

CLAIMS

WHAT IS CLAIMED IS:

1. A method of performing a transperineal biopsy procedure on a prostate of a patient using a transrectal ultrasound probe configured to provide imaging, the patient comprising a perineal access site leading to the prostate, the transrectal ultrasound probe including a shaft and a handle proximal to the shaft, the method comprising:

inserting an access needle into the perineal access site of the patient, the access needle including a hub at a proximal end of the access needle and a tubular shaft extending distally from the hub, the tubular shaft including a lumen sized to receive a biopsy needle therethrough;

coupling the access needle to one of a plurality of needle receiving ports of a displacement member of a transperineal biopsy guide such that a position of the access needle relative to the displacement member is retained, the transperineal biopsy guide comprising: a mount releasably coupled to the transrectal ultrasound probe; a guide member coupled to the mount; and the displacement member configured to slide relative to the guide member and including a vertically extending member including the plurality of needle receiving ports; and

inserting the biopsy needle through the access needle and into a first location of the prostate of the patient.

2. The method of claim 1, further comprising: contacting a distal end of a pair of guide rails of the guide member with the perineal access site of the patient.

3. The method of claim 1, further comprising injecting a substance into the patient via the biopsy needle.

4. The method of claim 1, further comprising taking a first biopsy of the first location of the prostate of the patient via the biopsy needle.

5. The method of claim 4, further comprising taking a second biopsy of a second location of the prostate of the patient via the biopsy needle, the second location being different than the first location.
6. The method of claim 5, wherein the access needle remains positioned within the perineal access site of the patient for the first biopsy and the second biopsy.
7. The method of claim 1, further comprising coupling the transperineal biopsy guide to the shaft of the transrectal ultrasound probe via a releasable fastener.
8. The method of claim 7, wherein the releasable fastener does not wrap around the handle of the transrectal ultrasound probe.
9. The method of claim 1, further comprising imaging the prostate of the patient with the transrectal ultrasound probe.
10. The method of claim 1, wherein coupling the access needle to one of the plurality of needle receiving ports of the displacement member of the transperineal biopsy guide comprises inserting a portion of the hub into one of the plurality of needle receiving ports.
11. The method of claim 1, wherein the access needle has a needle size of 15 gauge or 16 gauge.
12. The method of claim 1, wherein the biopsy needle has a needle size of 18 gauge.
13. A method of performing a transperineal biopsy procedure on a prostate of a patient using a transrectal ultrasound probe configured to provide imaging, the patient comprising a perineal access site leading to the prostate, the transrectal ultrasound probe including a shaft and a handle proximal to the shaft, the method comprising:

inserting an access needle into one of a plurality of needle receiving ports of a displacement member of a transperineal biopsy guide that is secured to the transrectal ultrasound probe, the access needle including a hub at a proximal end of the access needle and a tubular shaft extending distally from the hub, the tubular shaft including a lumen sized to receive a

biopsy needle therethrough, the transperineal biopsy guide comprising a mount configured to releasably couple to the transrectal ultrasound probe, a guide member extending from the mount, and the displacement member configured to slide relative to the guide member;

securing the access needle to the displacement member such that a position of the access needle relative to the displacement member is maintained;

imaging the prostate of the patient with the transrectal ultrasound probe;

inserting the access needle into the perineal access site of the patient; and

inserting the biopsy needle through the access needle and into the prostate of the patient.

14. The method of claim 13, further comprising: contacting a distal end of a pair of guide rails of the guide member with the perineal access site of the patient.

15. The method of claim 13, further comprising injecting a substance into the patient via the biopsy needle.

16. The method of claim 13, further comprising taking a first biopsy of a first location of the prostate of the patient via the biopsy needle.

17. The method of claim 16, further comprising taking a second biopsy of a second location of the prostate of the patient via the biopsy needle, the second location being different than the first location.

18. The method of claim 17, wherein the access needle remains positioned within the perineal access site of the patient for the first biopsy and the second biopsy.

19. The method of claim 13, further comprising coupling the transperineal biopsy guide to the shaft of the transrectal ultrasound probe via a releasable fastener.

20. The method of claim 19, wherein the releasable fastener does not wrap around the handle of the transrectal ultrasound probe.

21. The method of claim 13, wherein imaging the prostate of the patient with the transrectal ultrasound probe is performed in a sagittal imaging plane.
22. The method of claim 13, wherein securing the access needle to the displacement member comprises inserting a portion of the hub into one of the plurality of needle receiving ports.
23. The method of claim 13, wherein the access needle has a needle size of 15 gauge or 16 gauge.
24. The method of claim 13, wherein the biopsy needle has a needle size of 18 gauge.

ABSTRACT

A method of performing a transperineal biopsy procedure including the steps of: inserting an access needle into one of a plurality of needle receiving ports of a displacement member of a transperineal biopsy guide that is secured to the transrectal ultrasound probe; securing the access needle to the displacement member such that a position of the access needle relative to the displacement member is maintained; imaging the prostate of the patient with the transrectal ultrasound probe; inserting the access needle into the perineal access site of the patient; and inserting the biopsy needle through the access needle and into the prostate of the patient.

