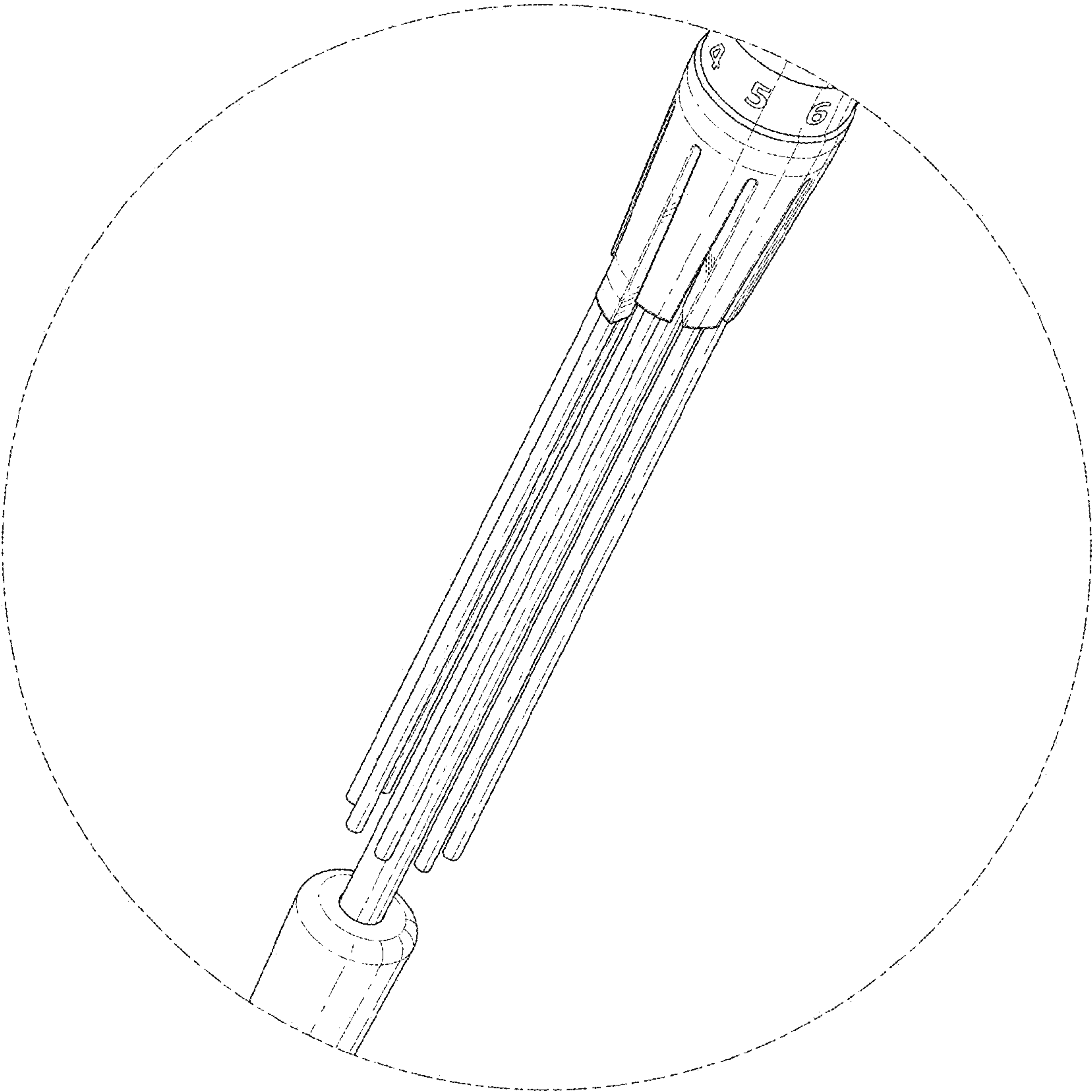


FIG. 12

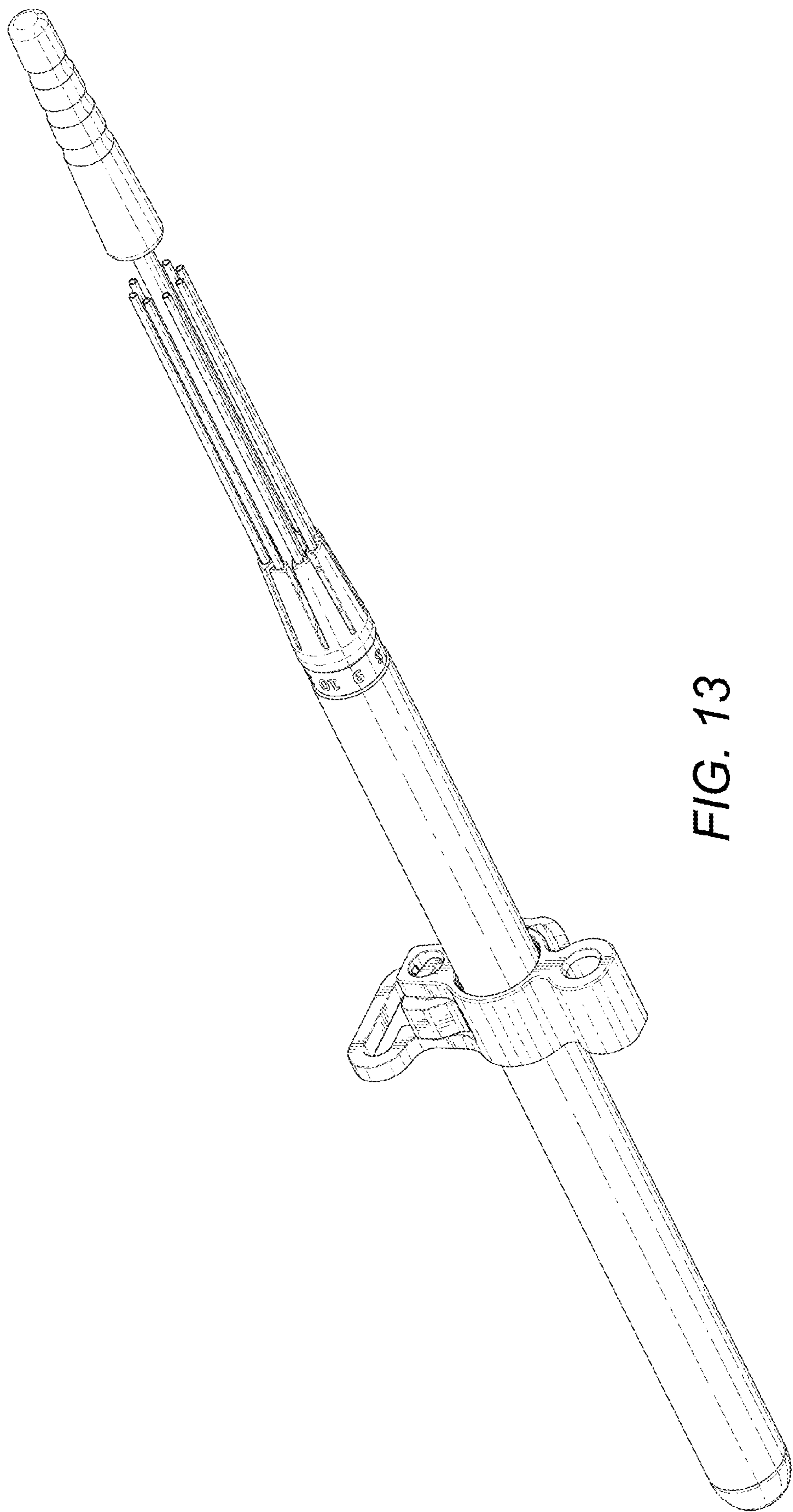


FIG. 13

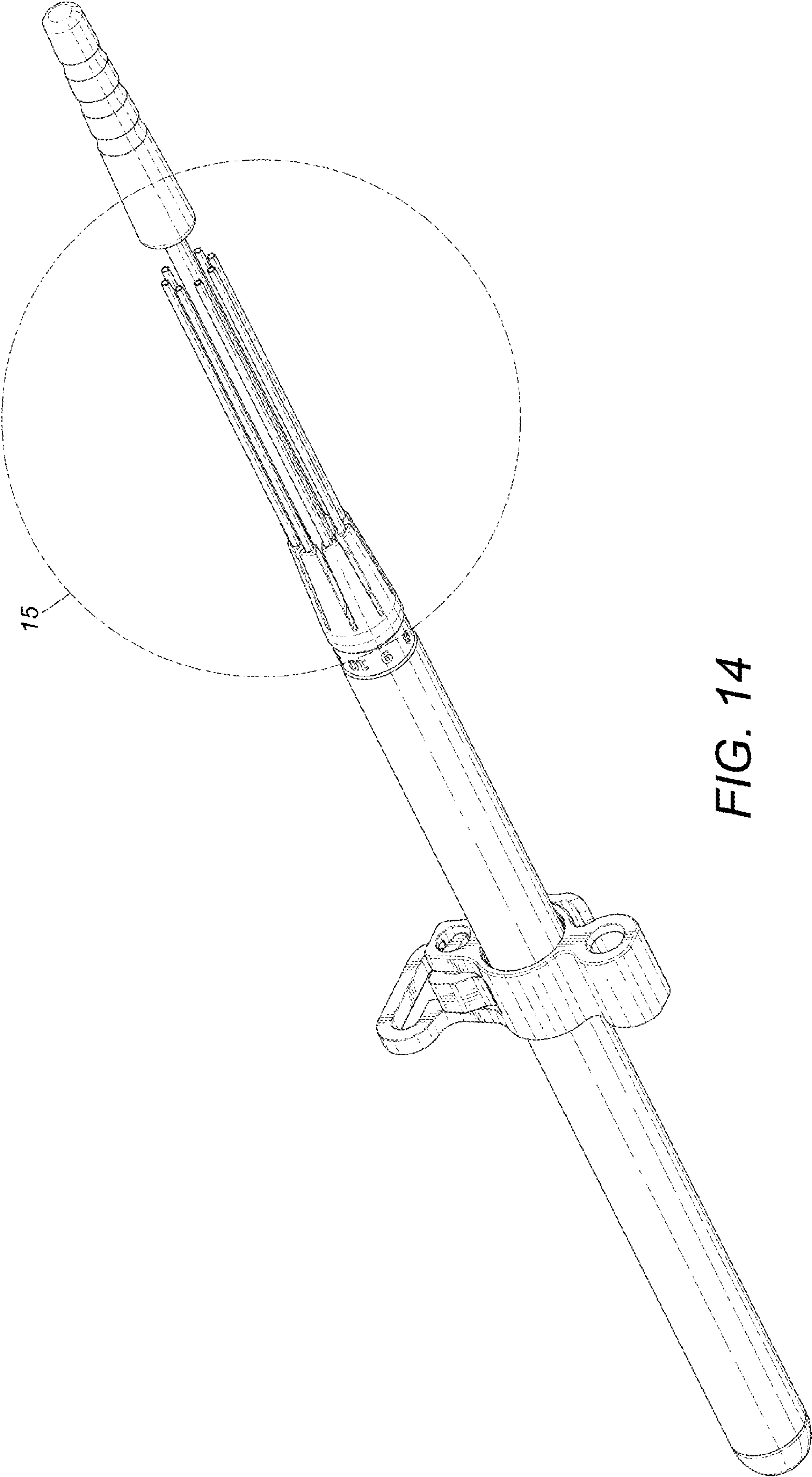


FIG. 14

