



US00D974561S

(12) **United States Design Patent** (10) **Patent No.:** **US D974,561 S**  
**Walsh** (45) **Date of Patent:** **\*\* Jan. 3, 2023**

(54) **RADIAL ULTRASOUND NEEDLE BIOPSY DEVICE**

(71) Applicant: **Boston Scientific Scimed, Inc.**, Maple Grove, MN (US)

(72) Inventor: **Kevin Walsh**, Wellesly, MA (US)

(73) Assignee: **Boston Scientific Scimed Inc.**, Maple Grove, MN (US)

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

(21) Appl. No.: **29/691,633**

(22) Filed: **May 17, 2019**

(51) **LOC (14) Cl.** ..... **24-02**

(52) **U.S. Cl.**  
USPC ..... **D24/146**

(58) **Field of Classification Search**

USPC ..... D24/119, 133, 137, 138, 151, 146, 147, D24/152, 108, 111, 112, 113, 117, 118, D24/127, 130, 135, 141, 143, 144, 148, D24/153, 154, 170, 176, 179, 216, 222, D24/145, 150; D8/51, 68, 107; D7/649  
CPC ..... A61B 1/00; A61B 1/00137; A61B 1/005; A61B 1/0014; A61B 1/0676; A61B 1/0669; A61B 1/00121; A61B 1/00133; A61B 1/00071; A61B 1/00064; A61B 1/00068;

(Continued)

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

D353,886 S \* 12/1994 Bales ..... D24/108  
D381,747 S \* 7/1997 Kapec ..... D24/146

(Continued)

**FOREIGN PATENT DOCUMENTS**

JP 2001104315 A 4/2001  
JP 1141561 S 5/2002

(Continued)

**OTHER PUBLICATIONS**

International Search Report and Written Opinion for the International Patent Application No. PCT/US2020/033152, dated Aug. 14, 2020, 12 pages.

*Primary Examiner* — T Chase Nelson

*Assistant Examiner* — Kelly L Gross

(74) *Attorney, Agent, or Firm* — Seager, Tufte & Wickhem, LLP

(57) **CLAIM**

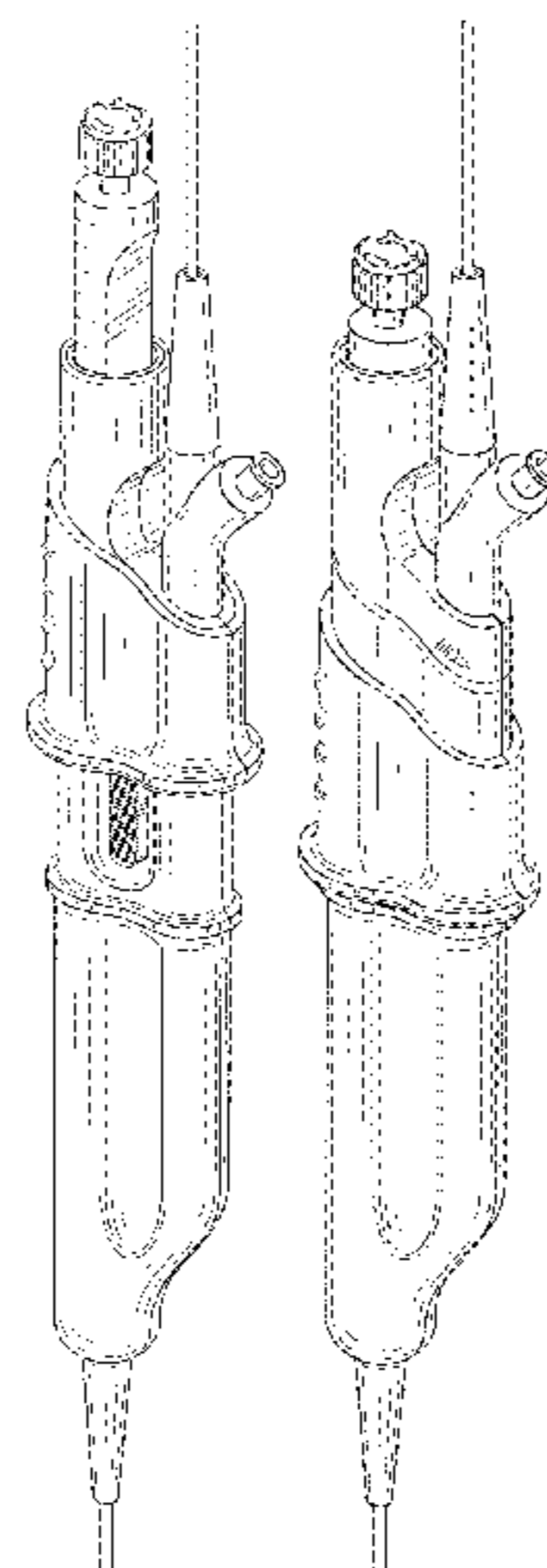
The ornamental design for a radial ultrasound needle biopsy device, as shown and described.