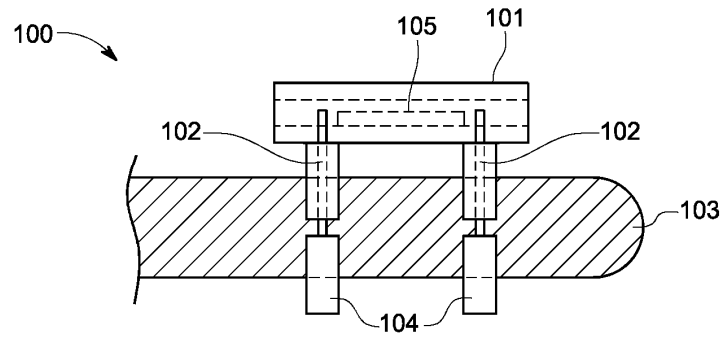


FIG. 1

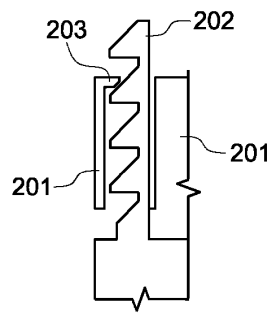


FIG. 2A

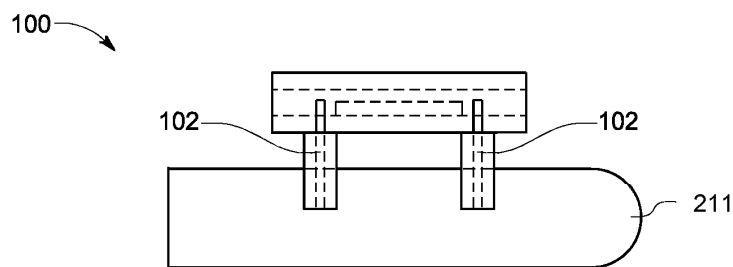


FIG. 2B

CORBIN_CLINICAL-002322

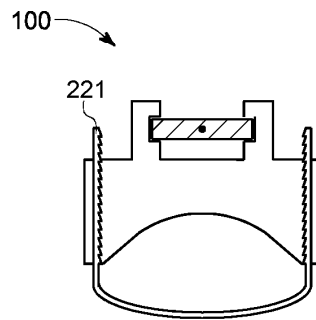


FIG. 2C

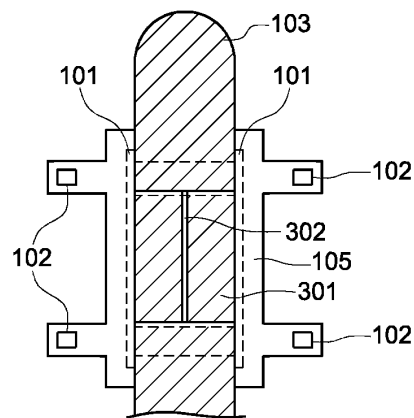


FIG. 3

CORBIN_CLINICAL-002323

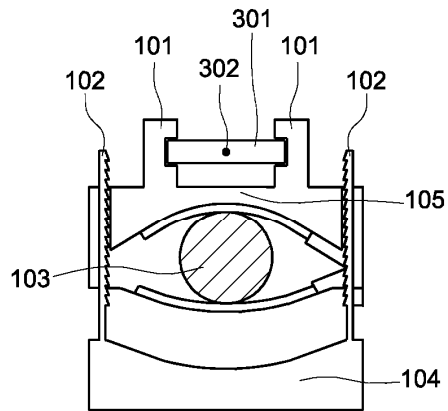


FIG. 4

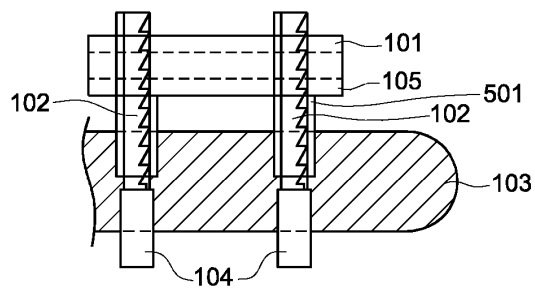


FIG. 5

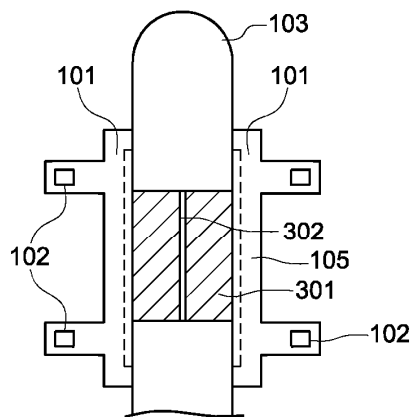


FIG. 6

CORBIN_CLINICAL-002324

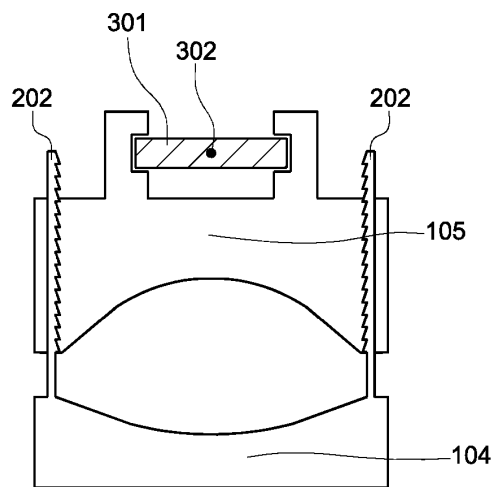


FIG. 7

CORBIN_CLINICAL-002325

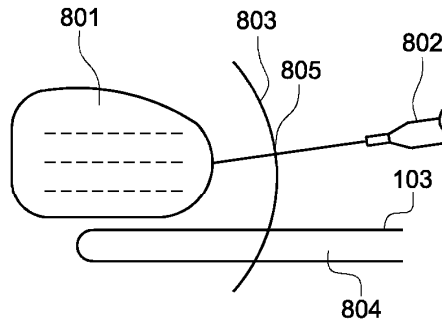


FIG. 8

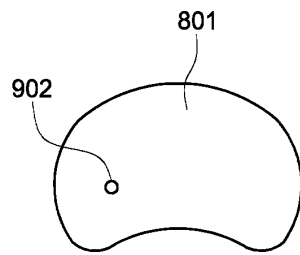


FIG. 9

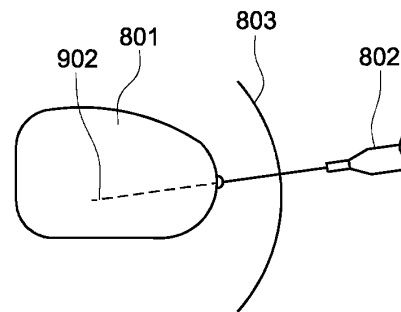


FIG. 10

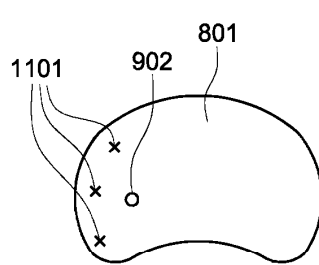


FIG. 11

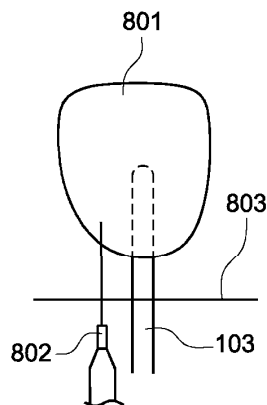


FIG. 12

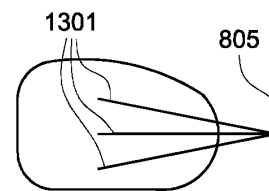


FIG. 13

CORBIN_CLINICAL-002326

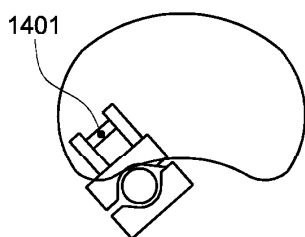


FIG. 14

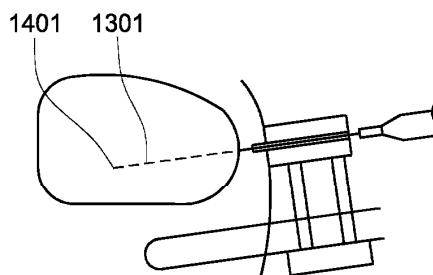


FIG. 15

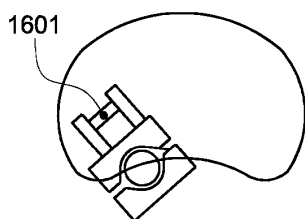


FIG. 16

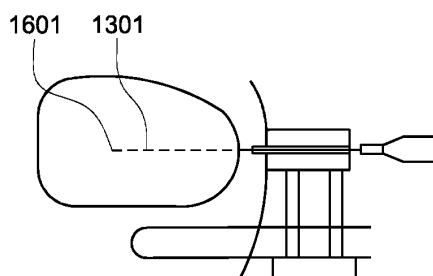


FIG. 17

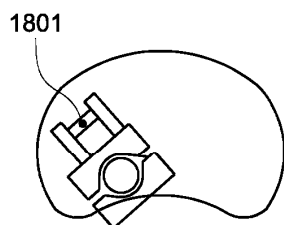


FIG. 18

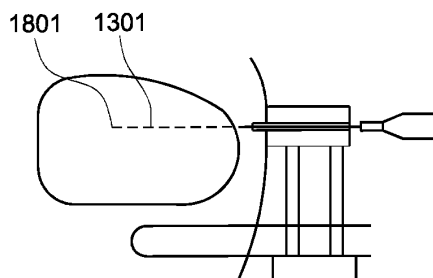


FIG. 19

CORBIN_CLINICAL-002327

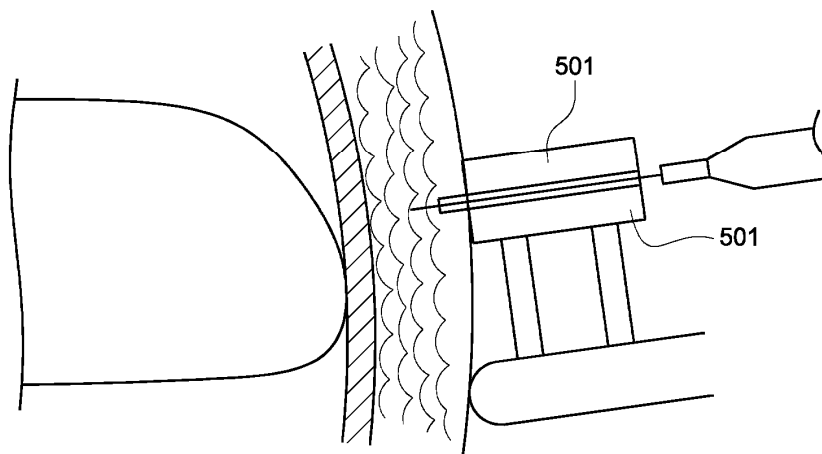


FIG. 20

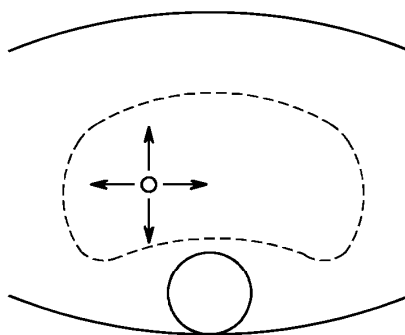


FIG. 21

CORBIN_CLINICAL-002328

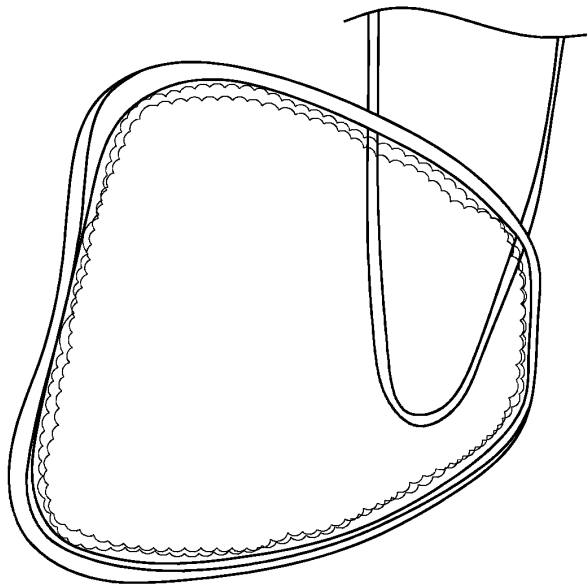


FIG. 22

CORBIN_CLINICAL-002329

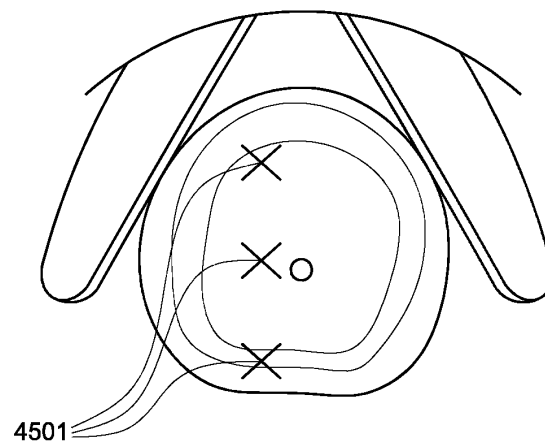
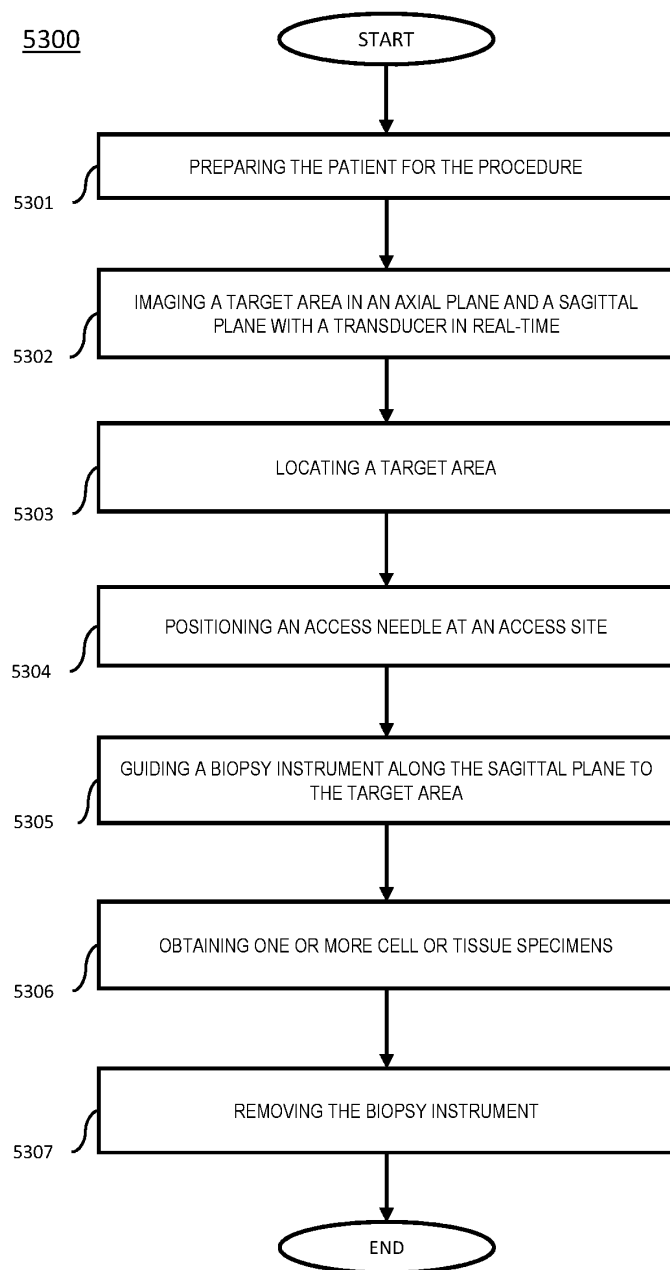
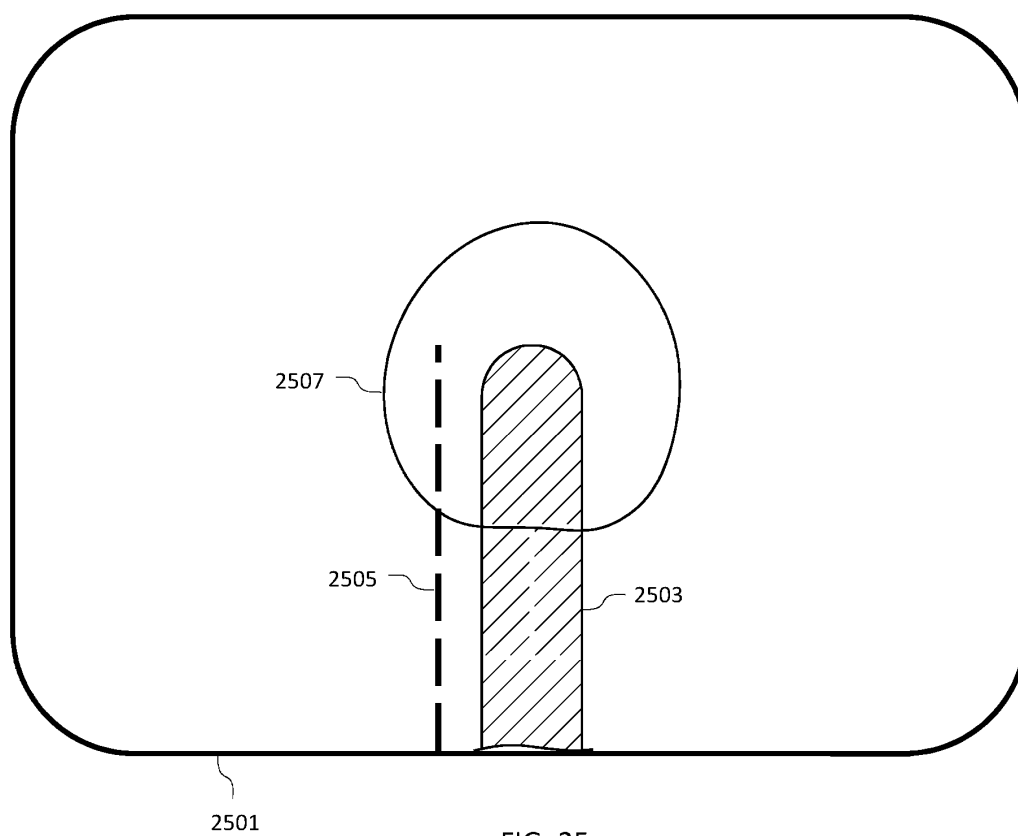