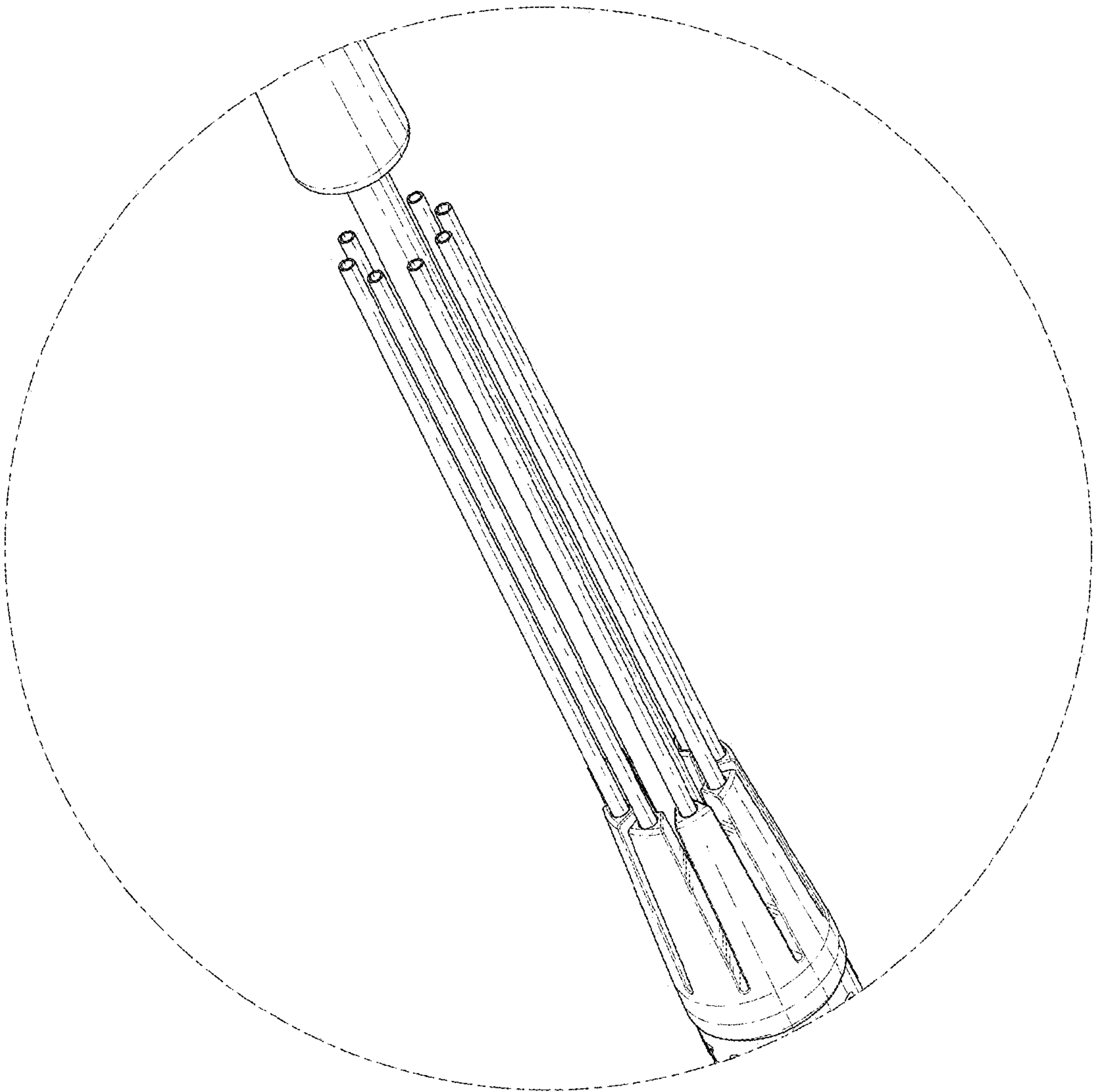


FIG. 15

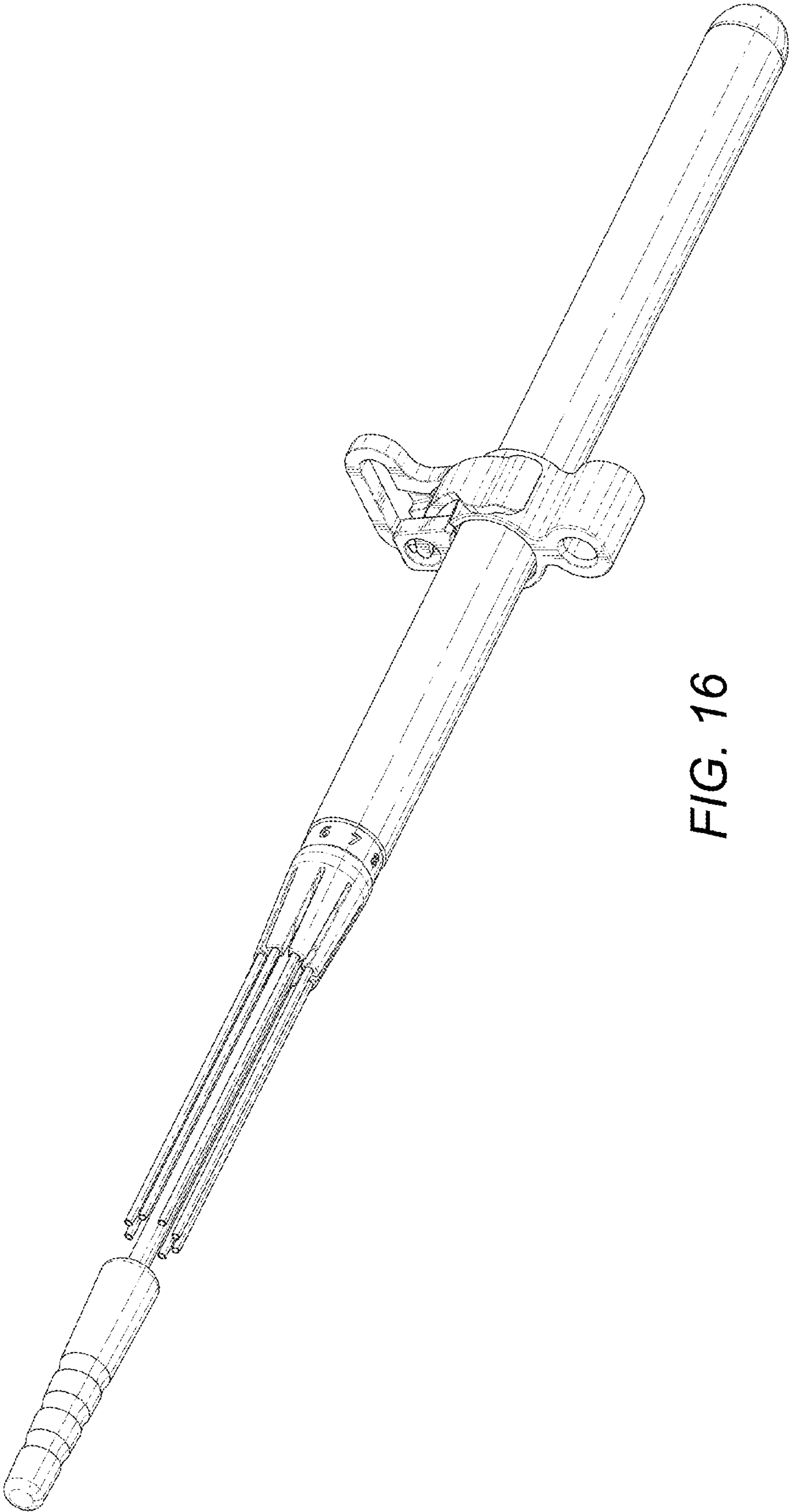


FIG. 16

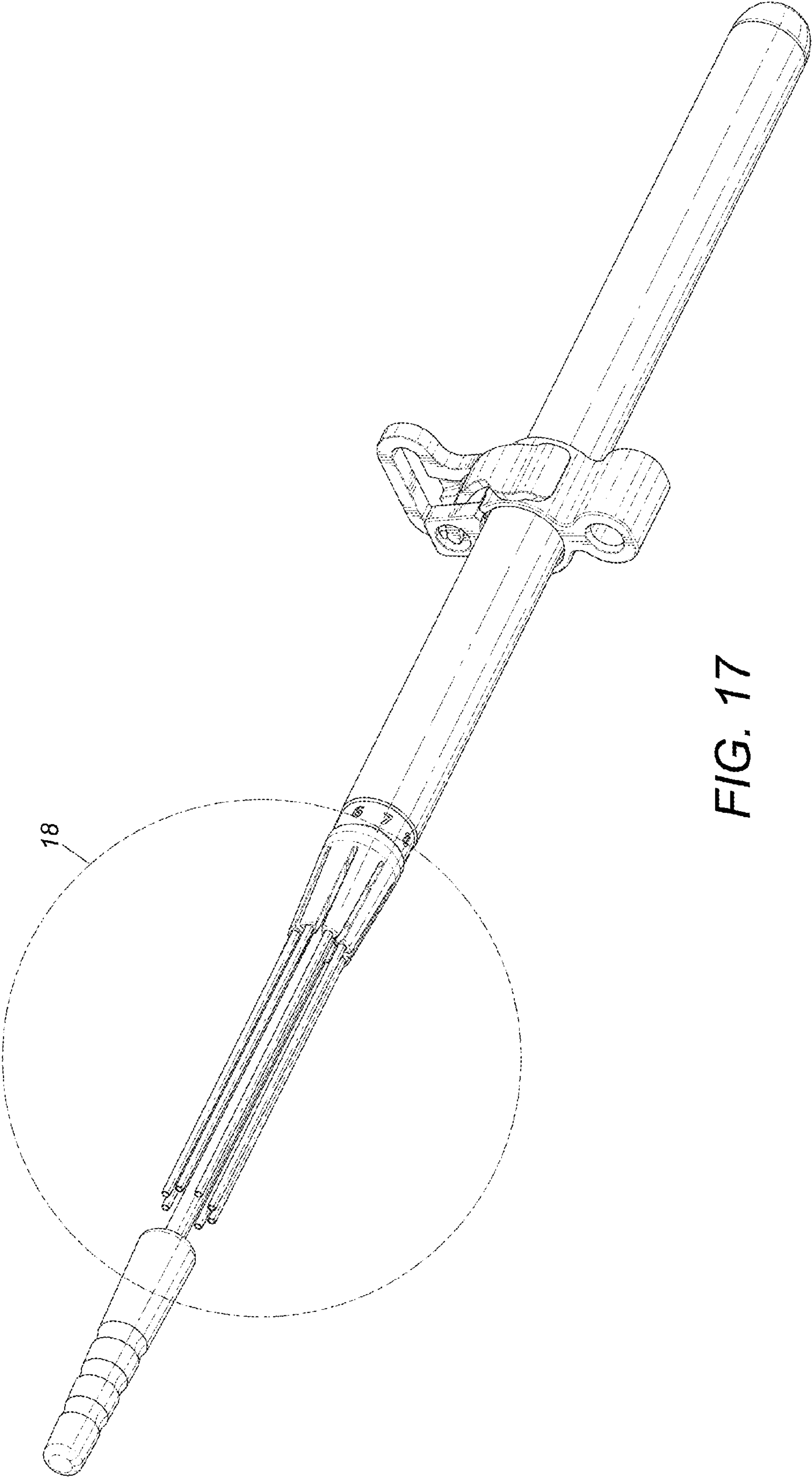


FIG. 17

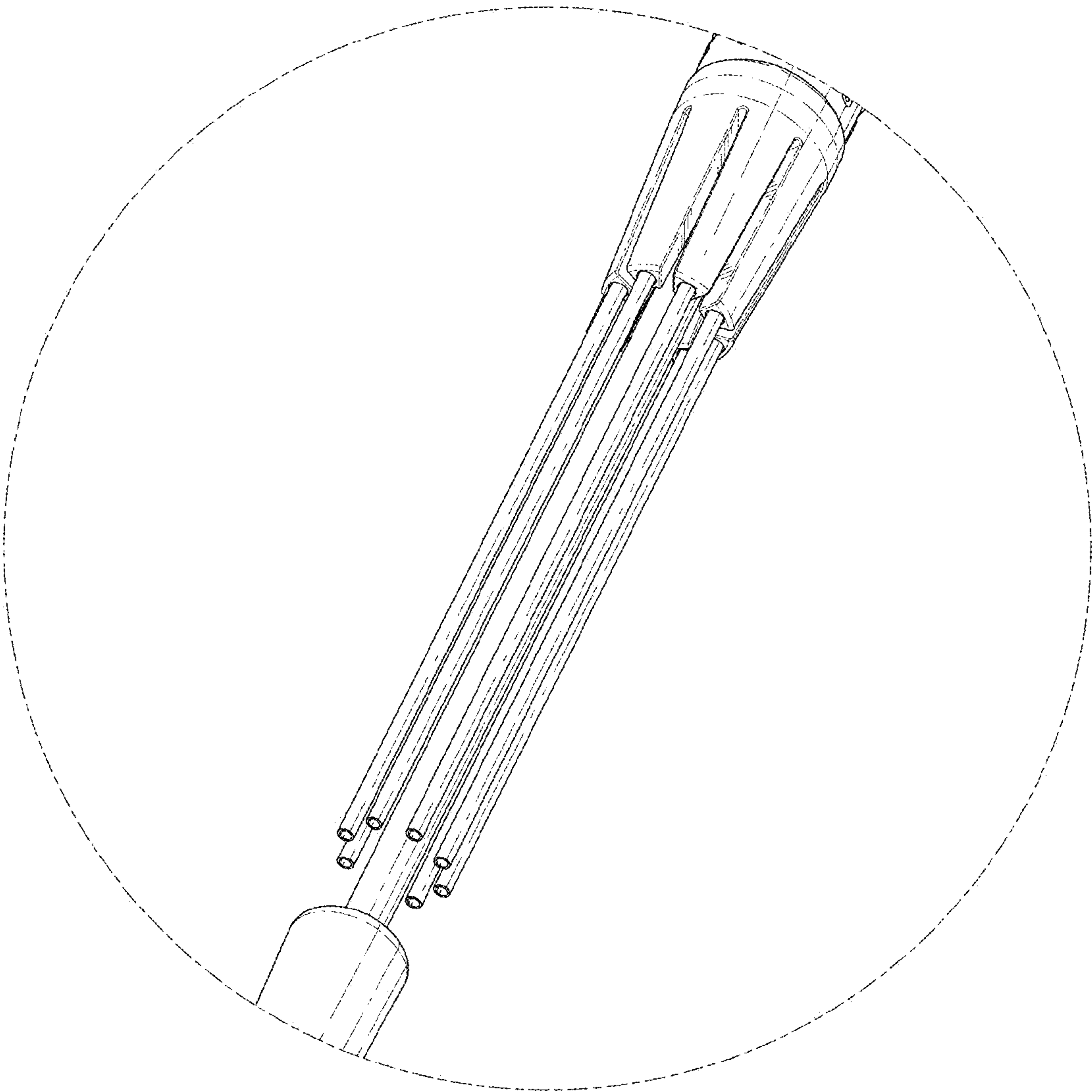