**DESCRIPTION**

FIG. 1 is a top, front, right side perspective view of a radial ultrasound needle biopsy device showing an embodiment of our new design in an un-activated configuration; FIG. 2 is a top, front, right side perspective view of the radial ultrasound needle biopsy device of FIG. 1 in an activated configuration; FIG. 3 is a right side elevational view of the radial ultrasound needle biopsy device of FIG. 1; FIG. 4 is a left side elevational view of the radial ultrasound needle biopsy device of FIG. 1; FIG. 5 is a back elevational view of the radial ultrasound needle biopsy device of FIG. 1; FIG. 6 is a front elevational view of the radial ultrasound needle biopsy device of FIG. 1; FIG. 7 is a top plan view of the radial ultrasound needle biopsy device of FIG. 1; and, FIG. 8 is a bottom plan view of the radial ultrasound needle biopsy device of FIG. 1.

The dashed lines in the drawings are environmental and for illustrative purposes only and form no part of the claimed design. The dot-dash lines illustrate boundaries and form no part of the claimed design.

**1 Claim, 6 Drawing Sheets**



(58) **Field of Classification Search**

CPC ..... A61B 1/00112; A61B 1/0125; A61B 17/3478; A61B 17/0684; A61B 17/068; A61B 17/0469; A61B 17/320092; A61B 17/32; A61B 18/1445; A61B 1/00087; A61B 1/00098; A61B 1/0052; A61B 1/00101; A61B 1/00066; A61B 1/0057; A61B 1/0011; A61B 10/0275; A61B 10/0266; A61B 10/025; A61B 10/04; A61B 17/34; A61B 2010/0208; A61M 25/09; A61M 2005/1585; A61F 2002/011  
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D402,028 S \* 12/1998 Grimm ..... D24/133  
D405,881 S \* 2/1999 Snoke ..... D24/112  
D445,899 S \* 7/2001 McLeod ..... D24/145  
D453,833 S \* 2/2002 Hess ..... D24/144  
D481,124 S \* 10/2003 Hayamizu ..... D24/138  
D486,910 S \* 2/2004 Hayamizu ..... D24/138  
D490,898 S \* 6/2004 Hayamizu ..... D24/129  
D493,529 S \* 7/2004 Hayamizu ..... D24/138  
D494,270 S \* 8/2004 Reschke ..... D24/133  
D495,051 S \* 8/2004 Reschke ..... D24/133  
D495,052 S \* 8/2004 Reschke ..... D24/133  
D495,946 S \* 9/2004 Py ..... D24/150  
D498,846 S \* 11/2004 Hayamizu ..... D24/138  
D507,752 S \* 7/2005 Py ..... D9/688  
D512,147 S \* 11/2005 Barker ..... D24/133  
D516,721 S \* 3/2006 Py ..... D24/150  
D533,274 S \* 12/2006 Visconti ..... D24/133  
D533,662 S \* 12/2006 Nakajima ..... D24/138  
D534,655 S \* 1/2007 Iranyi ..... D24/138  
D536,784 S \* 2/2007 Bacher ..... D24/133  
D548,328 S \* 8/2007 Fedenia ..... D24/108  
D553,242 S \* 10/2007 Fedenia ..... D24/108  
D586,916 S \* 2/2009 Faulkner ..... D24/146  
D587,805 S \* 3/2009 Gokhale ..... D24/141  
D590,502 S \* 4/2009 Geisser ..... D24/133  
D630,728 S \* 1/2011 Dombrowski ..... D24/111  
D640,374 S \* 6/2011 Liu ..... D24/133  
D658,026 S \* 4/2012 Dale ..... D8/107  
D660,430 S \* 5/2012 Horning ..... D24/146  
D665,909 S \* 8/2012 Dodd ..... D24/146  
D671,644 S \* 11/2012 Dodd ..... D24/146  
D674,082 S \* 1/2013 Efinger ..... D24/108  
D680,640 S \* 4/2013 Merchant ..... D24/108  
D690,428 S \* 9/2013 Blaine ..... A61M 5/42  
D24/200  
D690,811 S \* 10/2013 Horning ..... D24/146  
D692,559 S \* 10/2013 Scheibel ..... D24/133  
D695,404 S \* 12/2013 Horning ..... D24/146  
D698,441 S \* 1/2014 Meguro ..... D24/138  
D698,921 S \* 2/2014 Koennecke ..... D24/138  
D704,332 S \* 5/2014 Casey ..... D24/133  
D704,336 S \* 5/2014 Chon et al.  
D707,818 S \* 6/2014 Ghannoum ..... D24/143  
D708,744 S \* 7/2014 Morris ..... D24/144  
8,951,207 B2 \* 2/2015 Hibner ..... A61B 10/0266  
600/565  
D723,686 S \* 3/2015 Kratoska ..... D24/144  
D723,687 S \* 3/2015 Kratoska ..... D24/144  
D726,905 S \* 4/2015 Tegg ..... D24/130  
D726,906 S \* 4/2015 Reed ..... D24/130  
D733,874 S \* 7/2015 Yu ..... D24/130  
D733,876 S \* 7/2015 Rydberg ..... D24/146  
D735,330 S \* 7/2015 Rydberg ..... D24/146  
9,072,502 B2 \* 7/2015 Heske ..... A61B 10/0275  
9,078,640 B1 \* 7/2015 An ..... A61B 10/0283  
D736,917 S \* 8/2015 Katsura ..... D24/133  
D737,440 S \* 8/2015 Shabaz ..... D24/146  
9,101,351 B2 \* 8/2015 Thompson ..... A61B 10/0275  
D737,966 S \* 9/2015 Meguro ..... D24/138