FIG. 23

CORBIN_CLINICAL-002330

FIG. 24

**CORBIN_CLINICAL-002331**



CORBIN_CLINICAL-002332

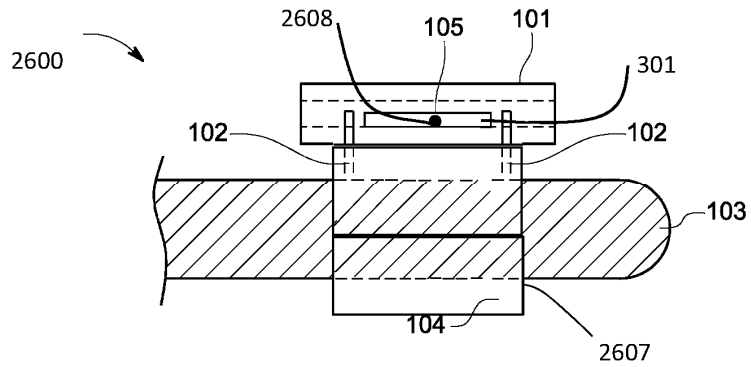


FIG. 26A

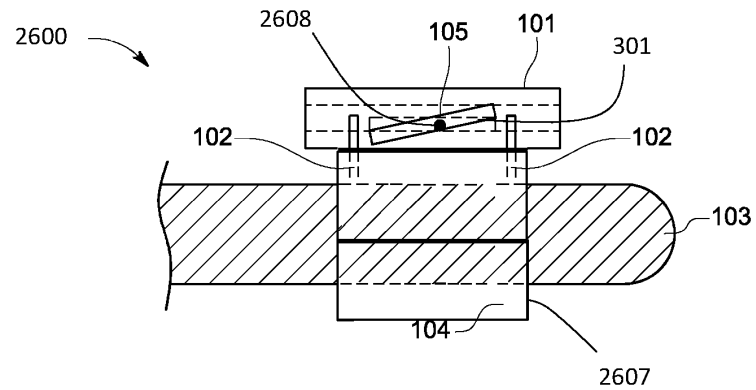


FIG. 26B

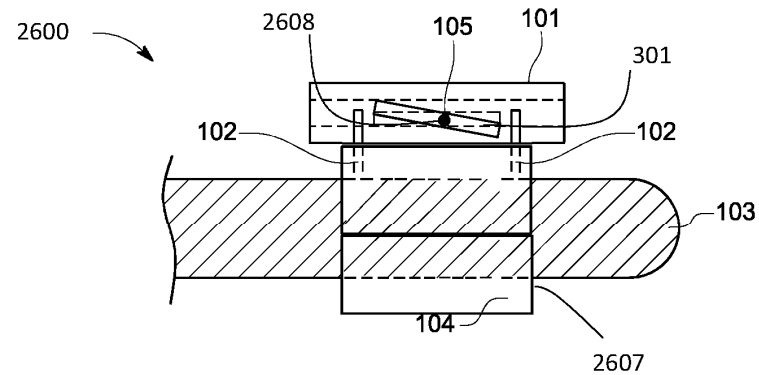


FIG. 26C

CORBIN_CLINICAL-002333

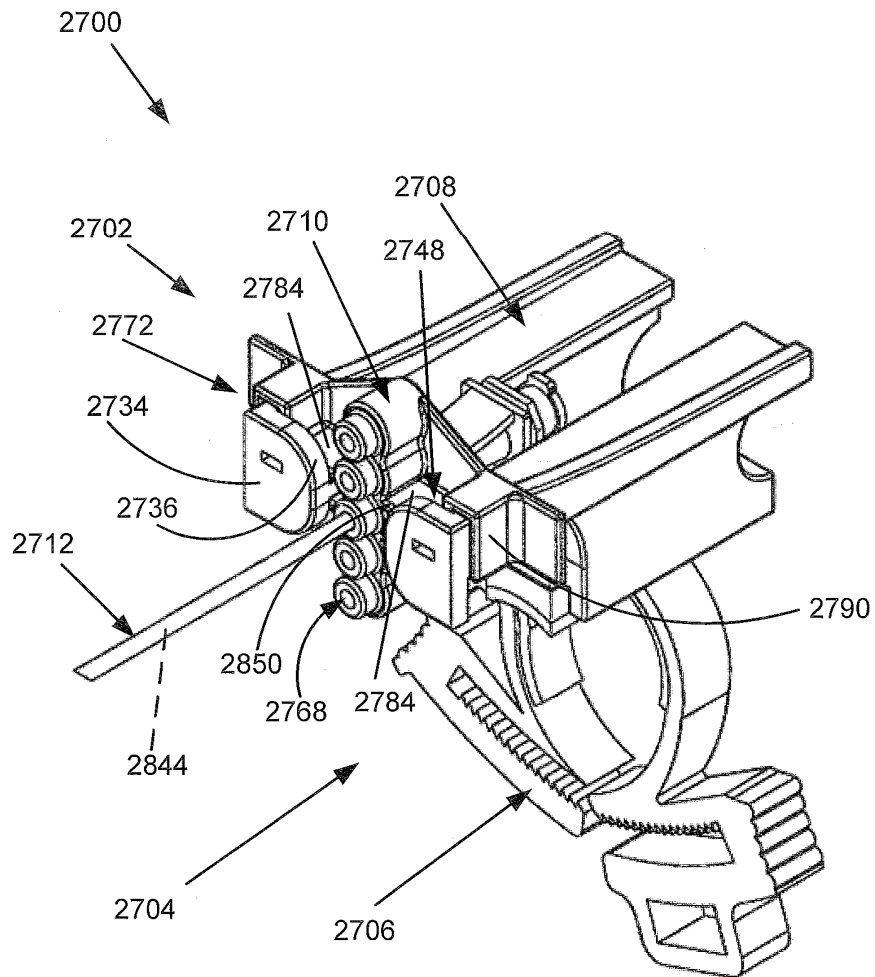


FIG. 27

CORBIN_CLINICAL-002334

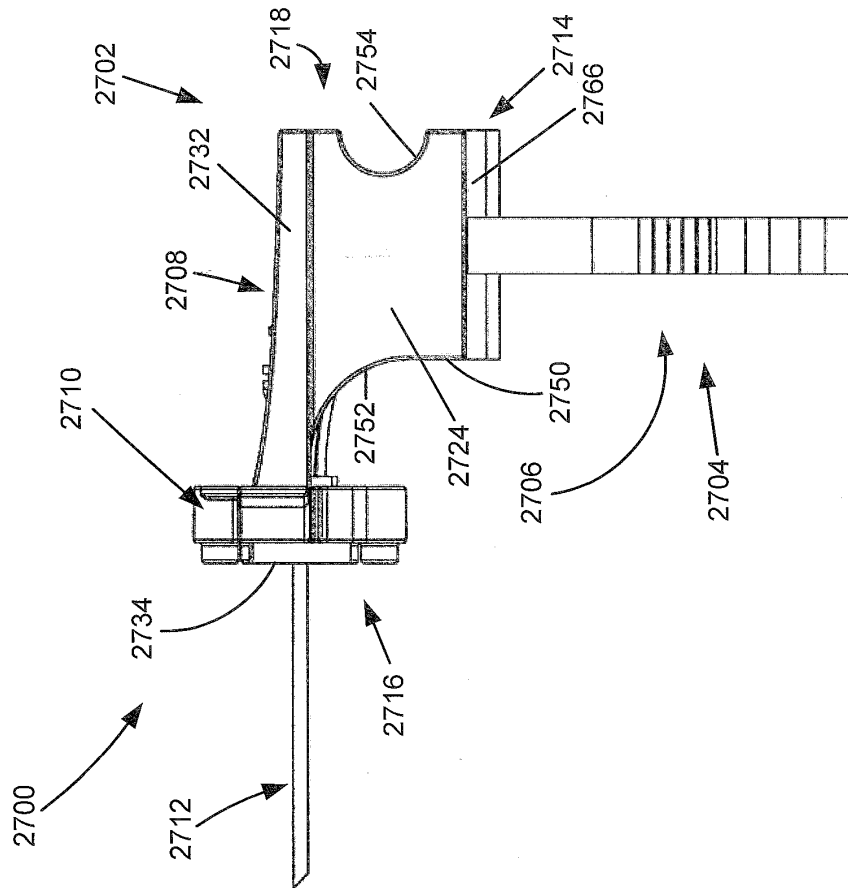


FIG. 29

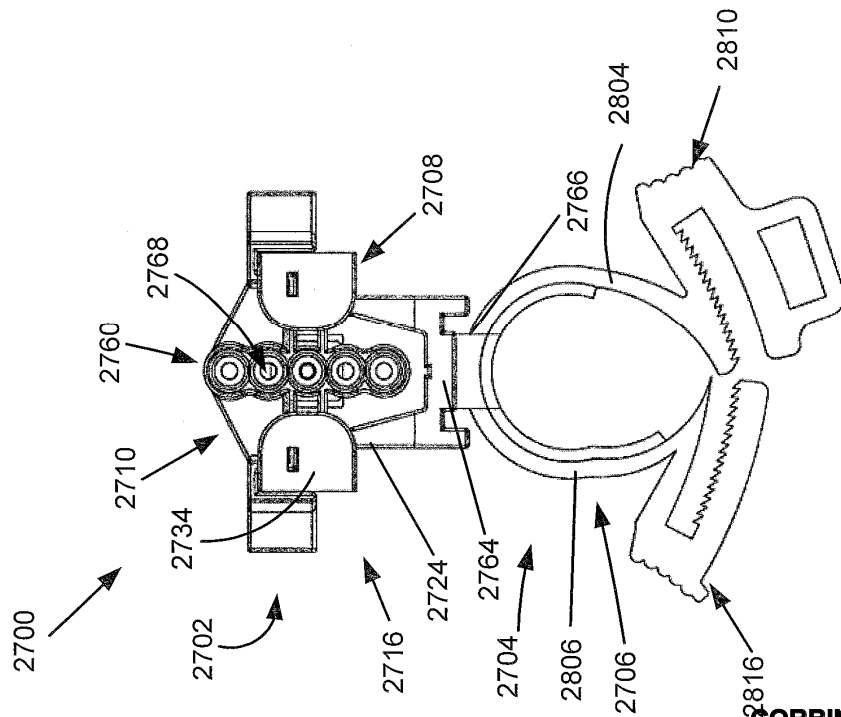


FIG. 28

CORBIN_CLINICAL-002335

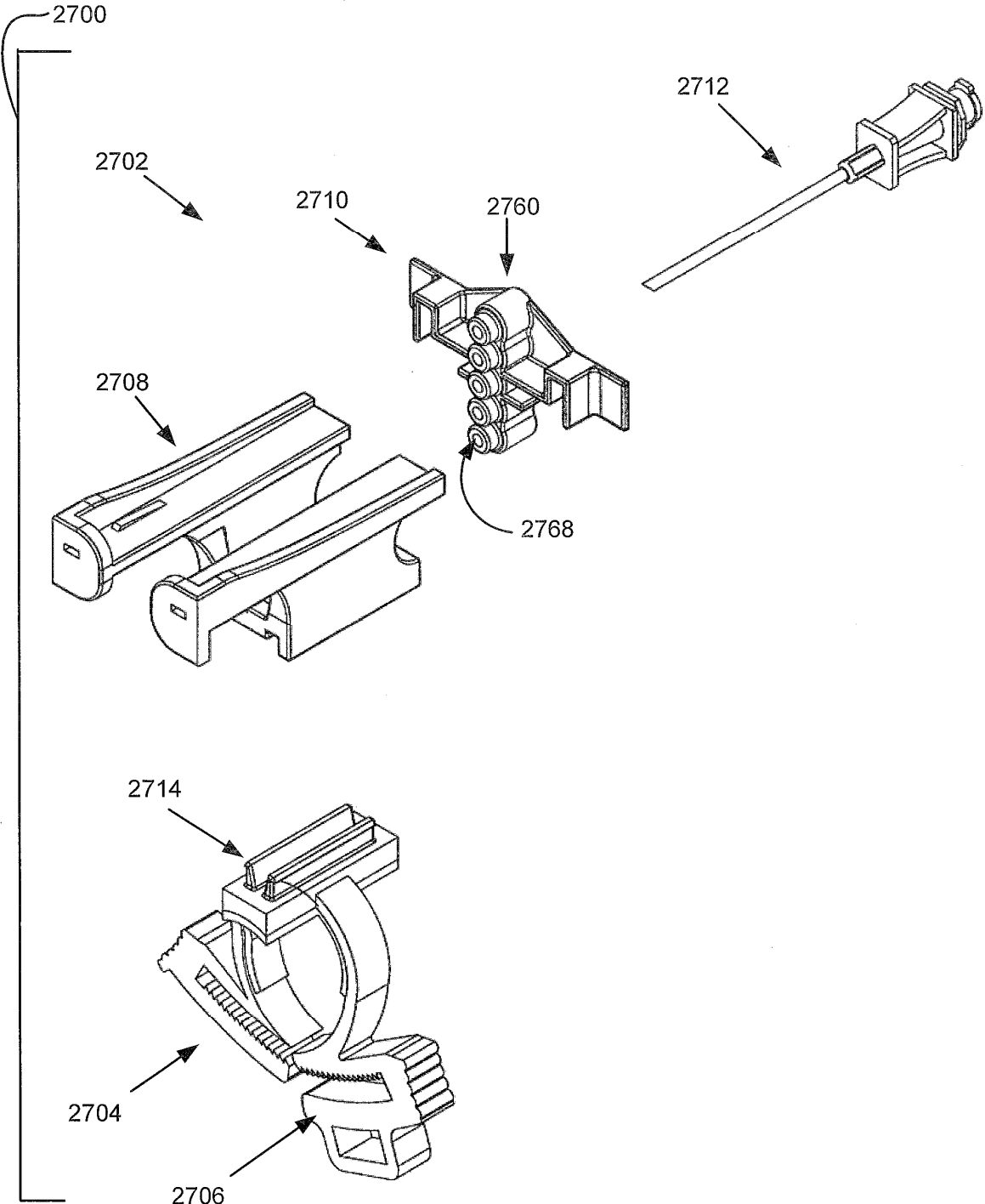
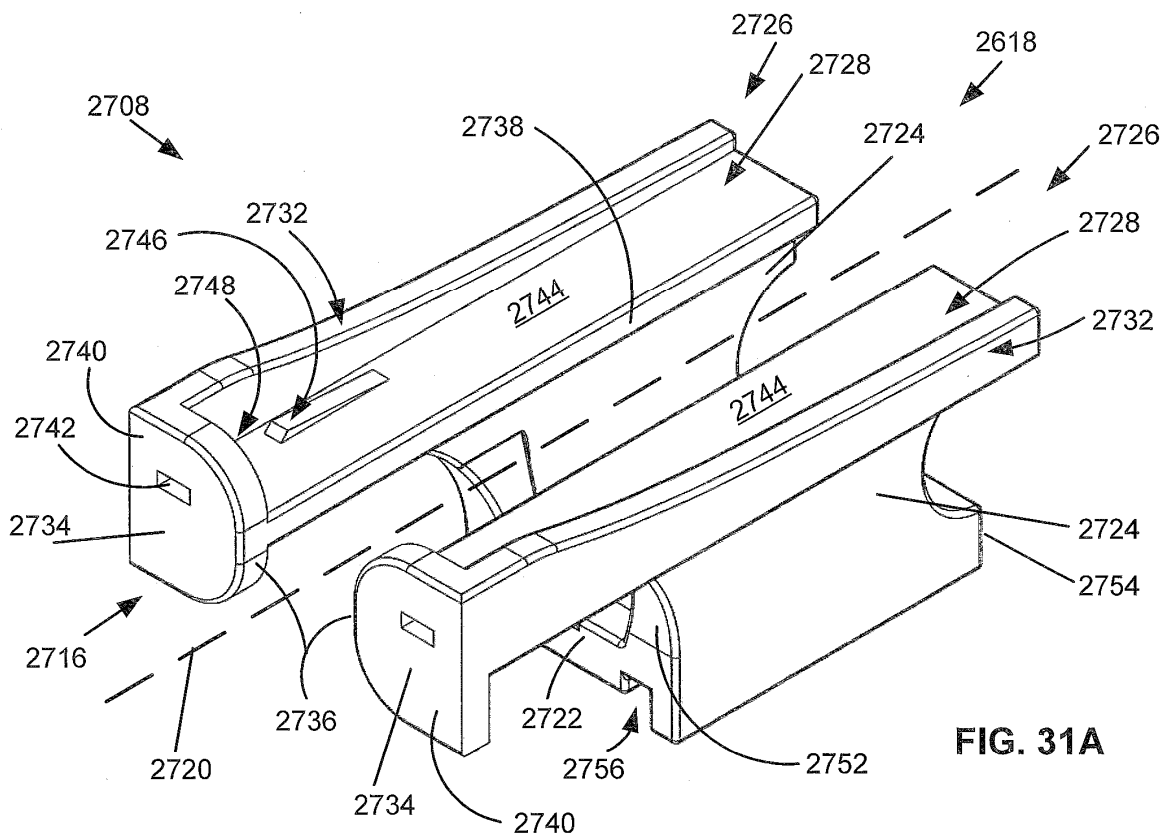
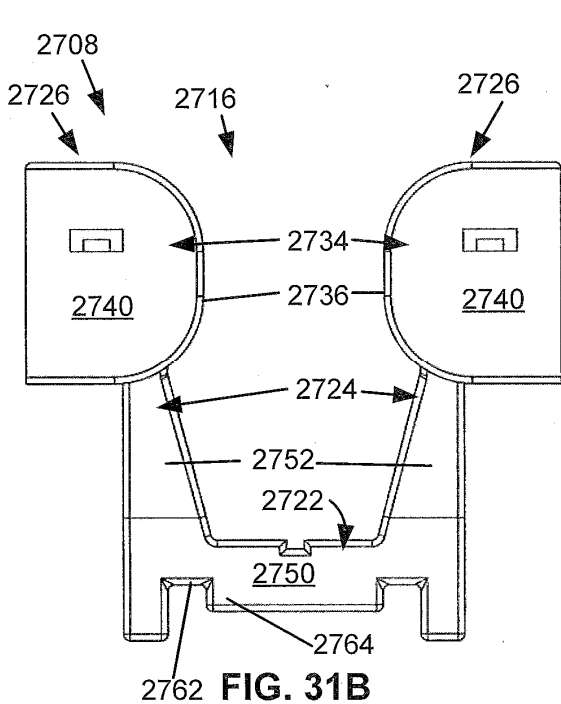
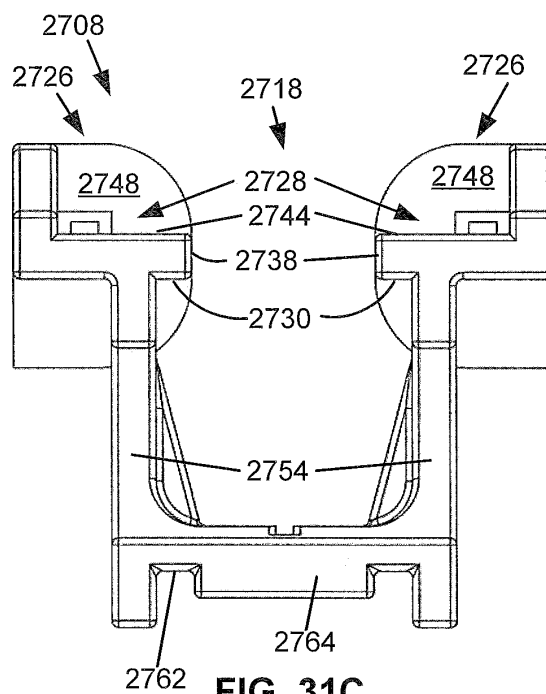
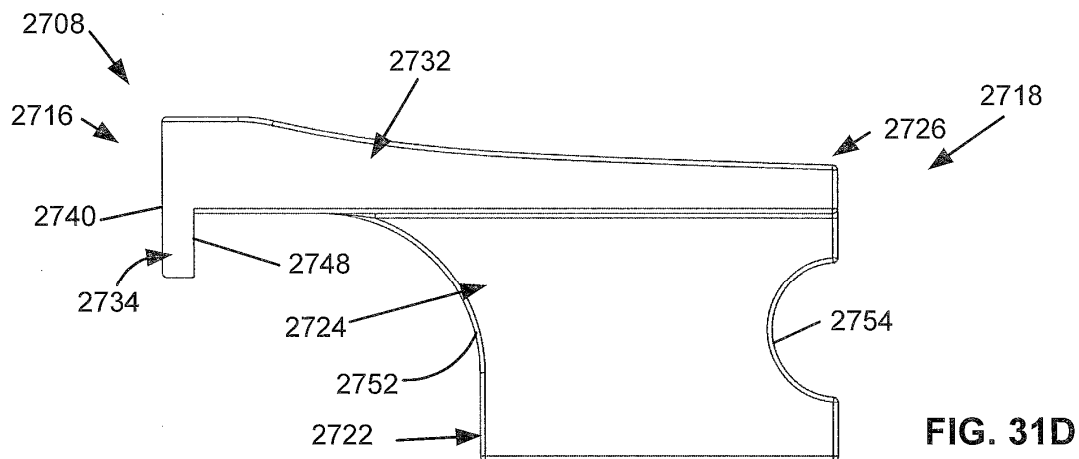
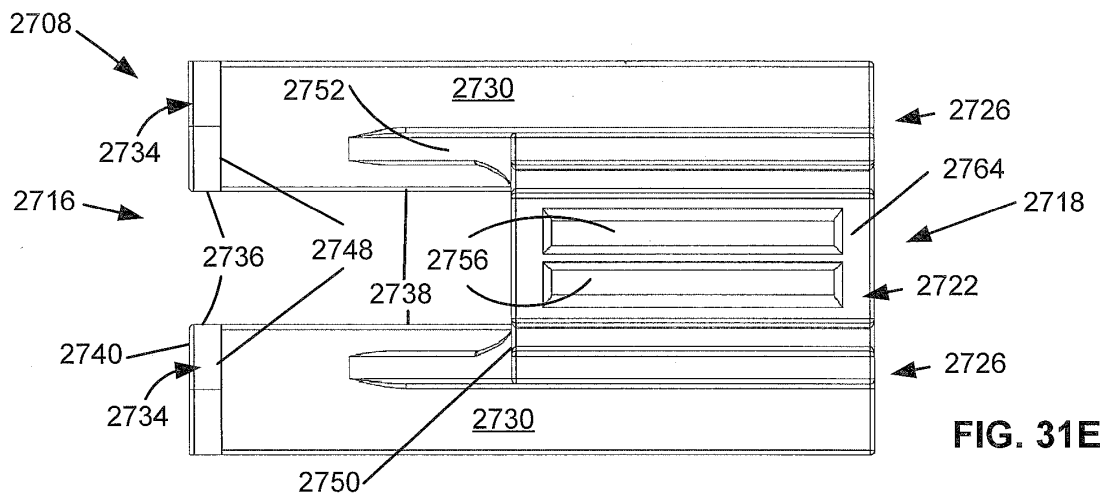
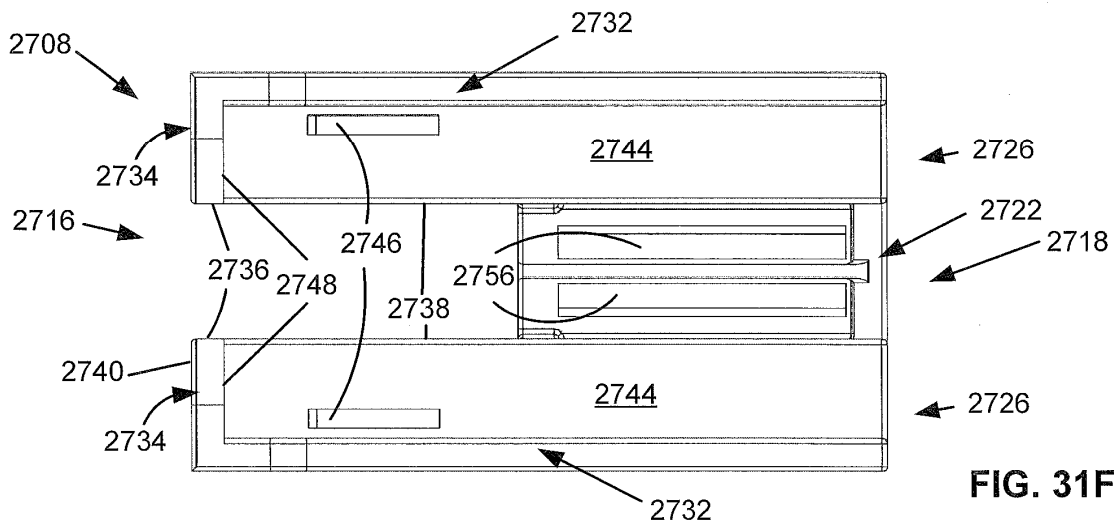