FIG. 18

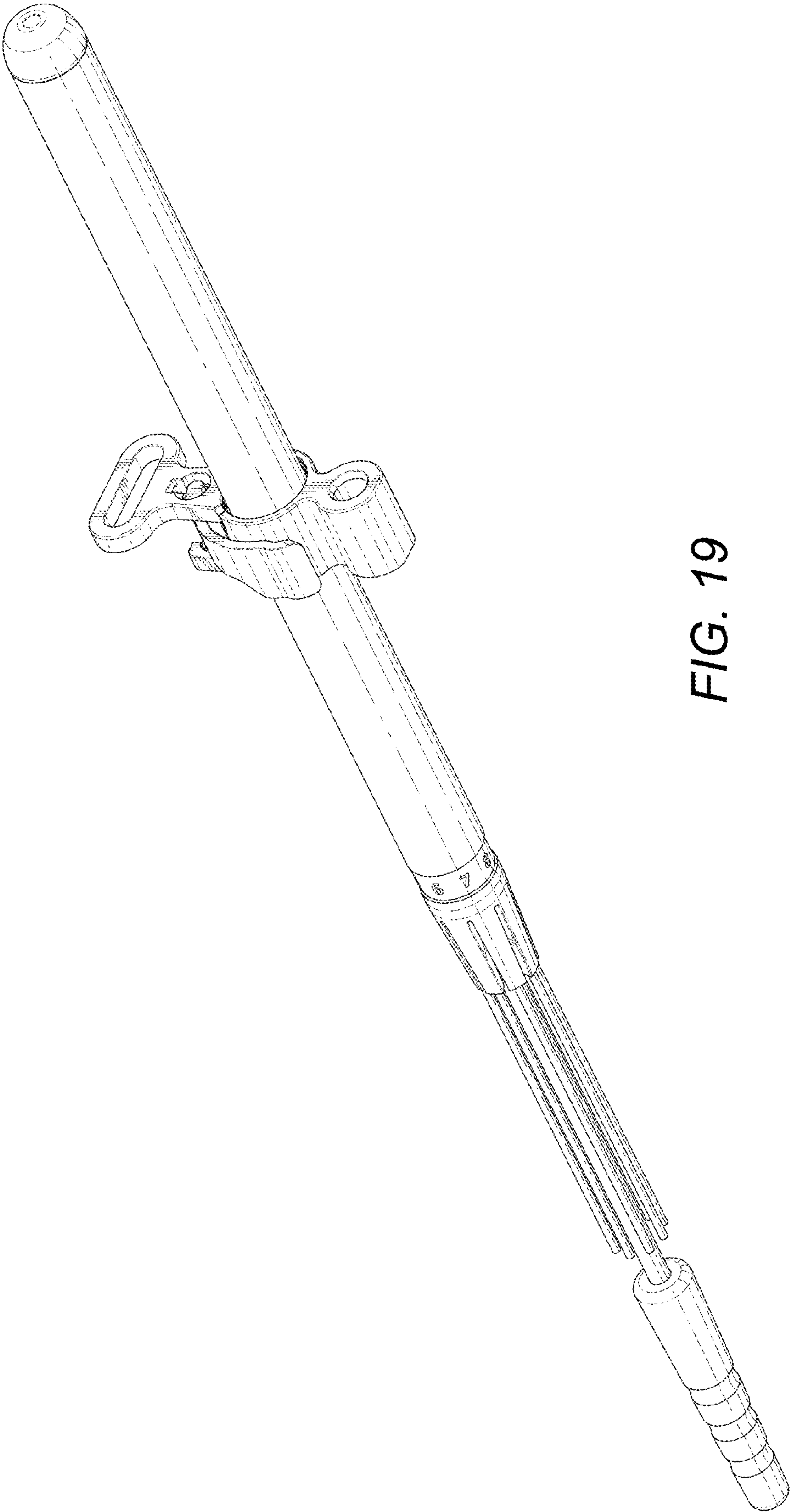


FIG. 19

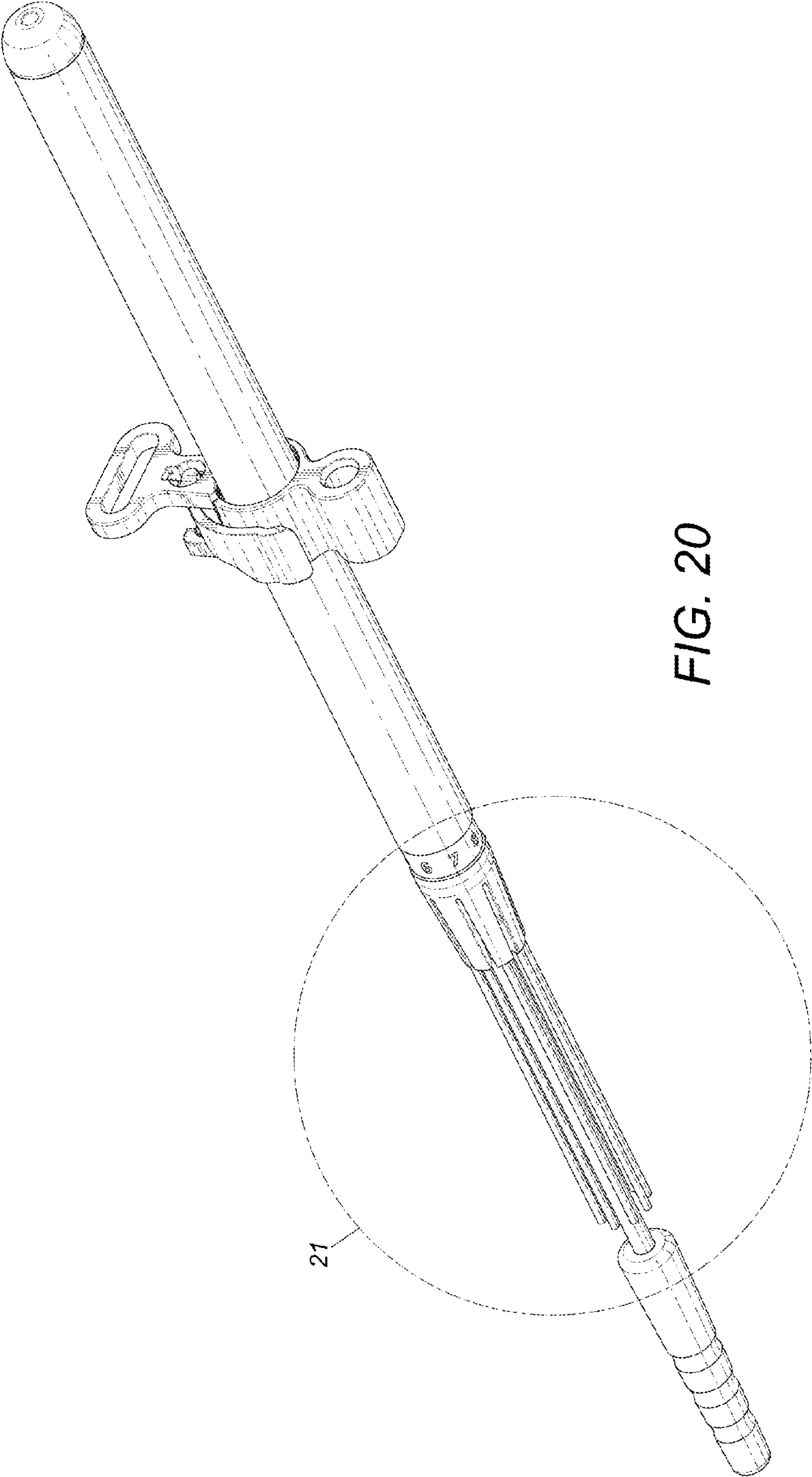


FIG. 20

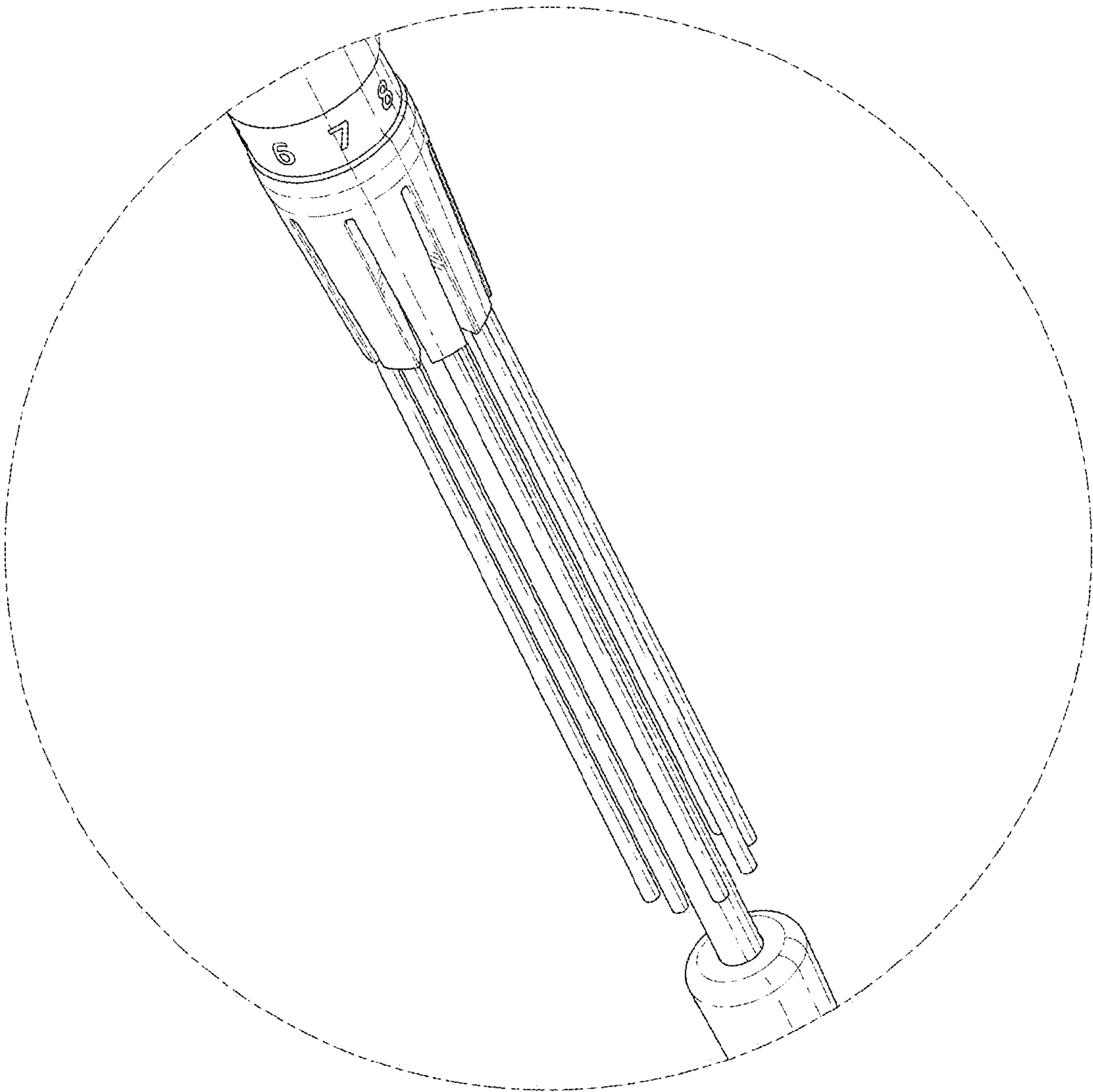


FIG. 21