D746,457 S \* 12/2015 Swick ..... D24/146  
D747,801 S \* 1/2016 Kwon ..... D24/133  
D753,301 S \* 4/2016 Fiksen ..... D24/144  
9,326,755 B2 \* 5/2016 Fiebig ..... A61B 10/0266  
D759,246 S \* 6/2016 Allen ..... D24/146  
D770,044 S \* 10/2016 Fiksen ..... D24/144  
9,456,808 B2 \* 10/2016 Kapushion ..... A61B 5/4312  
D770,618 S \* 11/2016 Fiksen ..... D24/144  
D777,915 S \* 1/2017 Tanaka ..... D24/138  
9,538,994 B2 \* 1/2017 Hibner ..... A61B 10/0275  
D779,053 S \* 2/2017 Kobida ..... D24/108  
9,603,587 B2 \* 3/2017 Fiebig ..... A61B 10/0266  
D785,794 S \* 5/2017 Magno, Jr. .... D24/146  
D786,429 S \* 5/2017 Cummins ..... D24/141  
D794,193 S \* 8/2017 Schuerg ..... D24/144  
D794,790 S \* 8/2017 Shi ..... D24/146  
9,724,073 B2 \* 8/2017 Hathaway ..... A61B 10/04  
D798,443 S \* 9/2017 Matthison-Hansen ..... D24/128  
D802,769 S \* 11/2017 Robertson ..... D24/167  
9,833,359 B2 \* 12/2017 Clopp ..... A61F 11/002  
9,833,360 B2 \* 12/2017 Andreas ..... A61F 11/002  
D809,137 S \* 1/2018 Ratjen ..... D24/130  
9,901,393 B2 \* 2/2018 Sunenshine ..... A61B 18/1206  
D820,436 S \* 6/2018 Kheradpir ..... D24/112  
D827,131 S \* 8/2018 Hayamizu ..... D24/129  
D827,818 S \* 9/2018 Hillukka ..... D24/130  
D831,205 S \* 10/2018 Fieber ..... D24/133  
RE47,148 E \* 12/2018 Rhad ..... A61B 10/0266  
D837,375 S \* 1/2019 Park ..... D24/146  
D839,349 S \* 1/2019 Cowen ..... D19/177  
D841,164 S \* 2/2019 Flowers ..... D24/150  
10,195,065 B2 \* 2/2019 Gillick ..... F16H 57/02  
10,195,086 B2 \* 2/2019 Van ..... A61F 11/002  
10,226,379 B2 \* 3/2019 Oberkircher ..... A61F 9/0008  
D846,738 S \* 4/2019 Kalina, Jr. .... D24/133  
D847,988 S \* 5/2019 Schnitzer ..... D24/144  
D850,618 S \* 6/2019 Elam ..... D24/152  
D851,755 S \* 6/2019 Nazzaro ..... D24/114  
10,314,563 B2 \* 6/2019 Leimbach ..... A61B 34/25  
D861,864 S \* 10/2019 Amano ..... A61B 34/76  
D24/133  
D863,006 S \* 10/2019 Buie, II ..... A61B 10/0233  
D8/25  
10,456,119 B2 \* 10/2019 Stone ..... A61B 10/0266  
D870,884 S \* 12/2019 Huels ..... A61B 10/0266  
D24/137  
D873,100 S \* 1/2020 Buie, II ..... A61B 34/25  
D8/25  
10,555,748 B2 \* 2/2020 Yates ..... A61B 17/3211  
D881,391 S \* 4/2020 Rogel ..... A61F 11/002  
D24/130  
D886,999 S \* 6/2020 Lohk ..... A61B 10/0266  
D24/138  
D888,237 S \* 6/2020 Lohk ..... A61B 10/0266  
D24/138  
10,675,050 B2 \* 6/2020 Staunton ..... A61B 34/76  
10,709,429 B2 \* 7/2020 Choi ..... A61B 10/0233  
10,709,465 B2 \* 7/2020 Chu ..... A61B 17/22031  
D893,018 S \* 8/2020 Fuentes-Ortega .....  
A61B 10/0266  
D24/112  
D898,910 S \* 10/2020 Hansen ..... A61B 10/0275  
D24/137  
D901,683 S \* 11/2020 Kalina, Jr. .... D24/133  
D904,608 S \* 12/2020 Attinger ..... A61B 10/0283  
D24/138  
D905,854 S \* 12/2020 Kao ..... A61B 10/0275  
D24/144  
10,925,763 B2 \* 2/2021 Halbert ..... A61F 2/966  
D919,804 S \* 5/2021 Cole ..... A61B 17/22031  
D24/133  
D923,176 S \* 6/2021 Bradley ..... F16H 57/02  
D24/144  
11,045,270 B2 \* 6/2021 Shelton, IV ..... A61B 17/072  
D933,820 S \* 10/2021 Ota ..... D24/133  
D933,837 S \* 10/2021 Tanghal ..... D24/187  
D938,028 S \* 12/2021 Hauser ..... D24/138  
D938,047 S \* 12/2021 Denis ..... D24/186

(56)