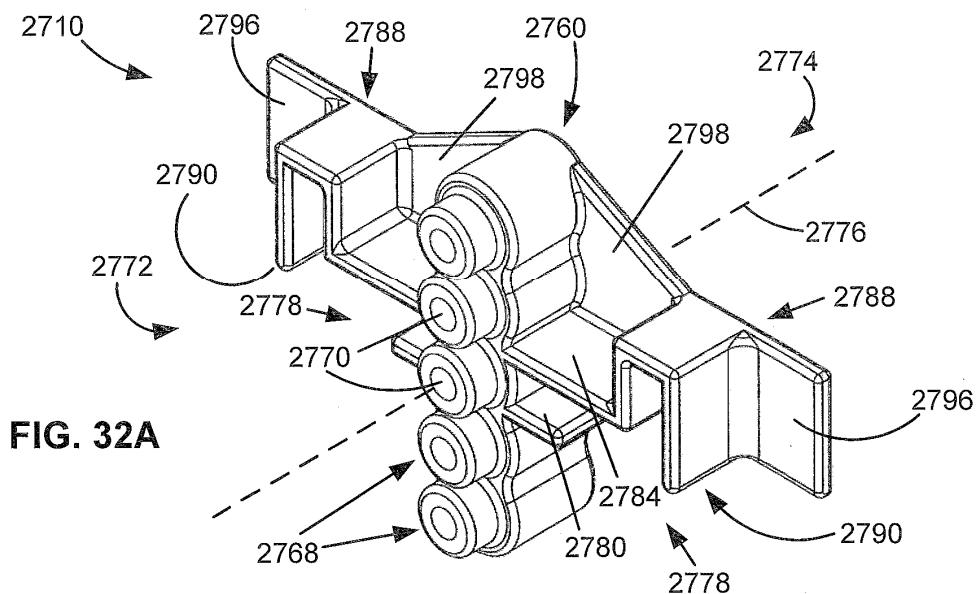
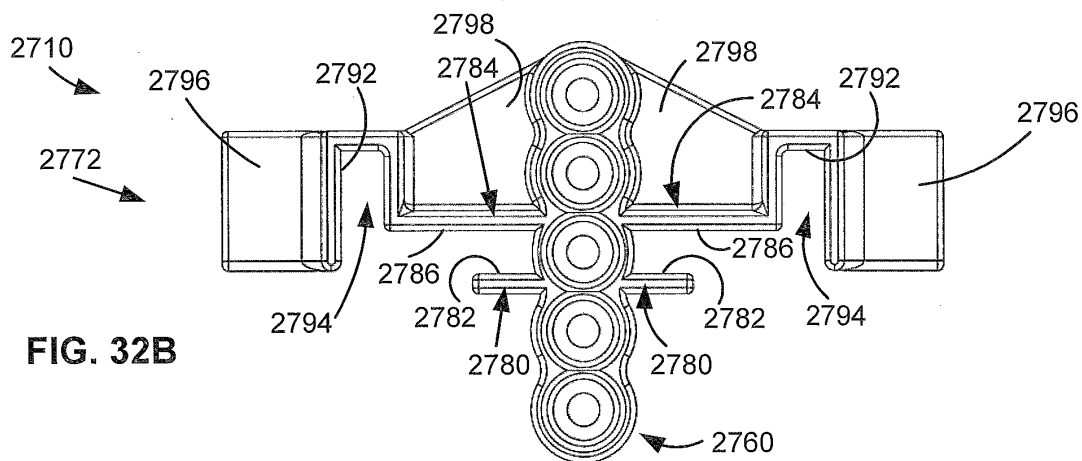
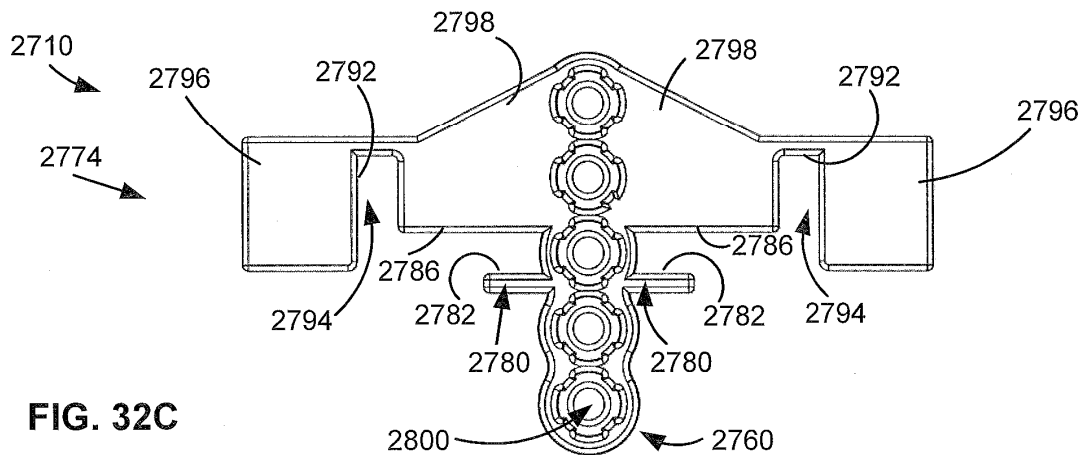
FIG. 30

CORBIN_CLINICAL-002336

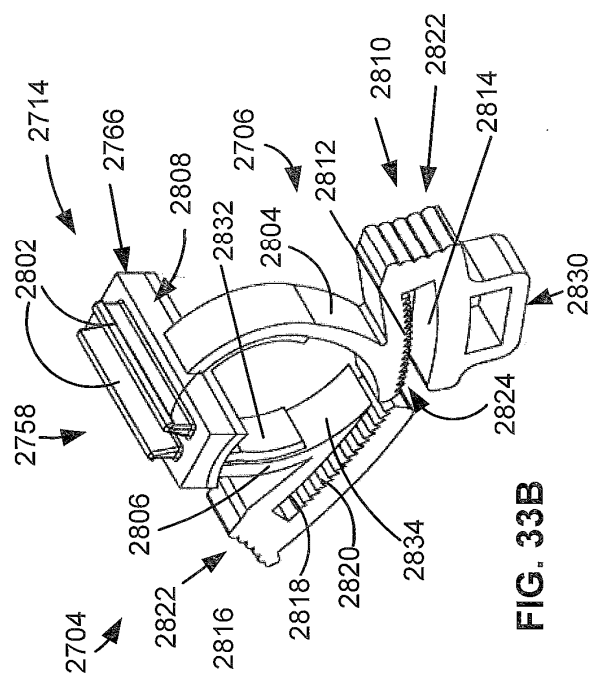
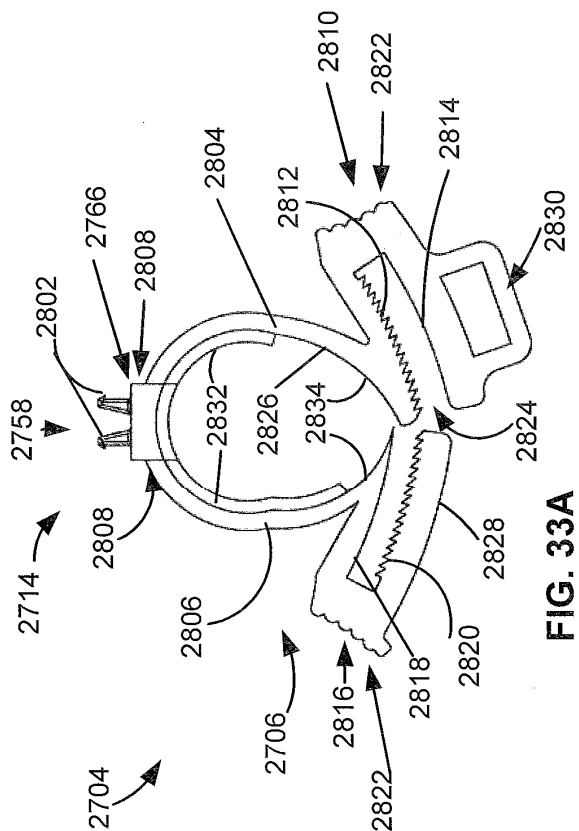
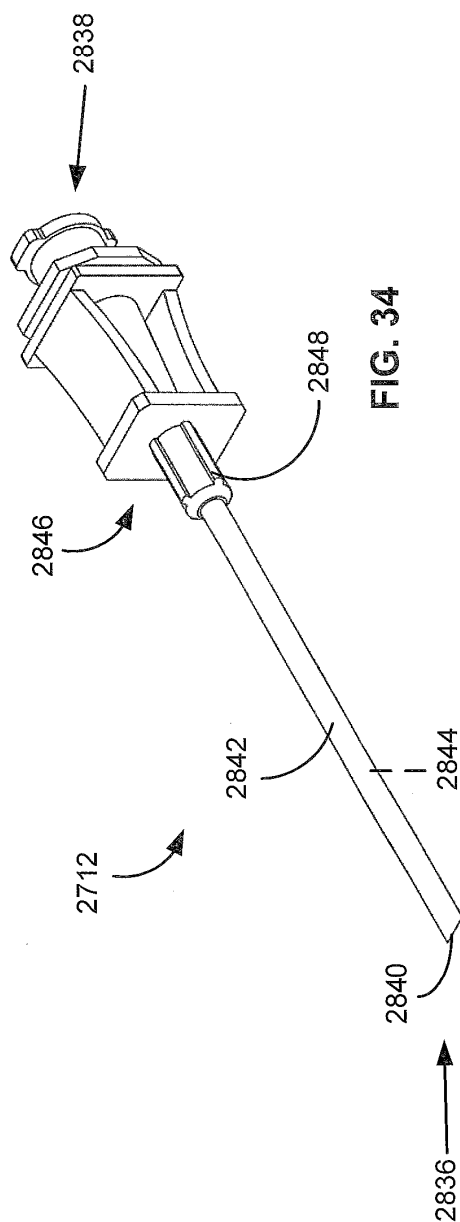
**FIG. 31A****FIG. 31B****FIG. 31C****CORBIN_CLINICAL-002337**