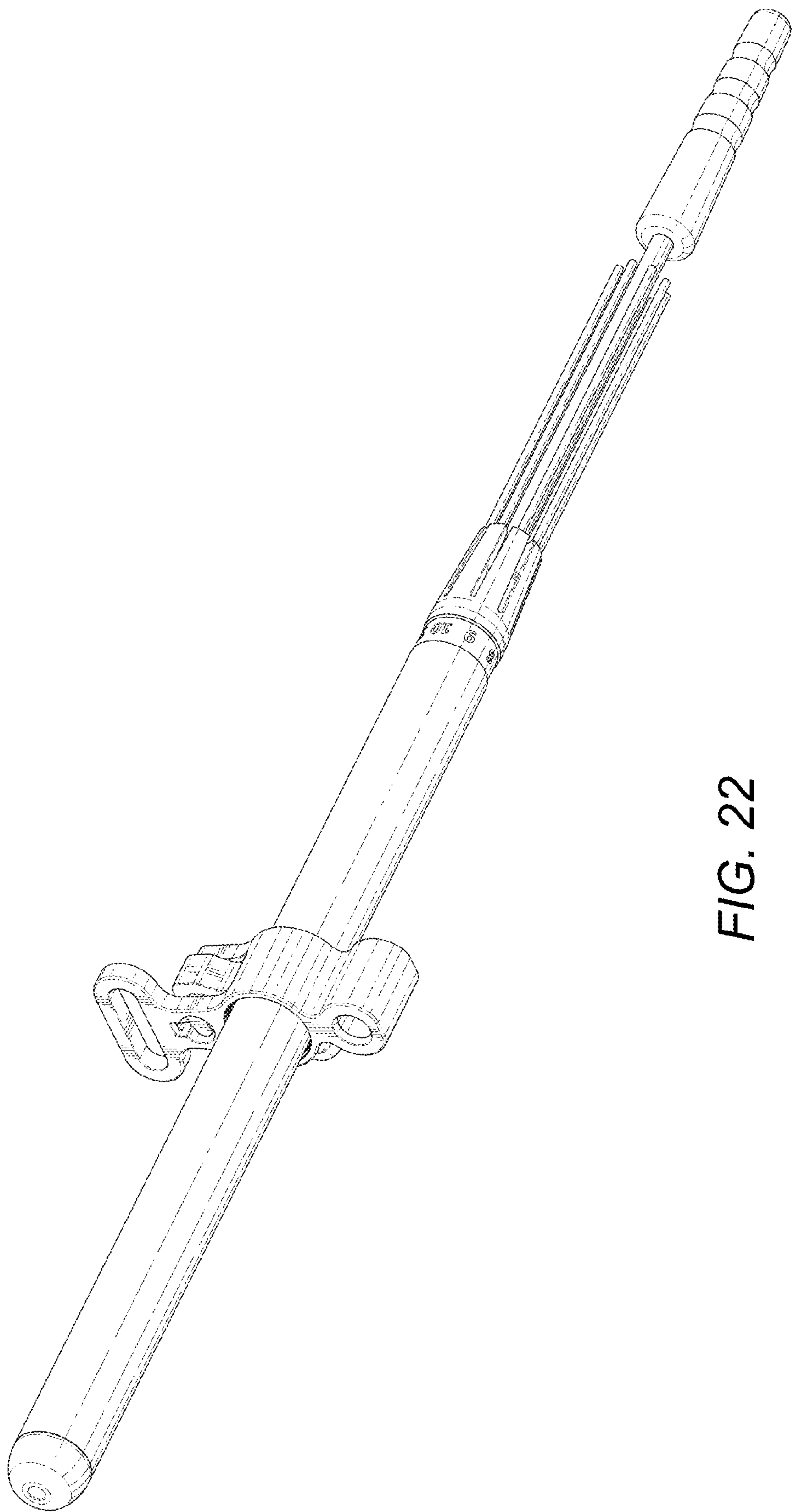


FIG. 22

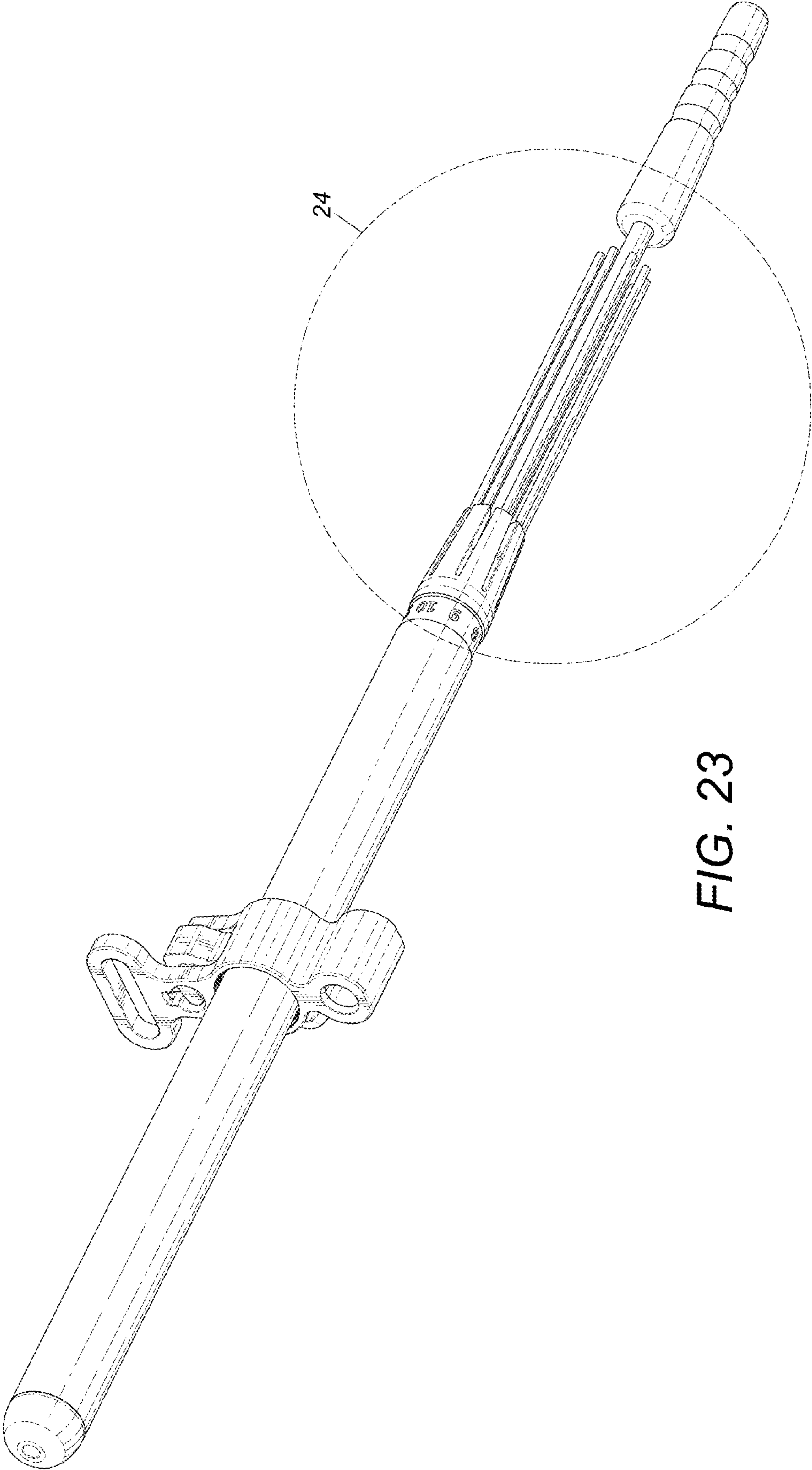


FIG. 23

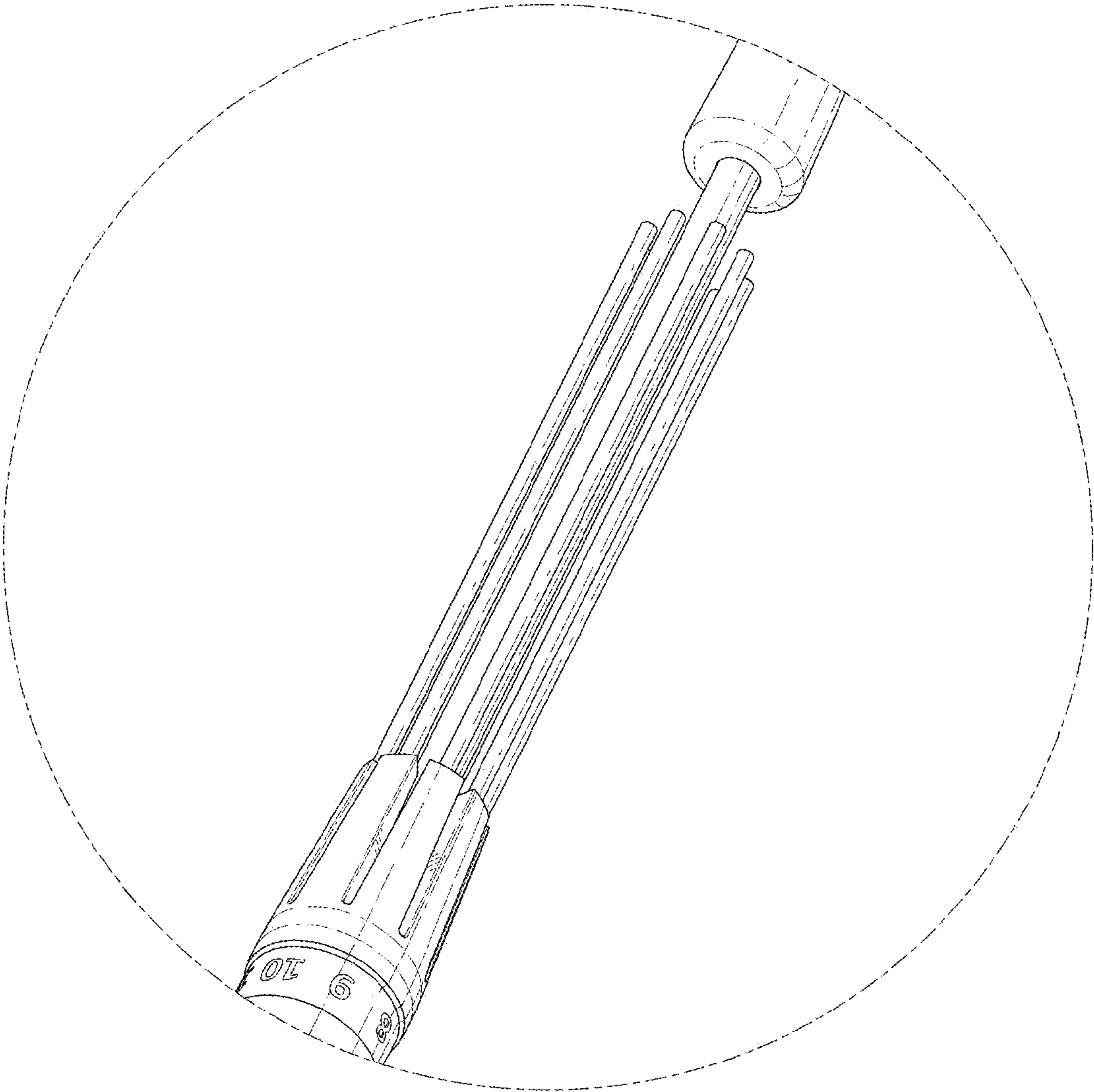


FIG. 24

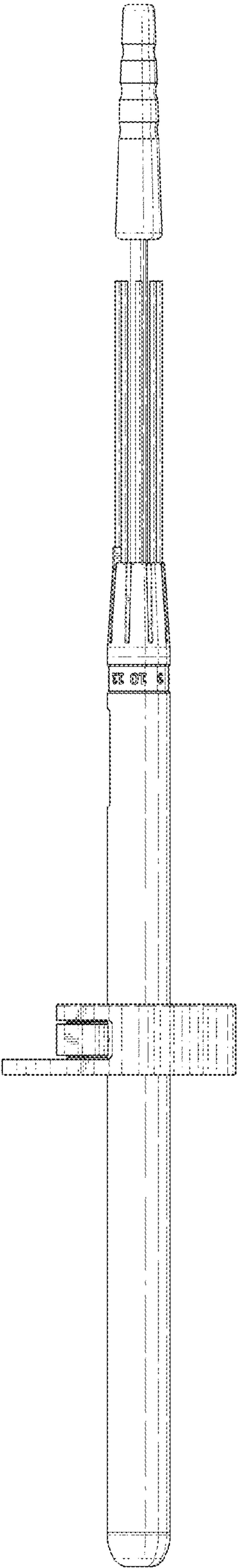