**References Cited**

U.S. PATENT DOCUMENTS

D938,585	S	*	12/2021	Kalina, Jr.	.....	D24/133
D939,089	S	*	12/2021	Cao	.....	D24/146
D939,092	S	*	12/2021	Roy	.....	D24/186
D944,395	S	*	2/2022	Harris	.....	D24/112
D946,753	S	*	3/2022	Swick	.....	D24/133
D949,373	S	*	4/2022	Madvin	.....	D24/214
D950,059	S	*	4/2022	Lee	.....	D24/152
D950,729	S	*	5/2022	Johnson	.....	D24/152
D950,735	S	*	5/2022	Cao	.....	D24/187
D950,736	S	*	5/2022	Cao	.....	D24/187
D955,573	S	*	6/2022	Mo	.....	D24/138
D958,344	S	*	7/2022	Ono	.....	D24/138
D958,345	S	*	7/2022	Ono	.....	D24/138
D958,989	S	*	7/2022	Renwick	.....	D24/146
D959,664	S	*	8/2022	Botansky	.....	D24/146
2013/0046316	A1		2/2013	Sullivan et al.		
2014/0296708	A1		10/2014	Flaherty et al.		

FOREIGN PATENT DOCUMENTS

JP	HH28514489	S	11/2016
WO	2017212332	A1	12/2017

\* cited by examiner

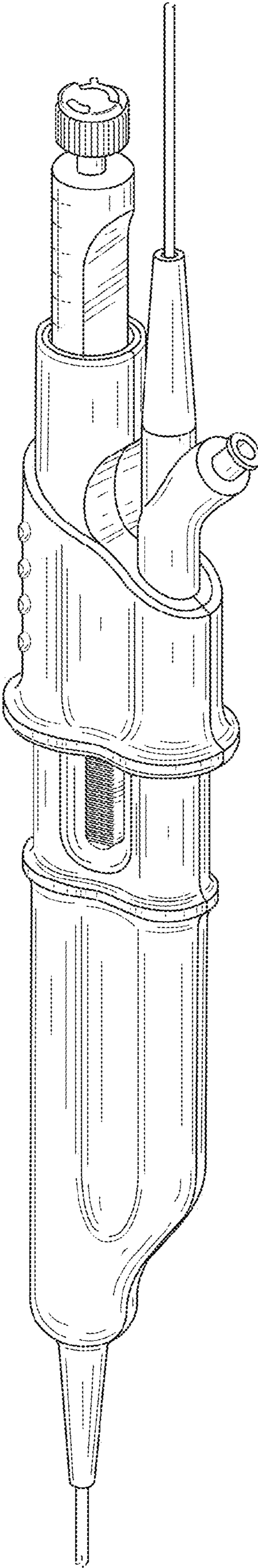
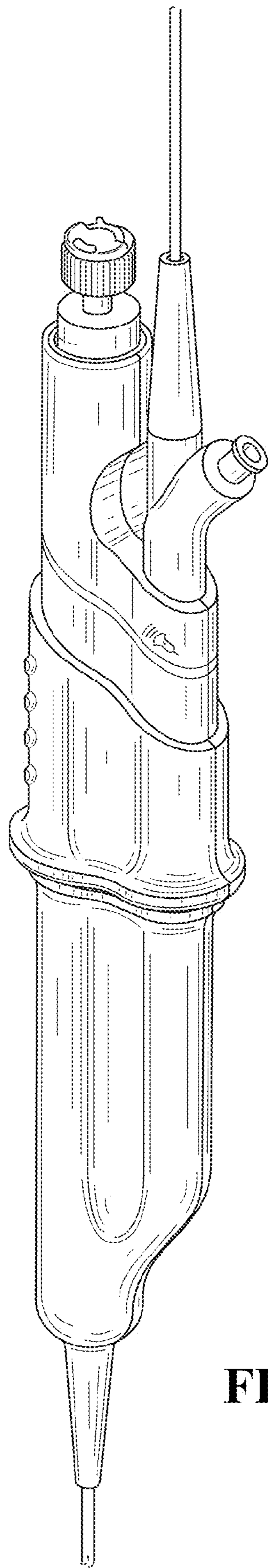
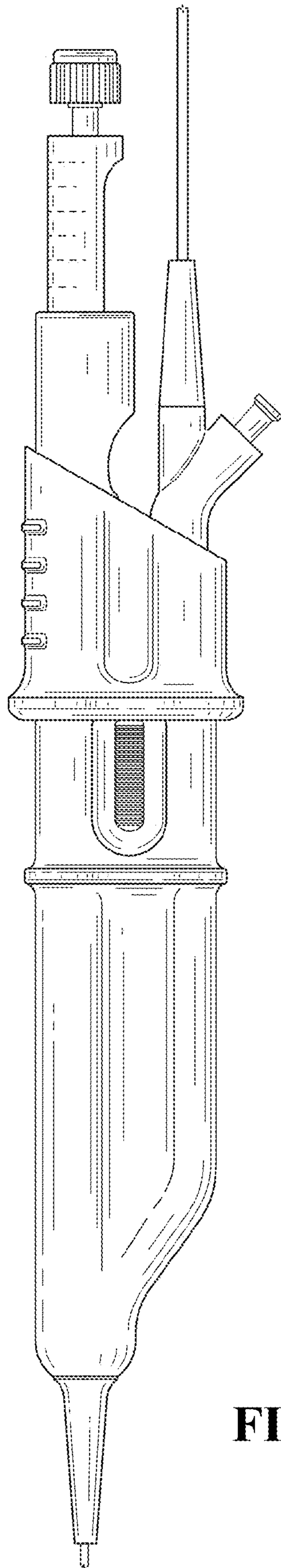