CORBIN_CLINICAL-002338



CORBIN_CLINICAL-002339



CORBIN_CLINICAL-002340

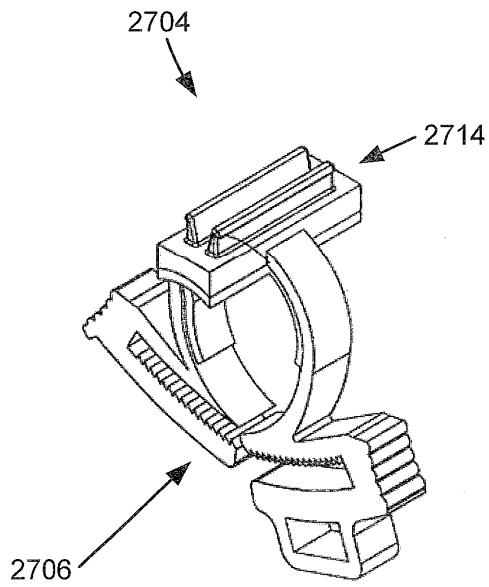


FIG. 35A

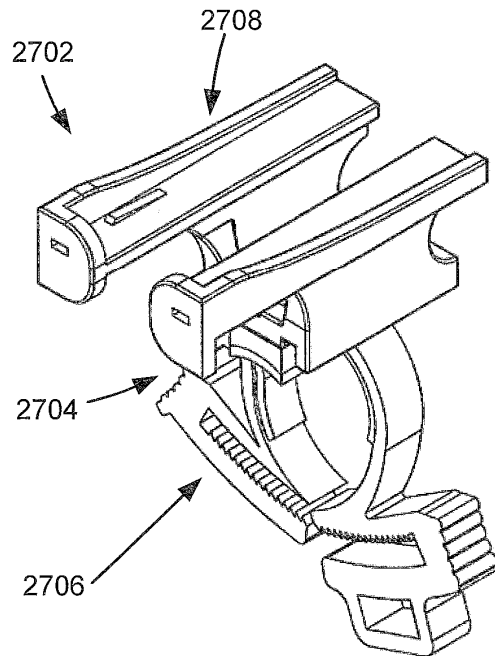


FIG. 35B

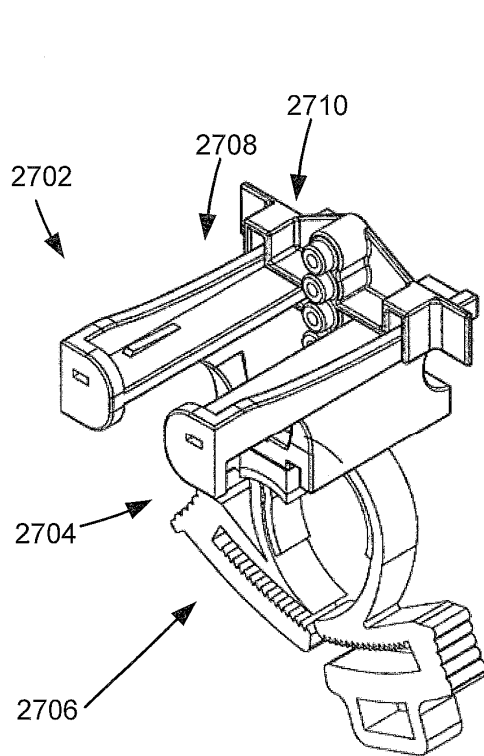


FIG. 35C

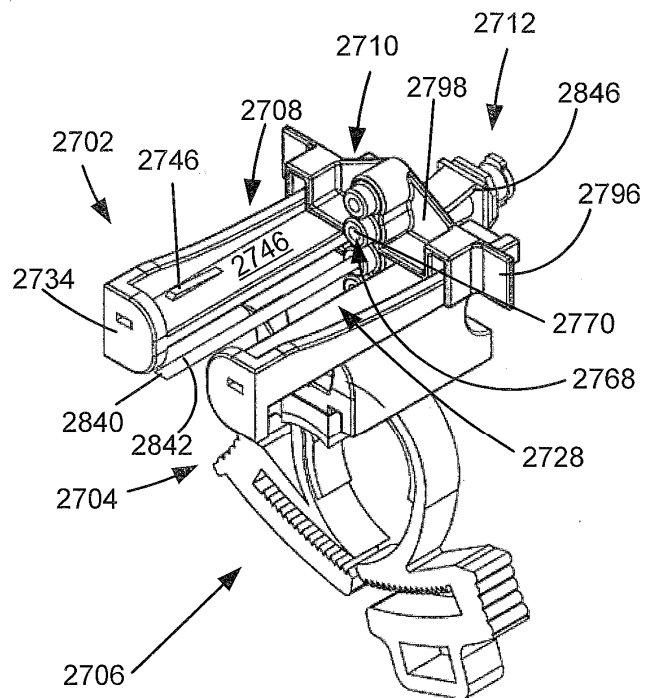
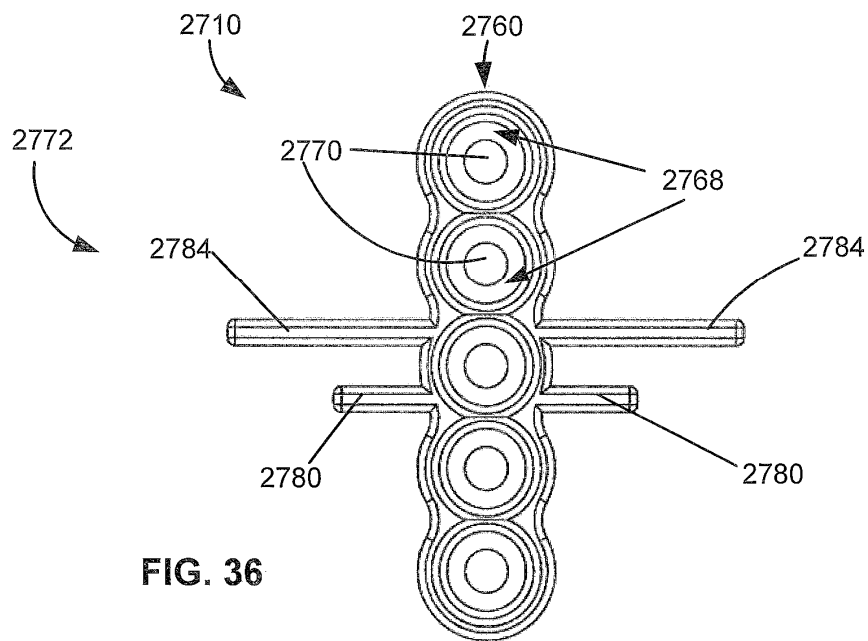
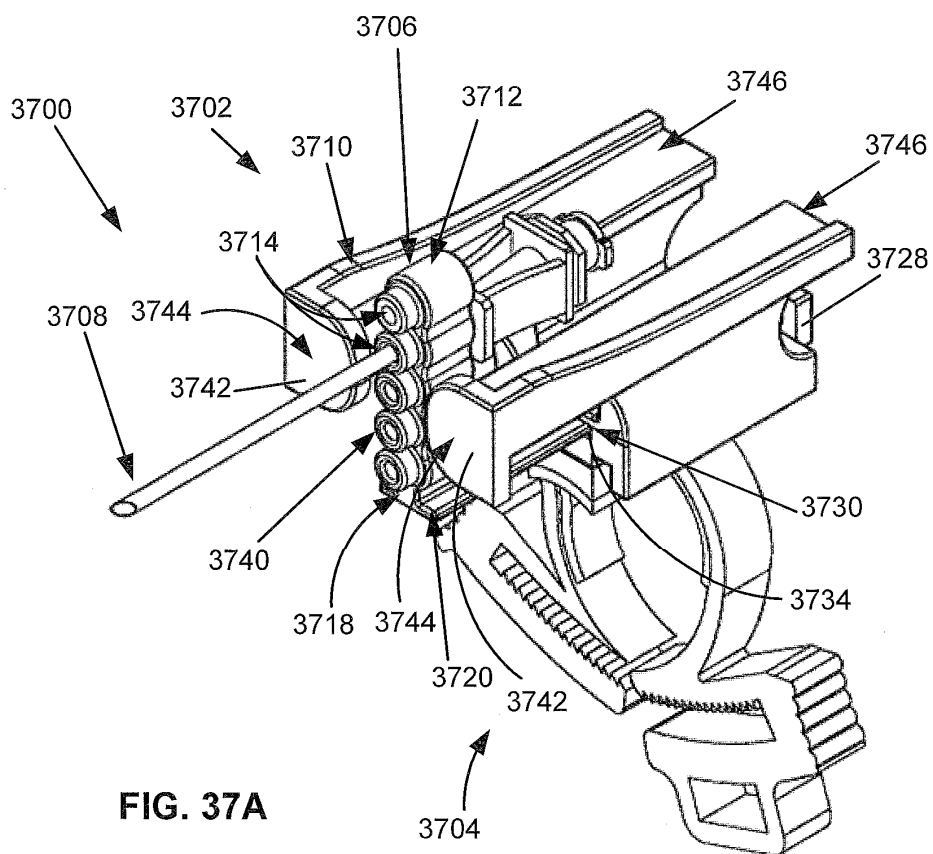