FIG. 25

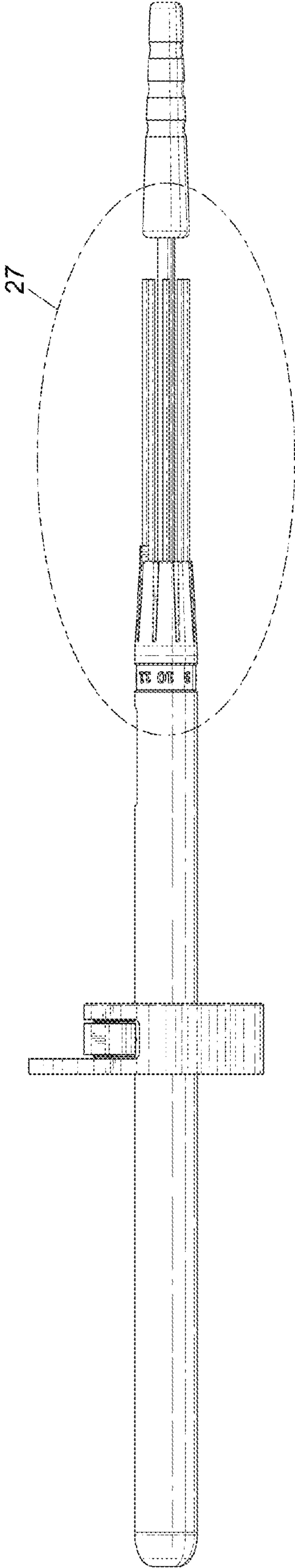


FIG. 26

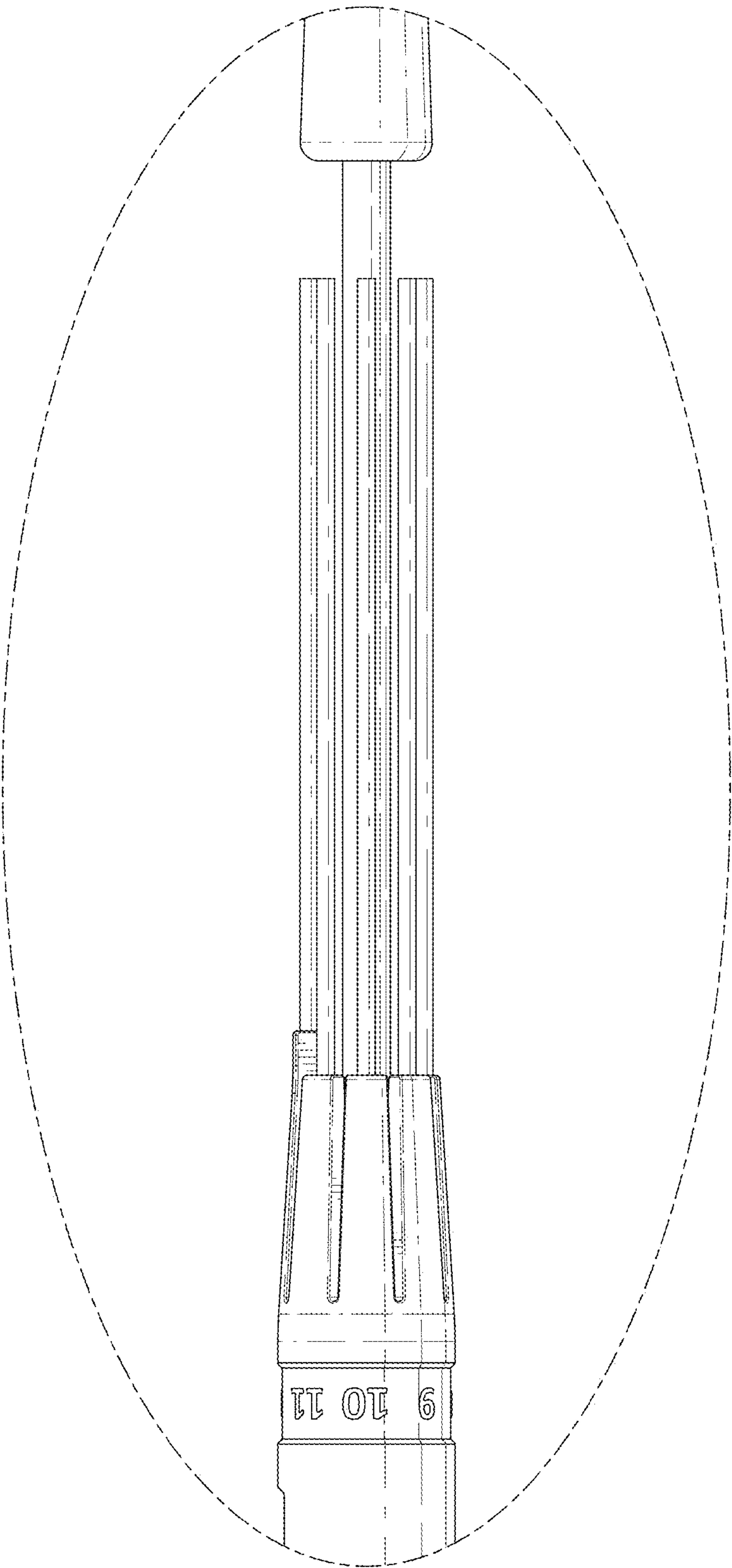


FIG. 27

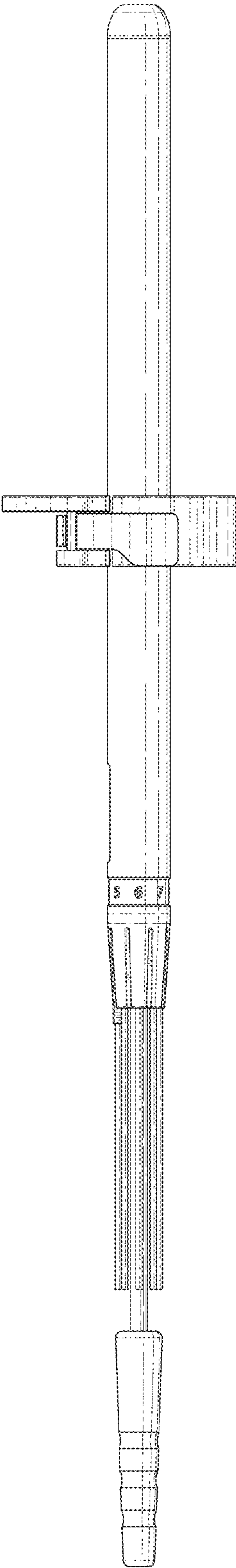