FIG. 1



**FIG. 2**



**FIG. 3**

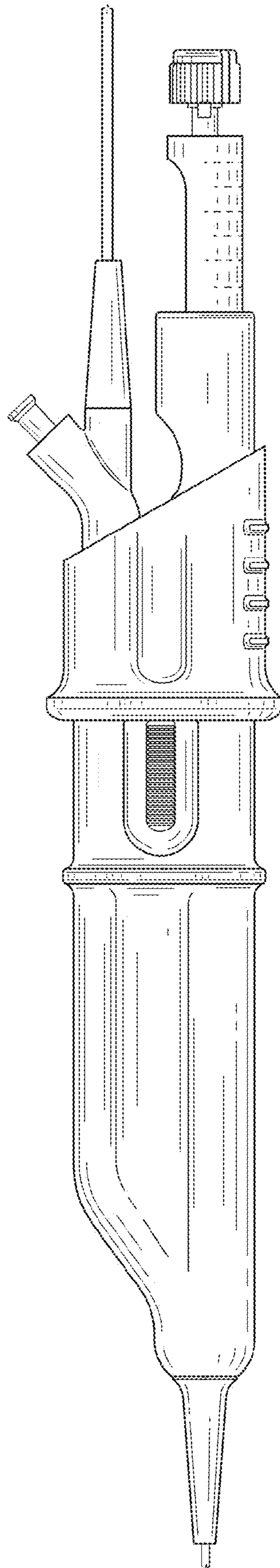


FIG. 4

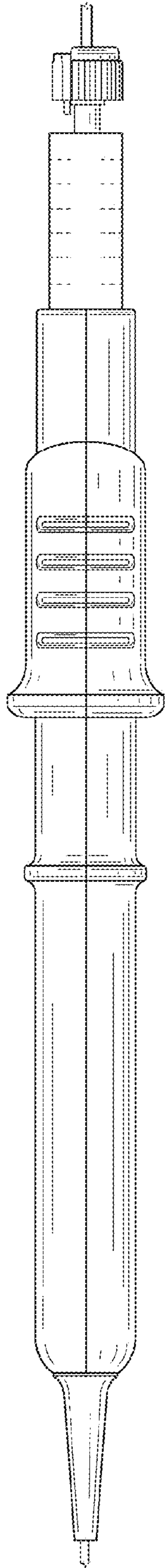