FIG. 35D

CORBIN_CLINICAL-002341



CORBIN_CLINICAL-002342

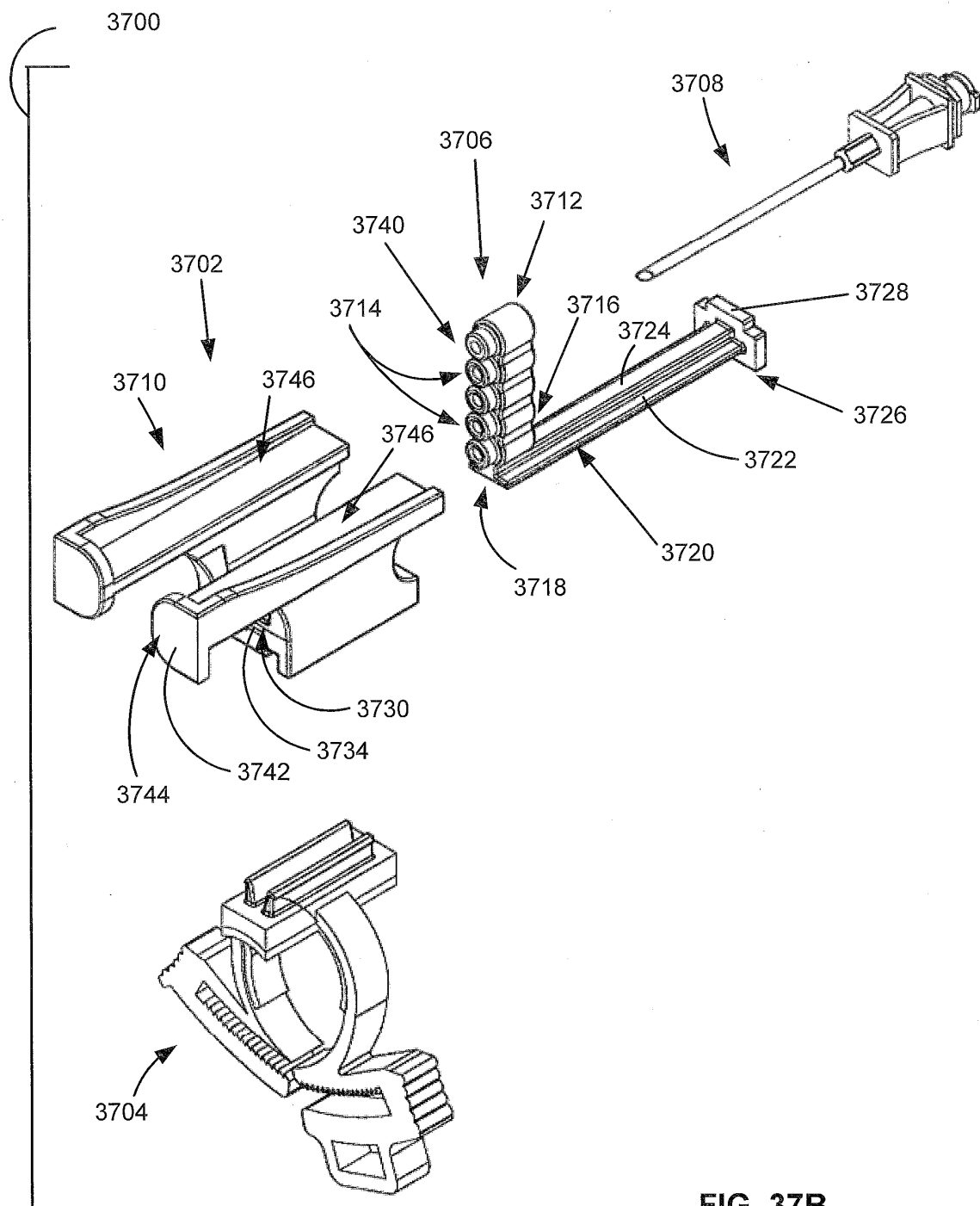


FIG. 37B

CORBIN_CLINICAL-002343

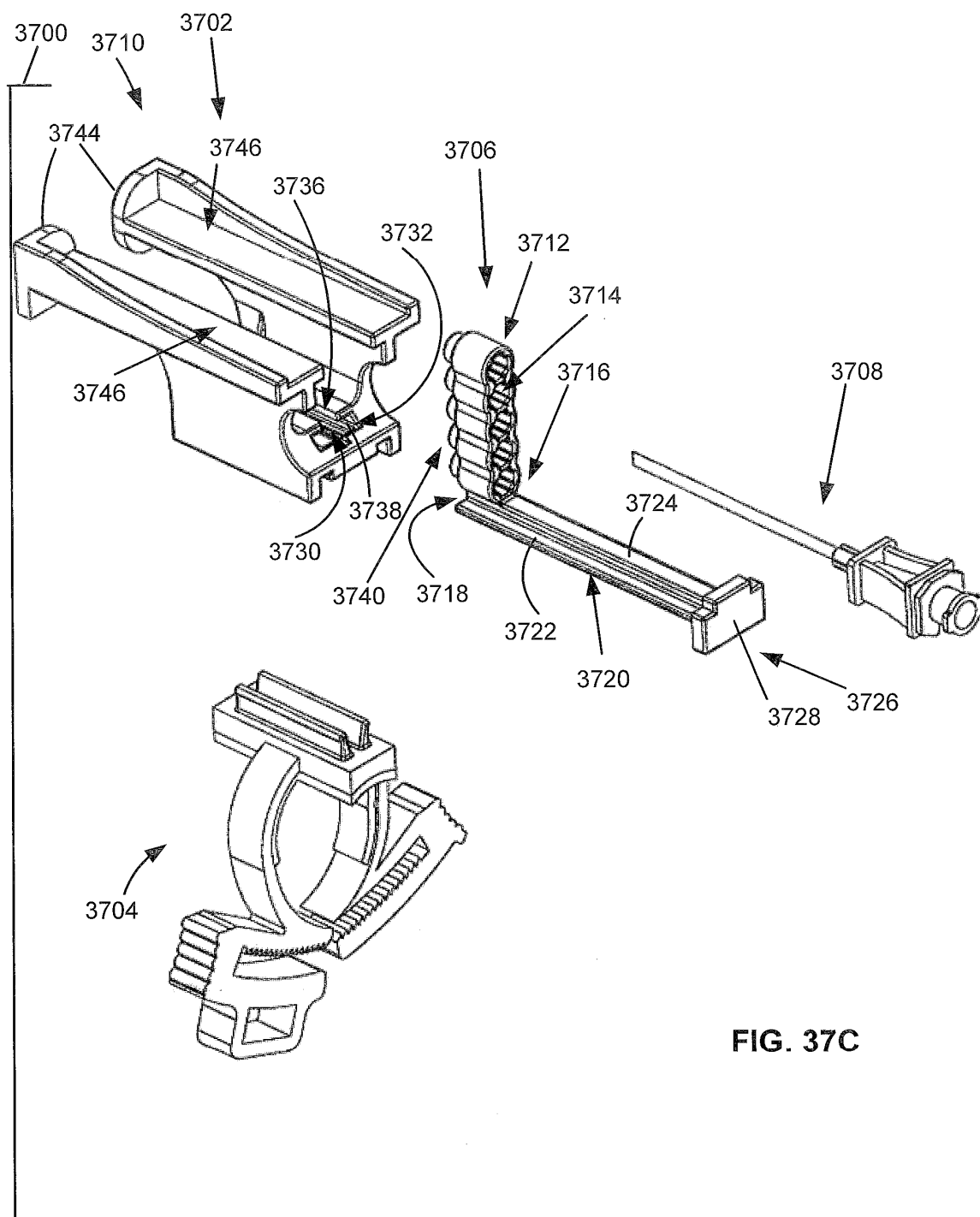


FIG. 37C

CORBIN_CLINICAL-002344

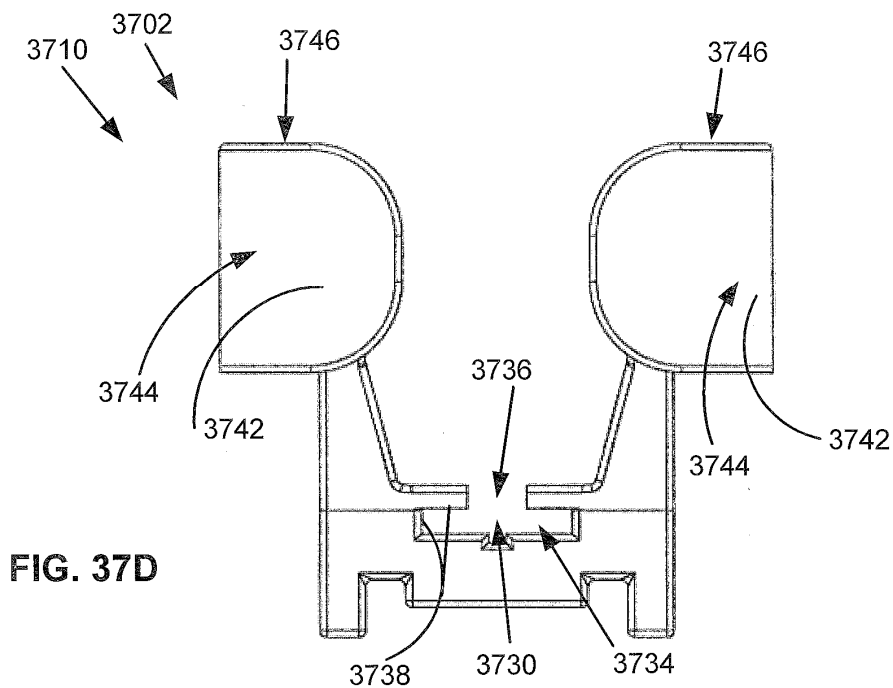


FIG. 37D

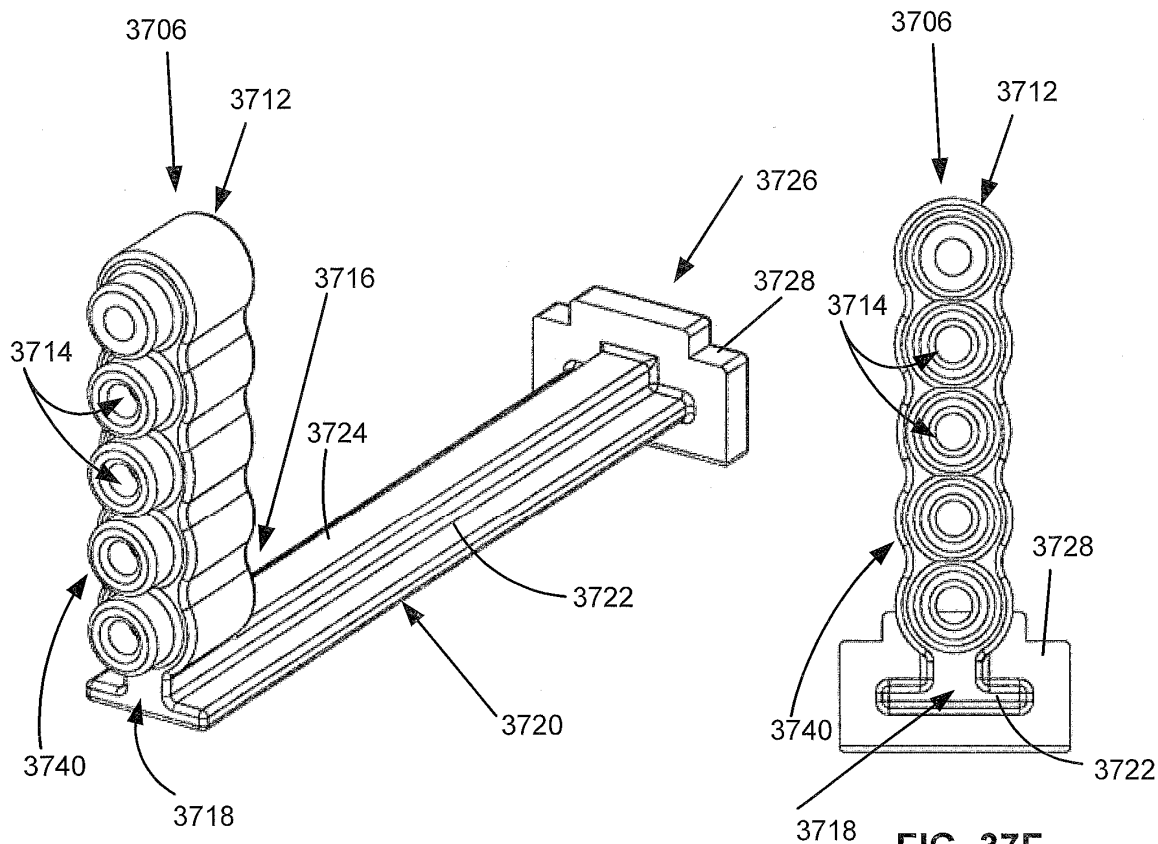
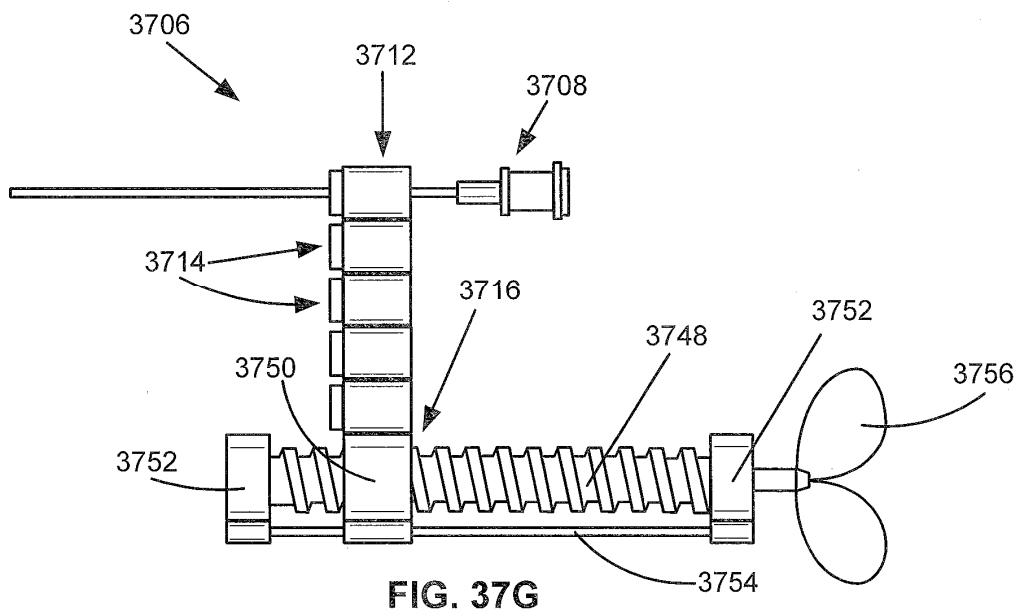
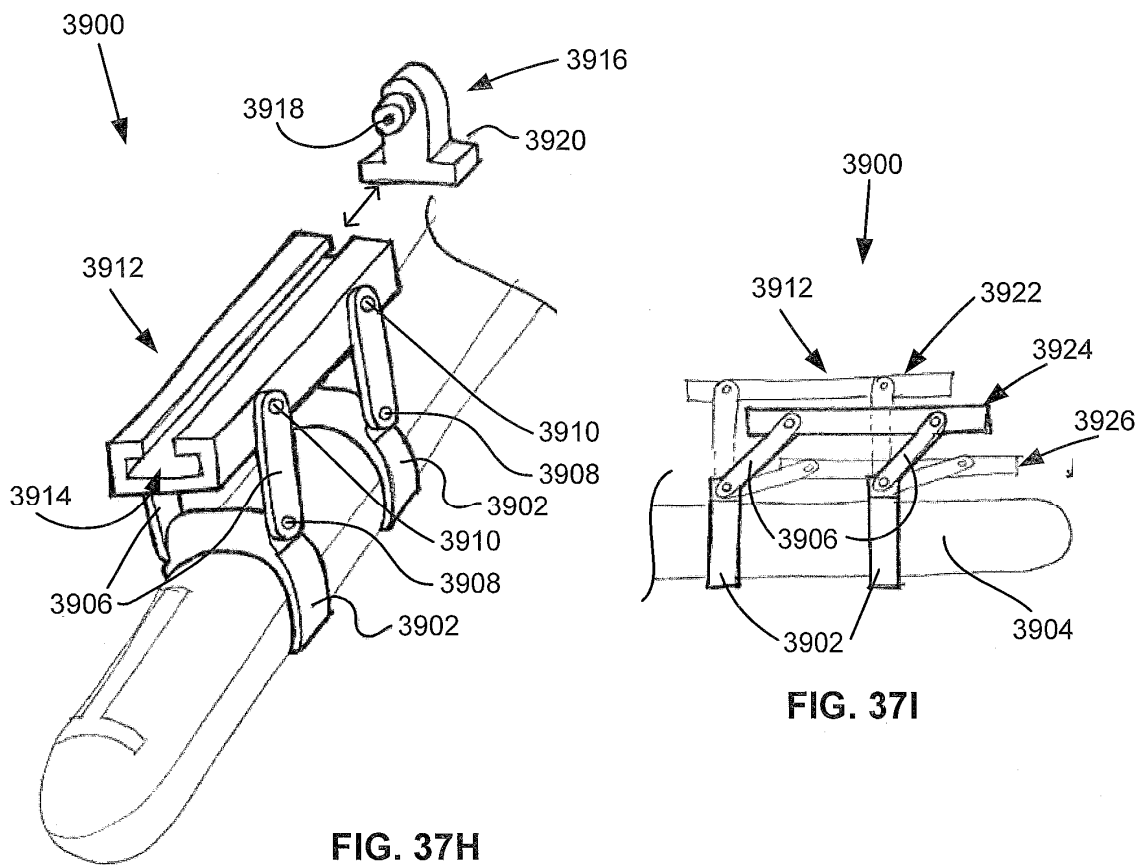


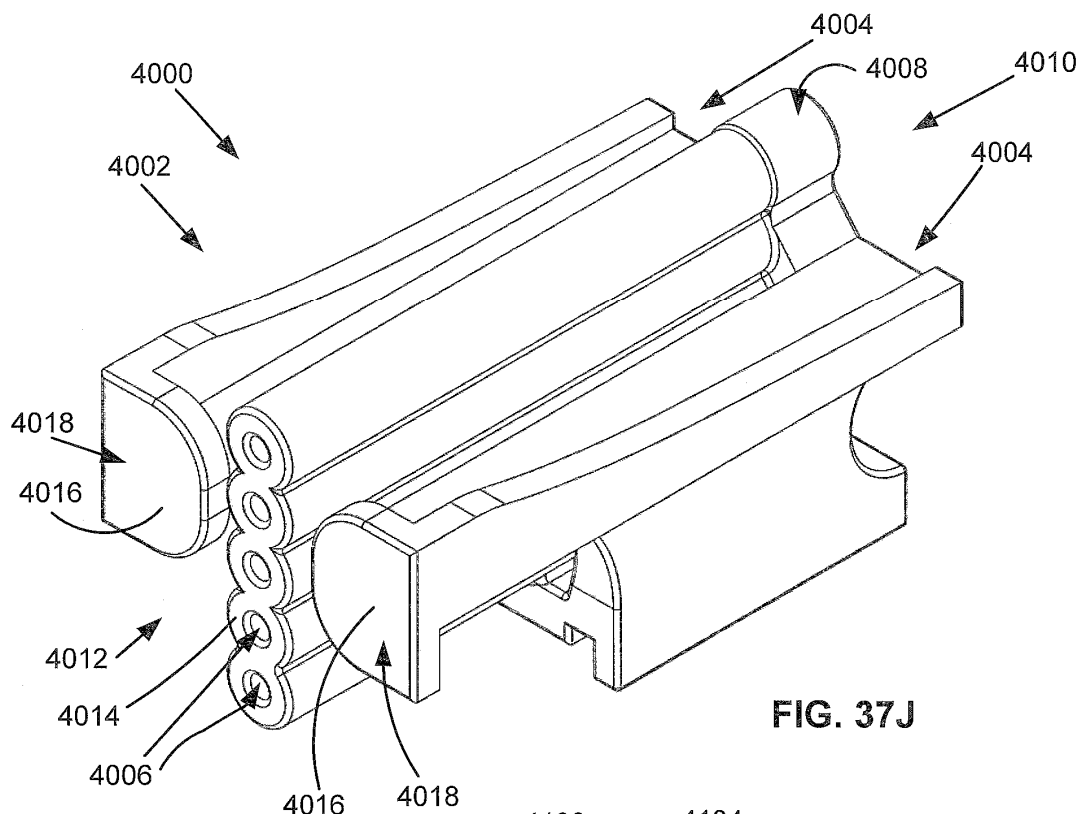
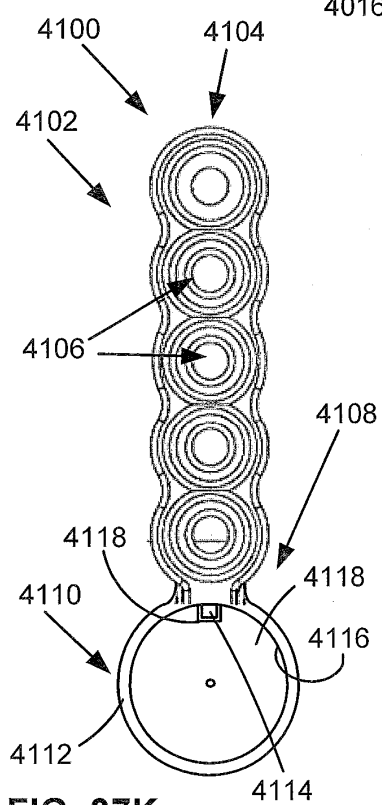
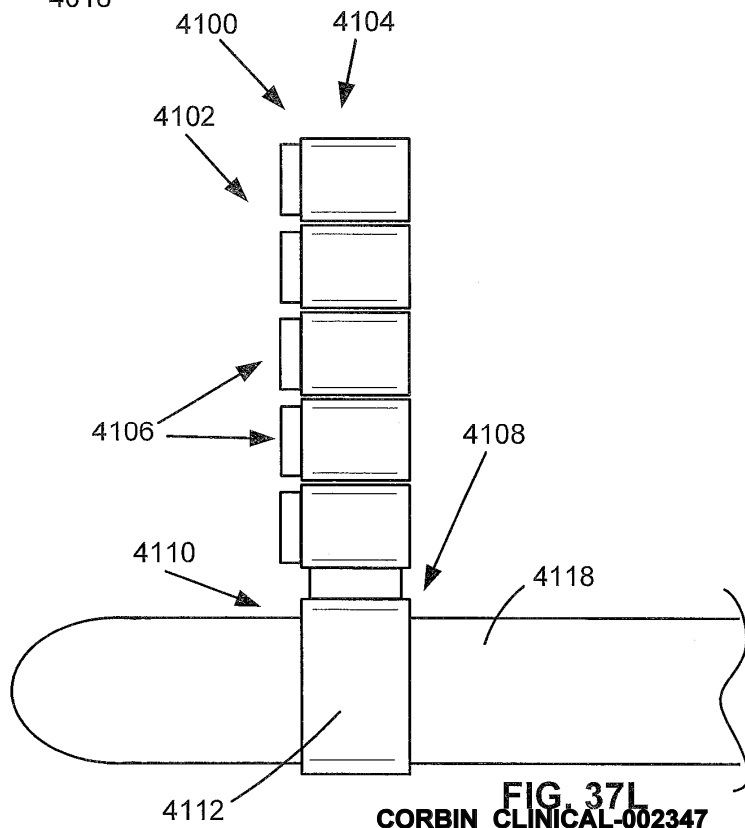
FIG. 37E