FIG. 28

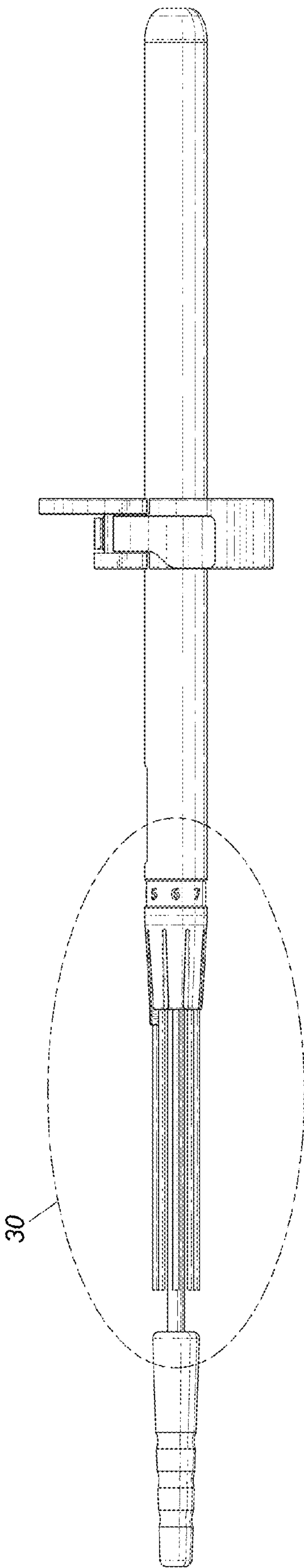


FIG. 29

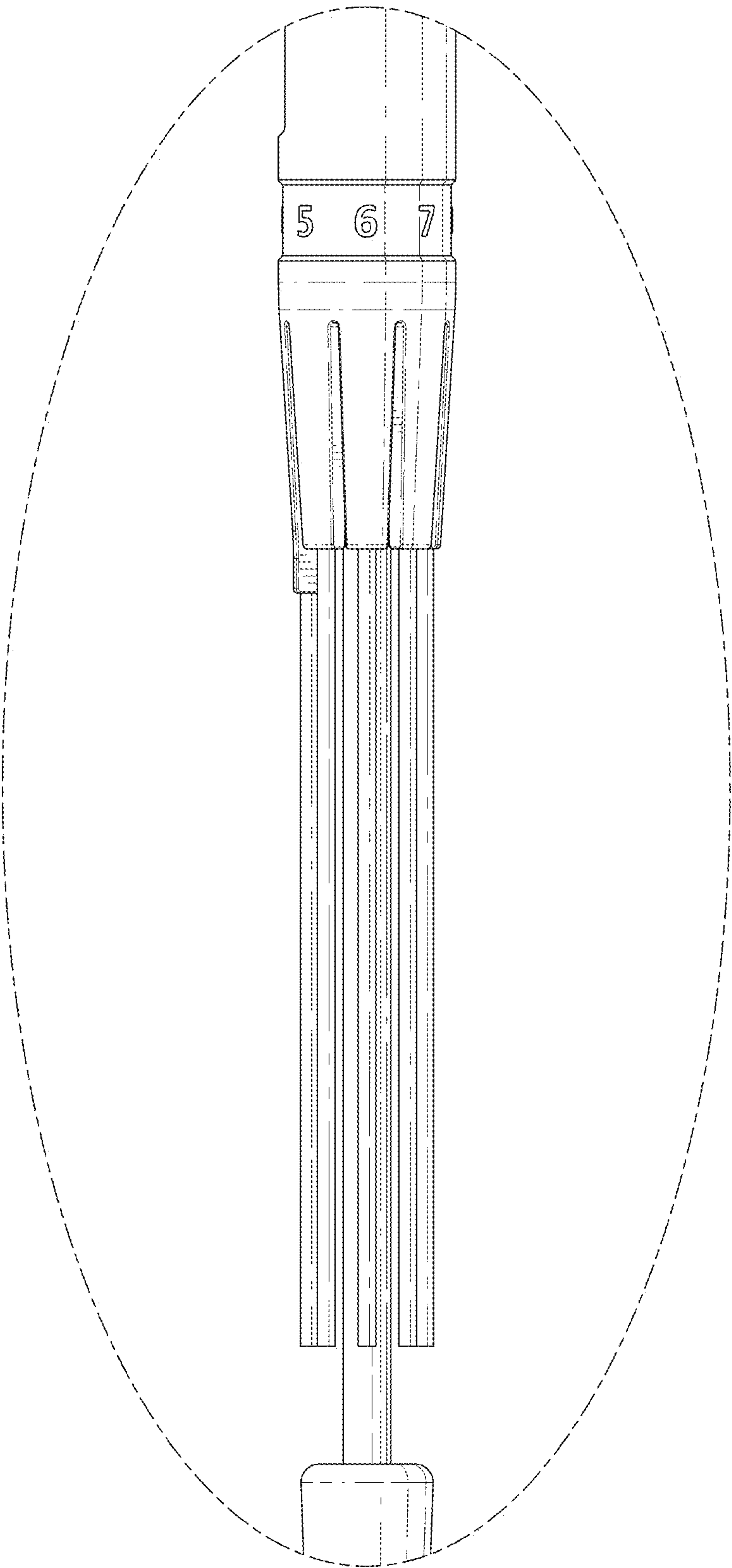


FIG. 30

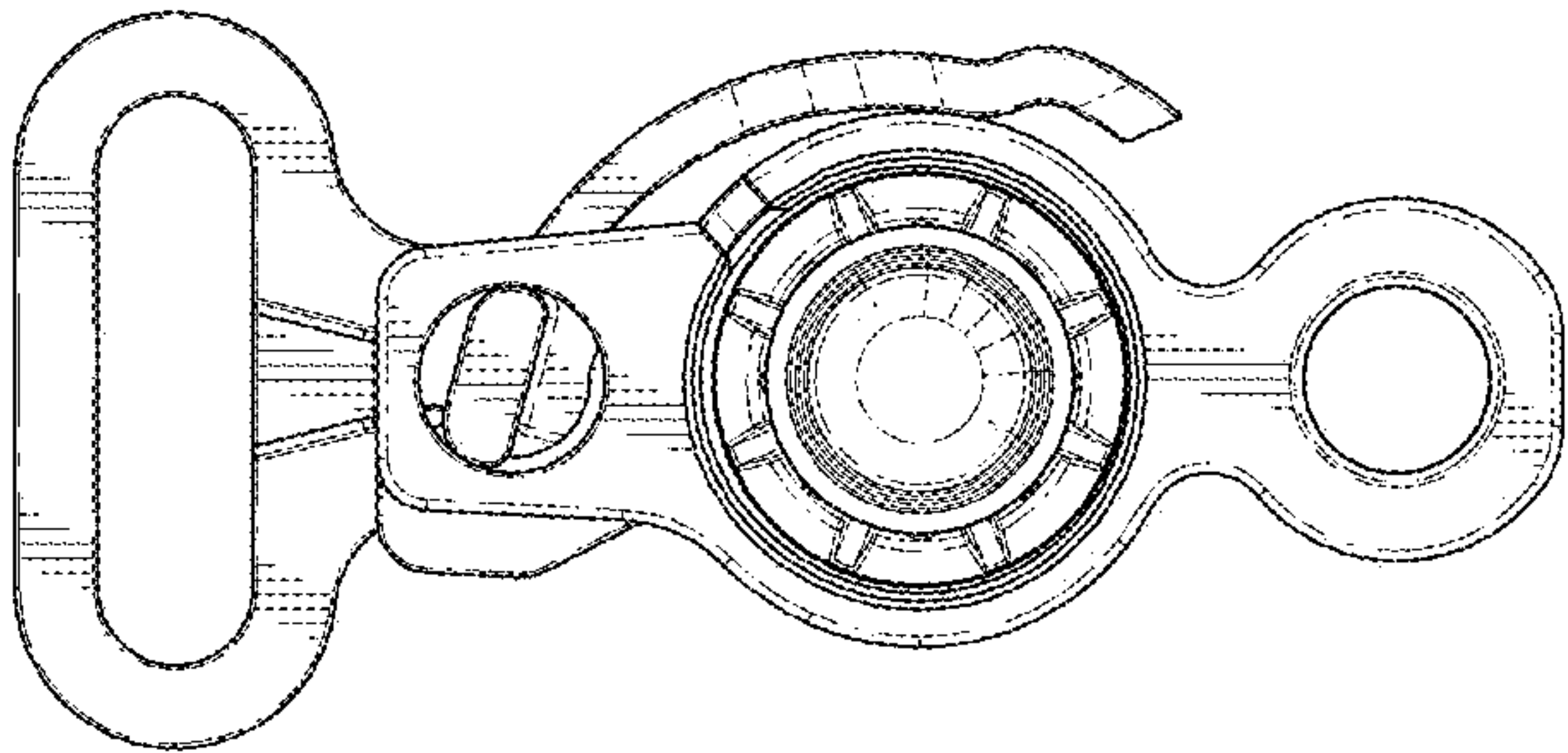


FIG. 32