FIG. 37F

CORBIN_CLINICAL-002345



CORBIN_CLINICAL-002346



CORBIN_CLINICAL-002347

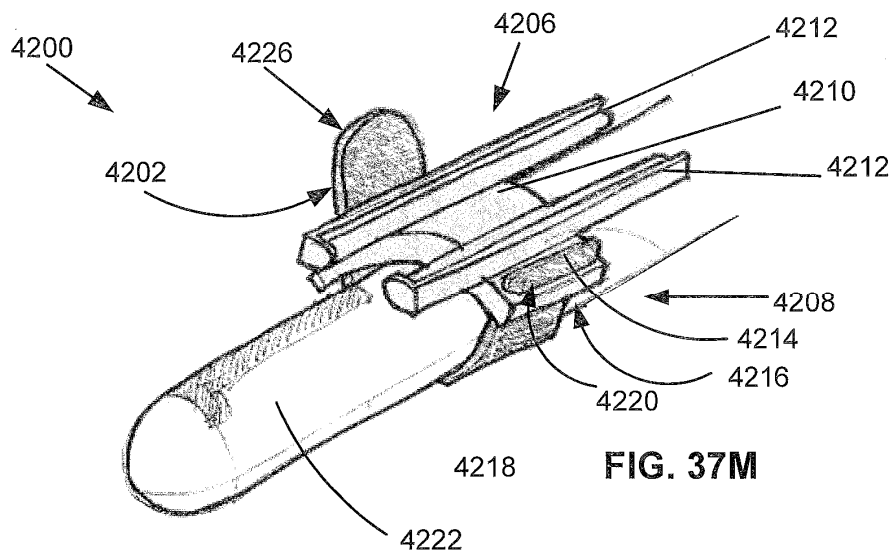


FIG. 37M

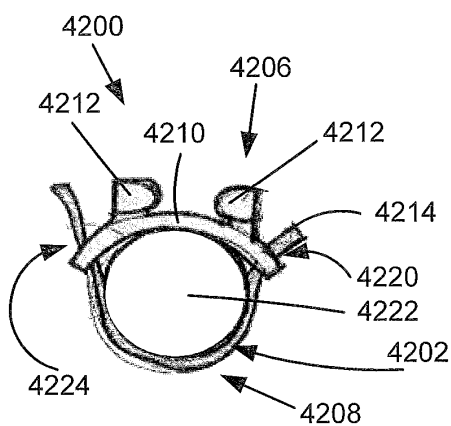


FIG. 37N

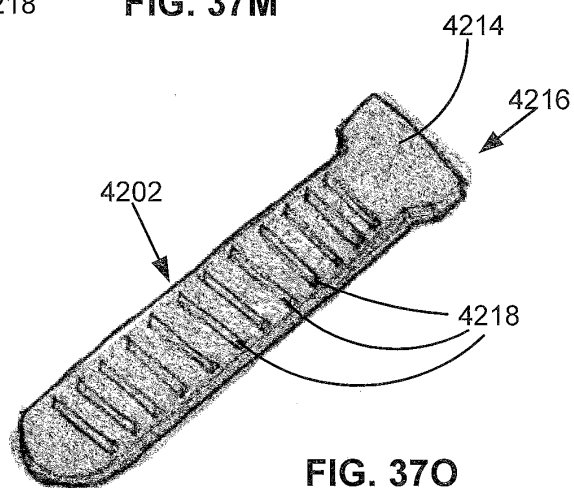


FIG. 37O

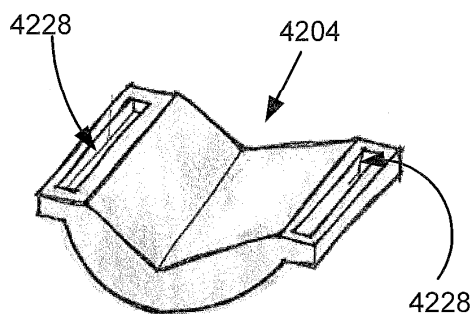


FIG. 37P

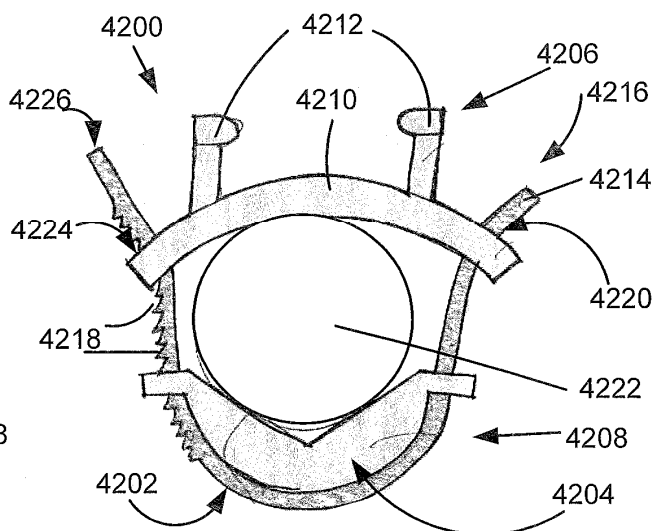
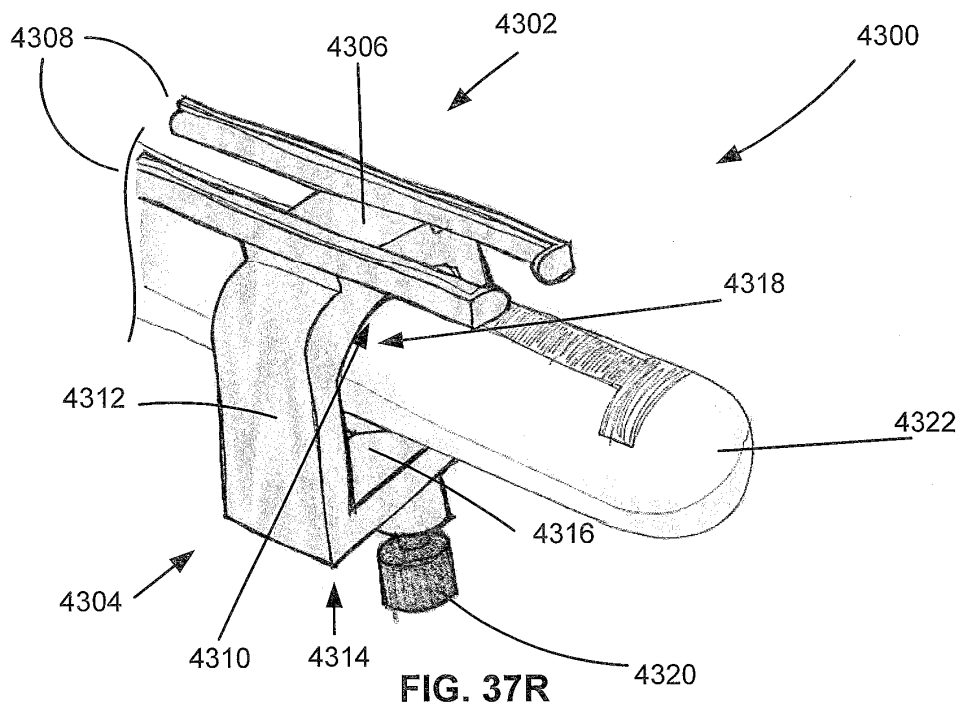
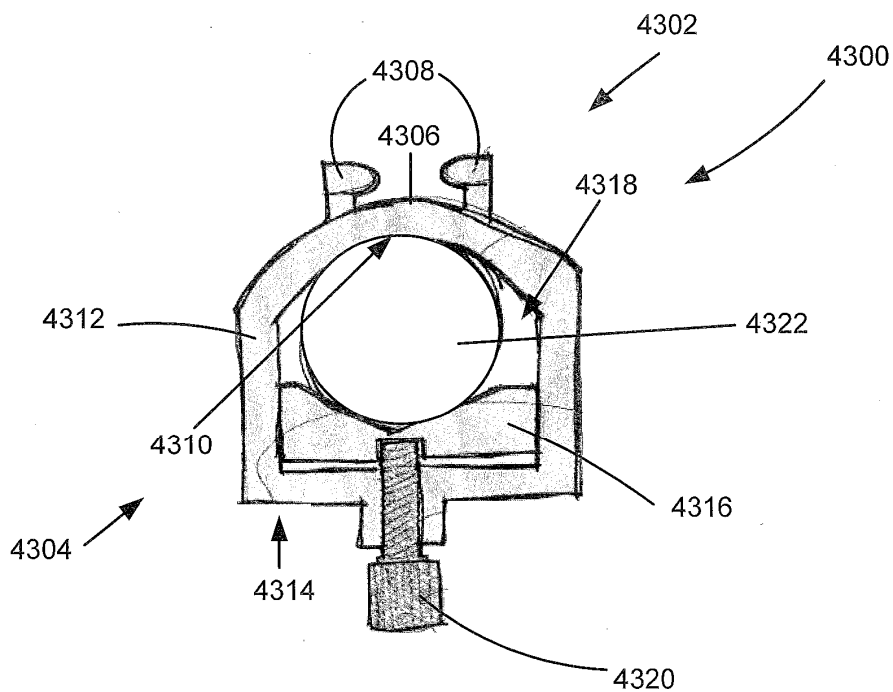