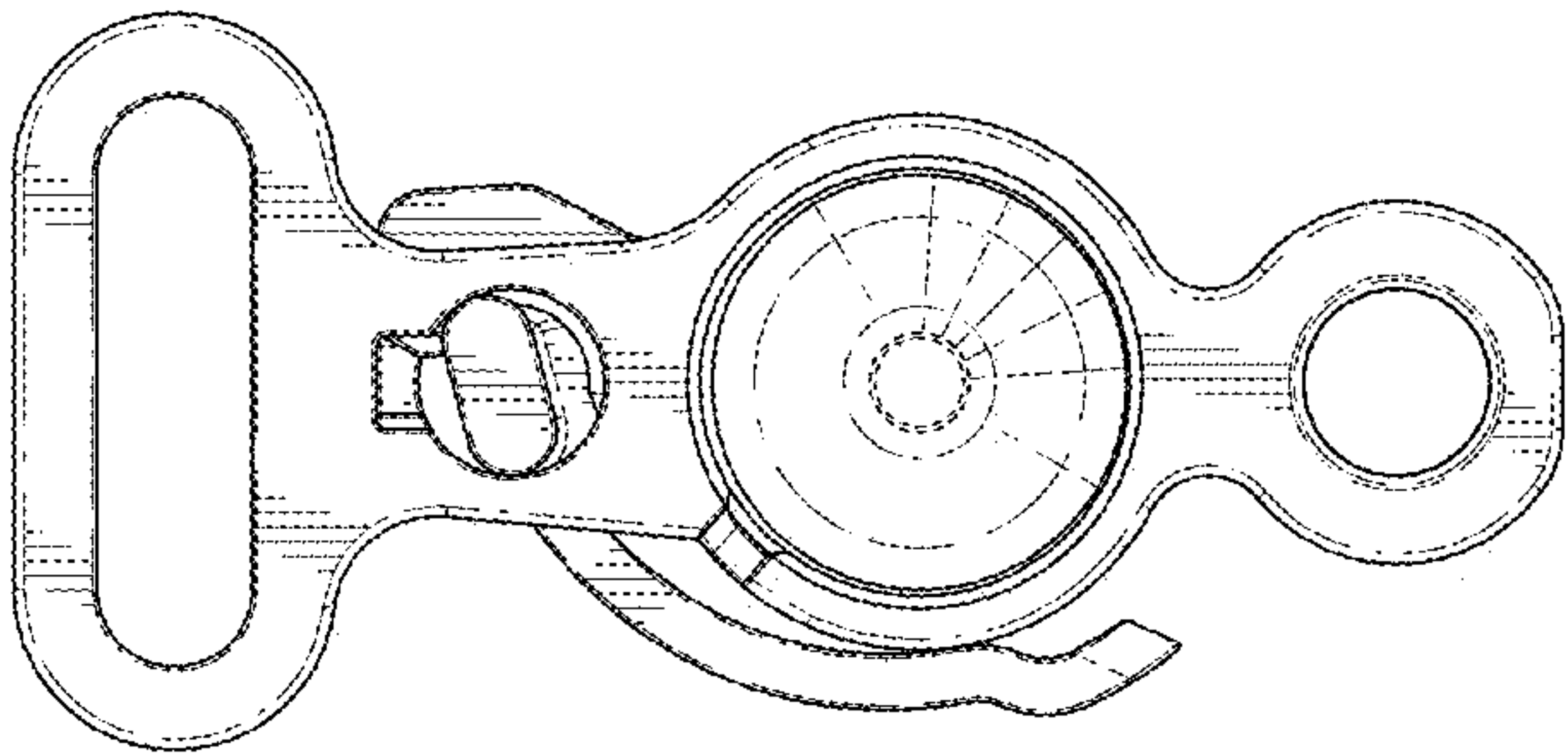


FIG. 31

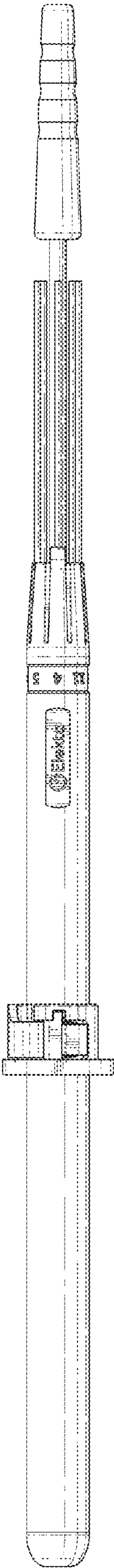


FIG. 33

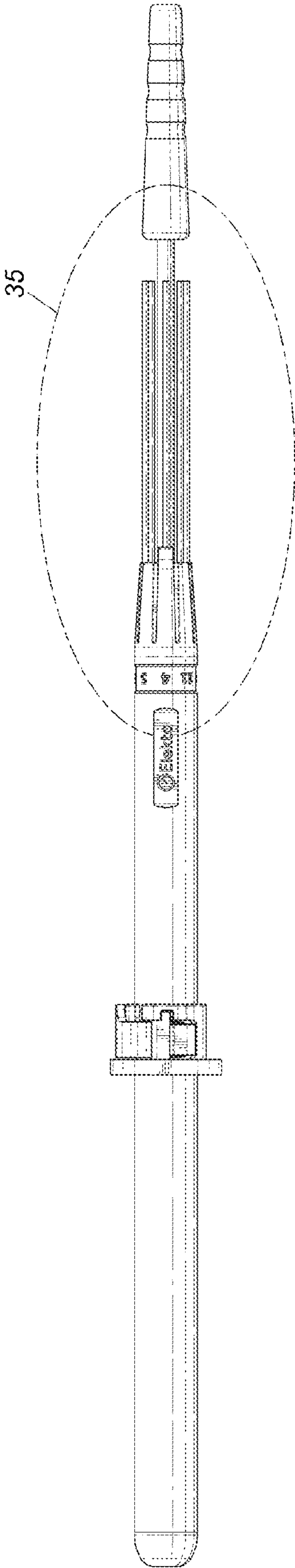


FIG. 34

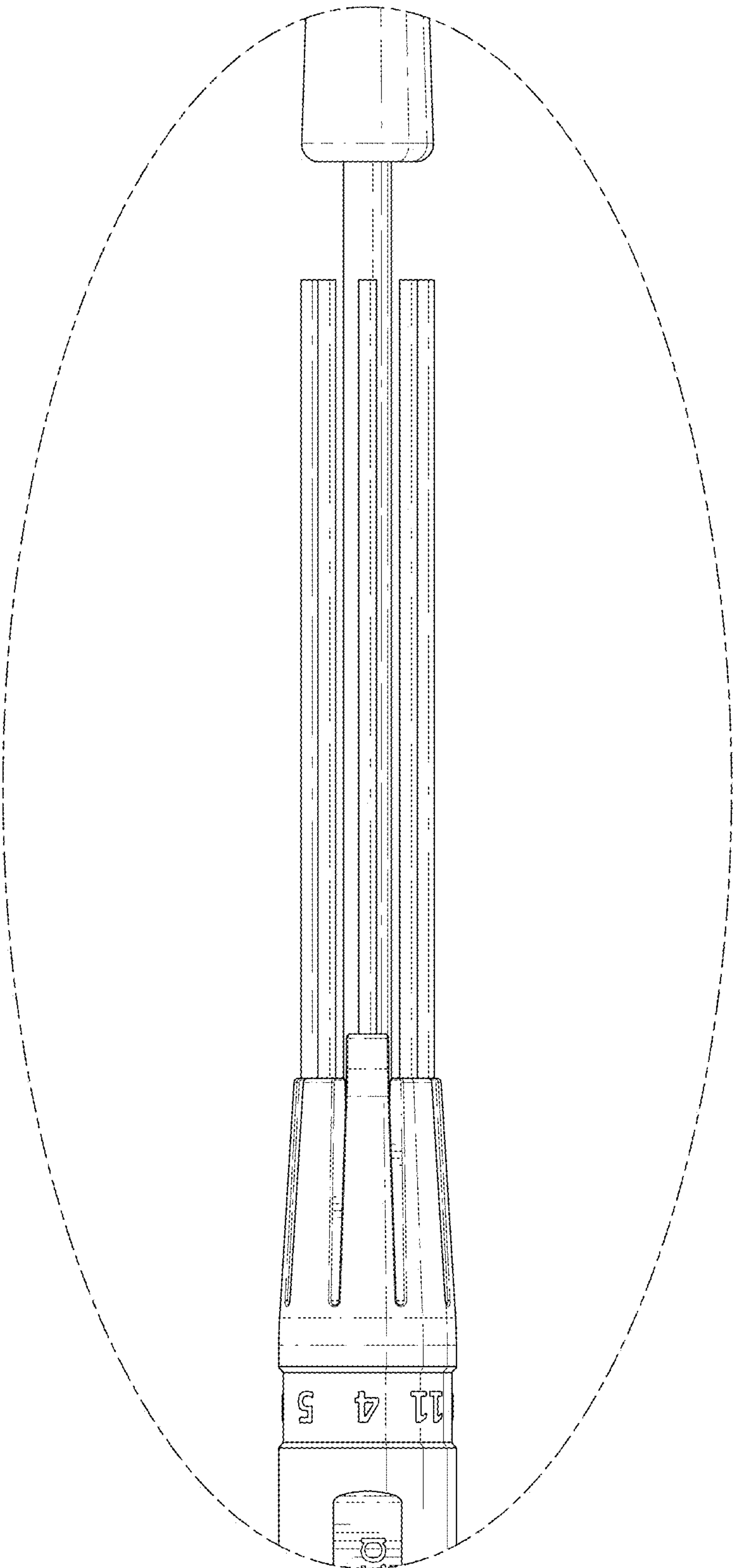