FIG. 37Q

CORBIN_CLINICAL-002348



CORBIN_CLINICAL-002349

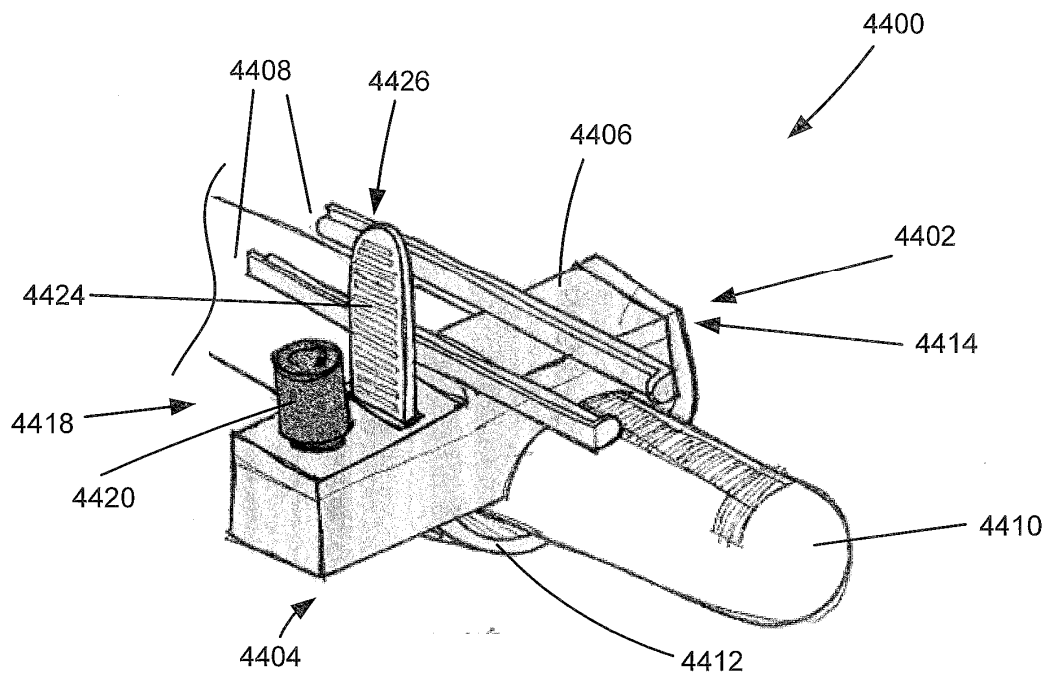


FIG. 37T

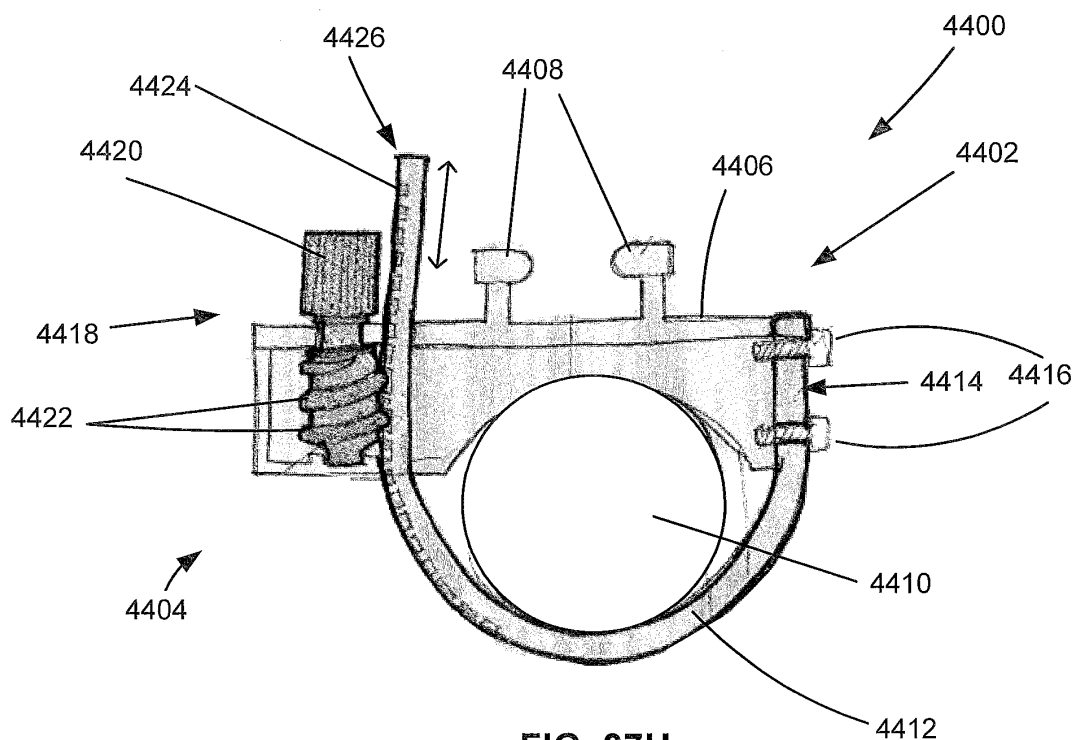
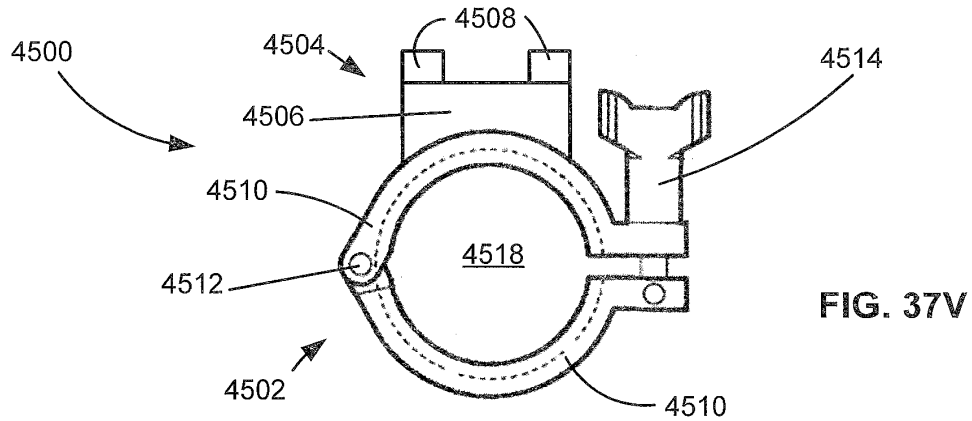
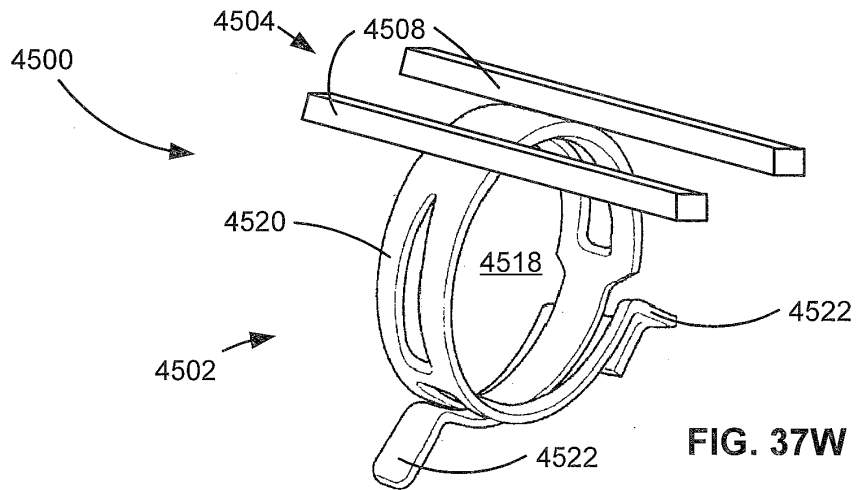
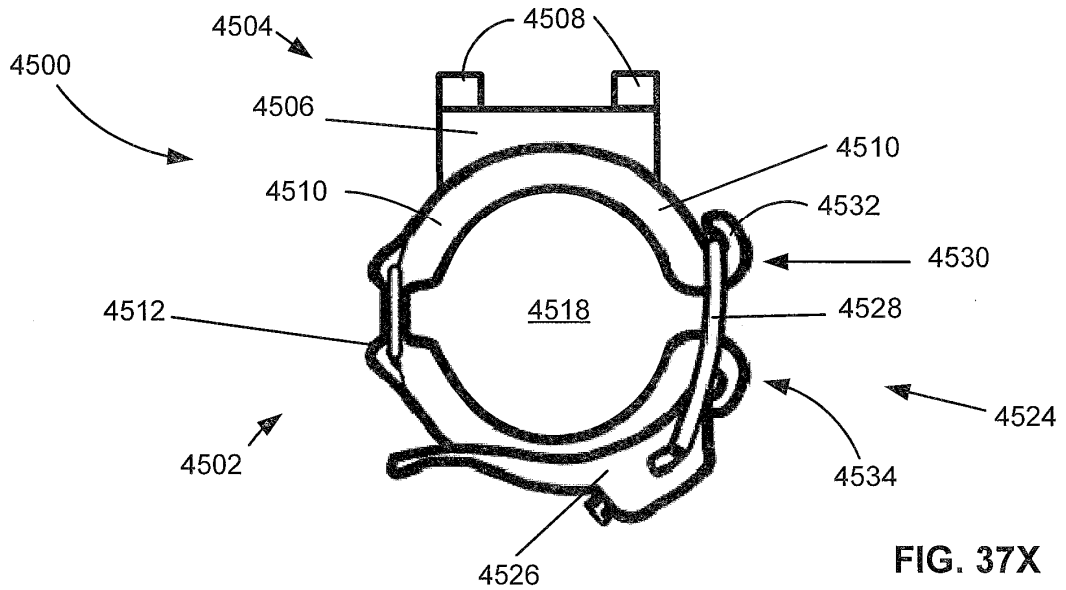


FIG. 37U

CORBIN_CLINICAL-002350



CORBIN_CLINICAL-002351

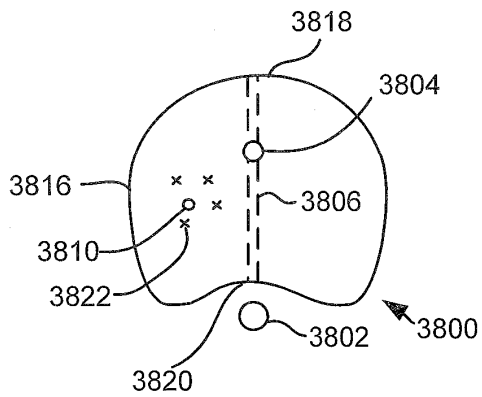


FIG. 38A

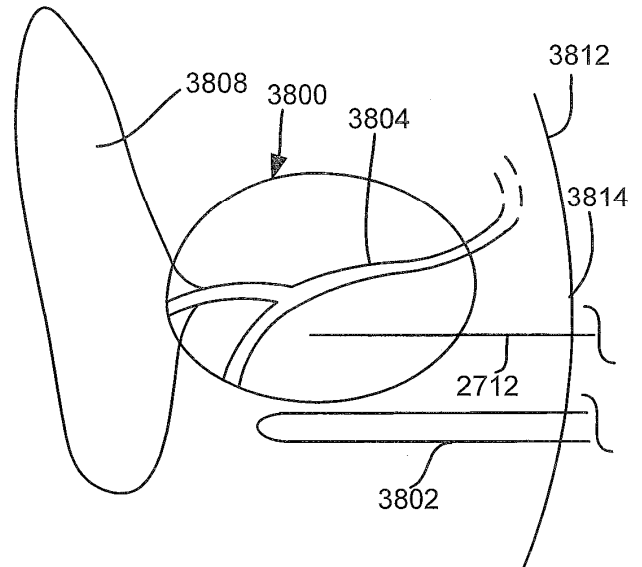


FIG. 38B

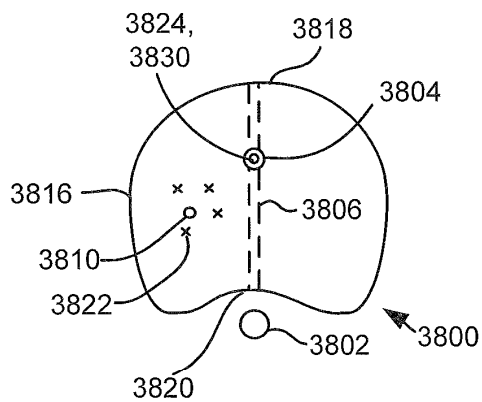


FIG. 38C

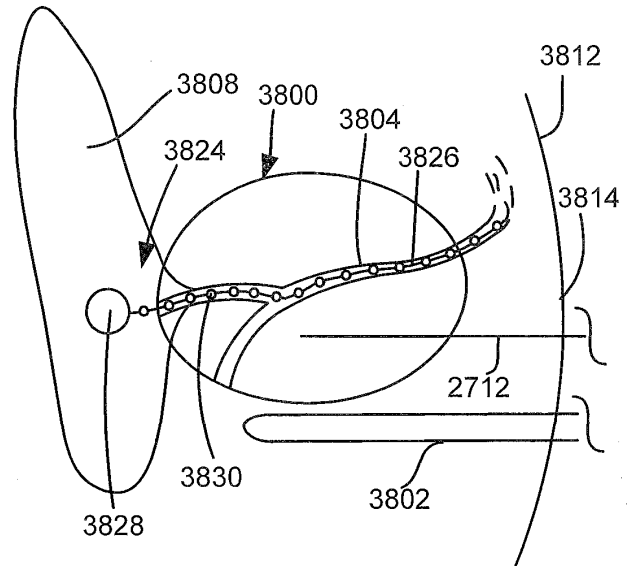


FIG. 38D

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TRANSMITTAL FOR POWER OF ATTORNEY TO ONE OR MORE REGISTERED PRACTITIONERS

NOTE: This form is to be submitted with the Power of Attorney by Applicant form (PTO/AIA/82B) to identify the application to which the Power of Attorney is directed, in accordance with 37 CFR 1.5, unless the application number and filing date are identified in the Power of Attorney by Applicant form. If neither form PTO/AIA/82A nor form PTO/AIA82B identifies the application to which the Power of Attorney is directed, the Power of Attorney will not be recognized in the application.

Application Number	17/698,641
Filing Date	03/18/2022
First Named Inventor	Matthew J. Allaway
Title	TRANSPERINEAL PROSTATE BIOPSY DEVICE, SYSTEMS, AND METHODS OF USE
Art Unit	
Examiner Name	
Attorney Docket Number	083003-722509

SIGNATURE of Applicant or Patent Practitioner			
Signature	/Joshua J. Pranckun/	Date (Optional)	03/18/2022
Name	Joshua J. Pranckun	Registration Number	70712
Title (if Applicant is a juristic entity)	Attorney for Applicant		
Applicant Name (if Applicant is a juristic entity)		Corbin Clinical Resources, LLC	
<p>NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4(d) for signature requirements and certifications. If more than one applicant, use multiple forms.</p>			
☐ *Total of _____ forms are submitted.			

This collection of information is required by 37 CFR 1.131, 1.32, and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select extension **CORBIN-CLINICAL-002353**

I hereby revoke all previous powers of attorney given in the application identified in either the attached transmittal letter or the boxes below.	
Application Number <div style="border: 1px solid black; text-align: center; padding: 2px;">16/115,180</div>	Filing Date <div style="border: 1px solid black; text-align: center; padding: 2px;">08/28/2018</div>
(Note: The boxes above may be left blank if information is provided on form PTO/AIA/82A.)	
☒ I hereby appoint the Patent Practitioner(s) associated with the following Customer Number as my/our attorney(s) or agent(s), and to transact all business in the United States Patent and Trademark Office connected therewith for the application referenced in the attached transmittal letter (form PTO/AIA/82A) or identified above:	
<div style="border: 1px solid black; text-align: center; padding: 2px;">24030</div>	
OR ☐ I hereby appoint Practitioner(s) named in the attached list (form PTO/AIA/82C) as my/our attorney(s) or agent(s), and to transact all business in the United States Patent and Trademark Office connected therewith for the patent application referenced in the attached transmittal letter (form PTO/AIA/82A) or identified above. (Note: Complete form PTO/AIA/82C.)	
Please recognize or change the correspondence address for the application identified in the attached transmittal letter or the boxes above to:	
☒ The address associated with the above-mentioned Customer Number	
OR ☐ The address associated with Customer Number:	
<div style="border: 1px solid black; height: 20px; width: 150px;"></div>	
OR ☐ Firm or Individual Name	
Address	
City	
State	
Zip	
Country	
Telephone	
Email	
I am the Applicant (If the Applicant is a juristic entity, list the Applicant name in the box):	
<div style="border: 1px solid black; padding: 5px;">Corbin Clinical Resources, LLC</div>	
☐ Inventor or Joint Inventor (title not required below)	
☐ Legal Representative of a Deceased or Legally Incapacitated Inventor (title not required below)	
☒ Assigned or Person to Whom the Inventor is Under an Obligation to Assign (provide signer's title if applicant is a juristic entity)	
☐ Person Who Otherwise Shows Sufficient Proprietary Interest (e.g., a petition under 37 CFR 1.46(b)(2) was granted in the application or is concurrently being filed with this document) (provide signer's title if applicant is a juristic entity)	
SIGNATURE of Applicant for Patent	
The undersigned (whose title is supplied below) is authorized to act on behalf of the applicant (e.g., where the applicant is a juristic entity).	
Signature	Date (Optional)
<div style="border: 1px solid black; padding: 2px;">Matthew J. Aldrey</div>	<div style="border: 1px solid black; padding: 2px;">8/28/18</div>
Name	Title
President/CEO	
NOTE: Signature - This form must be signed by the applicant in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. If more than one applicant, use multiple forms.	
☐ Total of _____ forms are submitted.	

CORBIN_CLINICAL-002354

Electronic Acknowledgement Receipt	
EFS ID:	45266060
Application Number:	17698641
International Application Number:	
Confirmation Number:	9971
Title of Invention:	TRANSPERINEAL PROSTATE BIOPSY DEVICE, SYSTEMS, AND METHODS OF USE
First Named Inventor/Applicant Name:	Matthew J. ALLAWAY
Customer Number:	24030
Filer:	Joshua Prackun/Donna Carrera
Filer Authorized By:	Joshua Prackun
Attorney Docket Number:	083003-722509
Receipt Date:	18-MAR-2022
Filing Date:	
Time Stamp:	16:44:10
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no
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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Power of Attorney	722509_POA_transmittal.pdf	272416	no	2
			9d829c8d83b60e742ae0a628cd9277ec481dd350		

Warnings:

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Information:	
Total Files Size (in bytes):	272416
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