FIG. 35

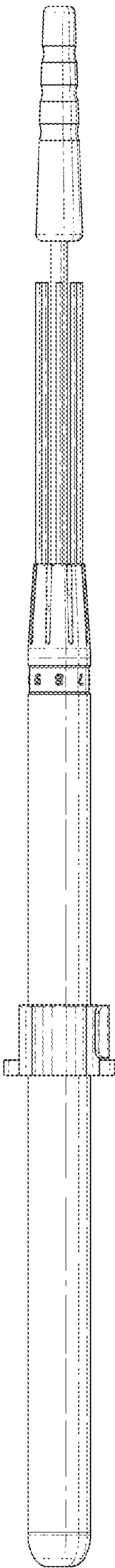


FIG. 36

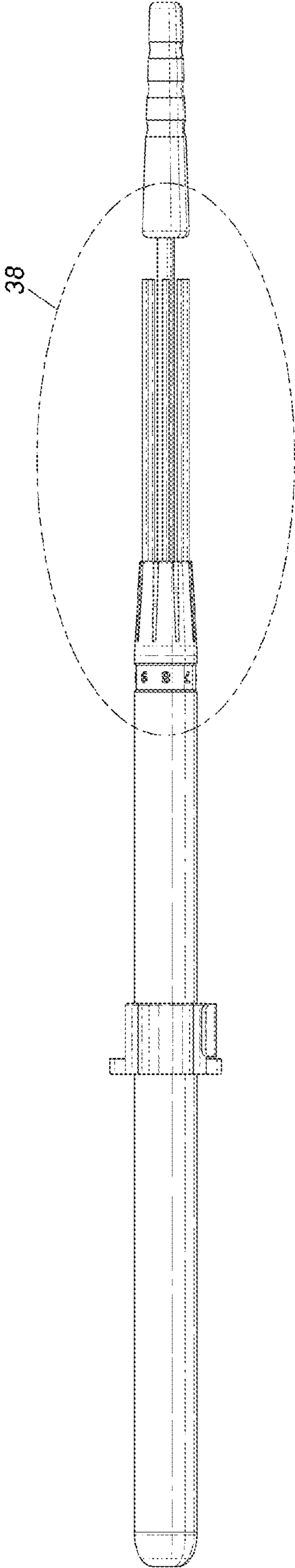


FIG. 37

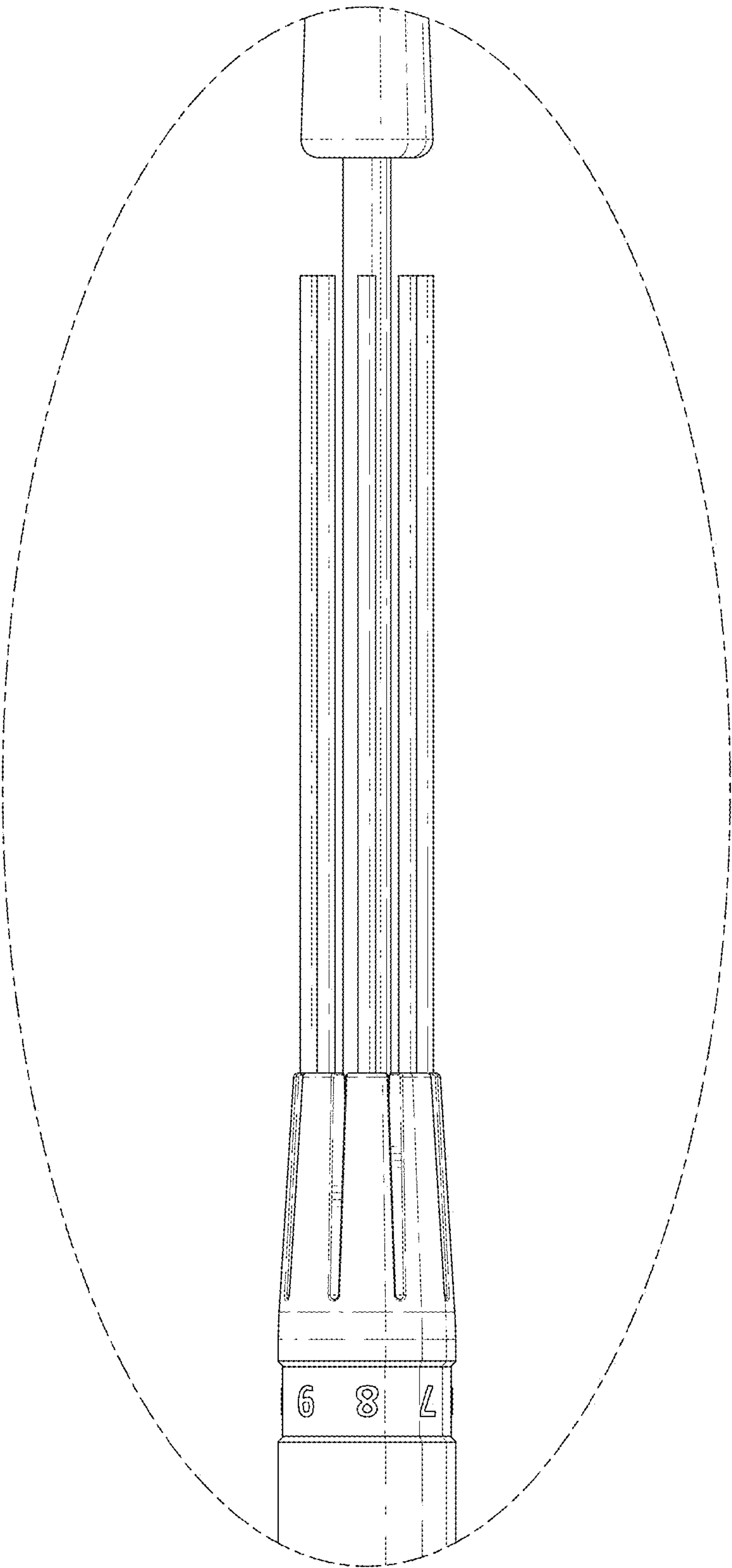


FIG. 38