FIG. 5

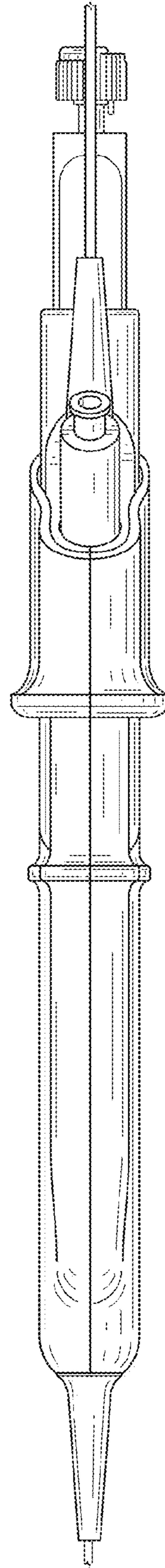
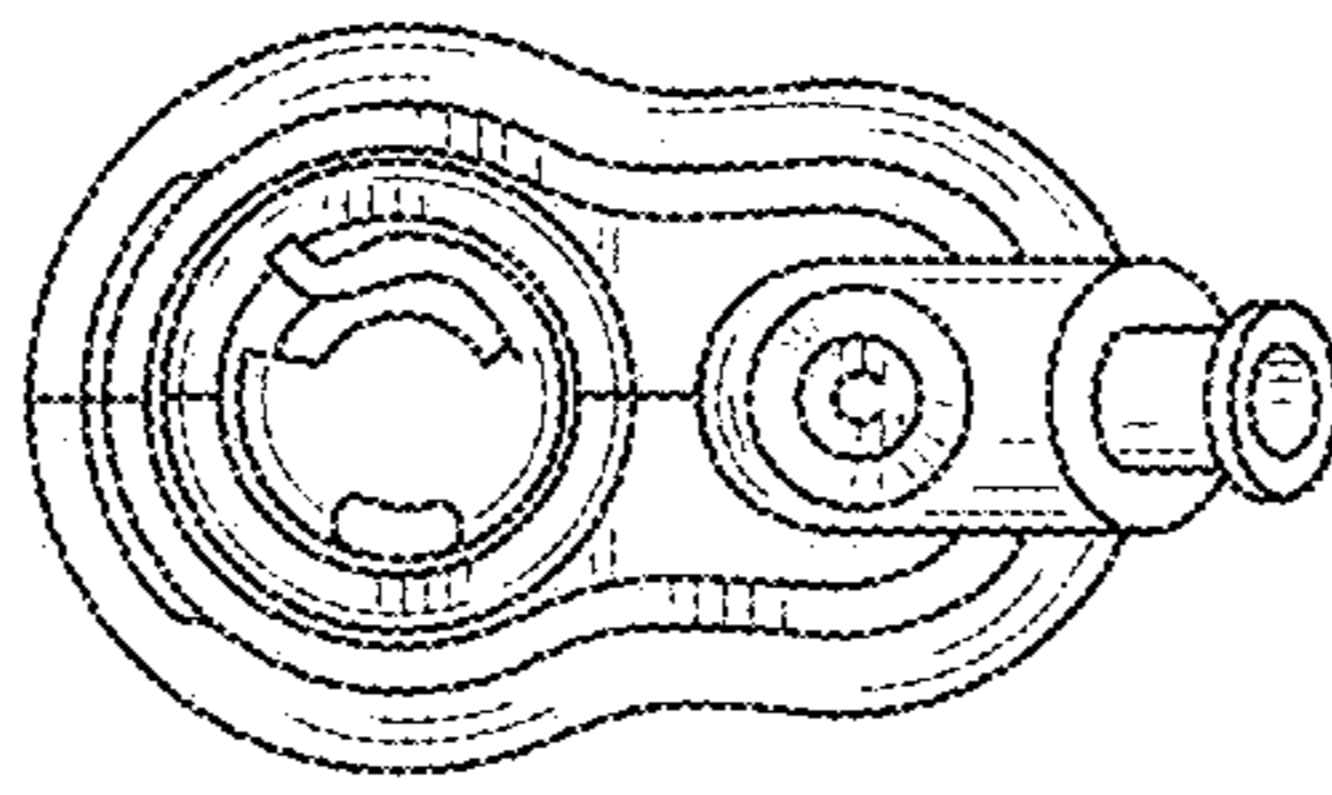
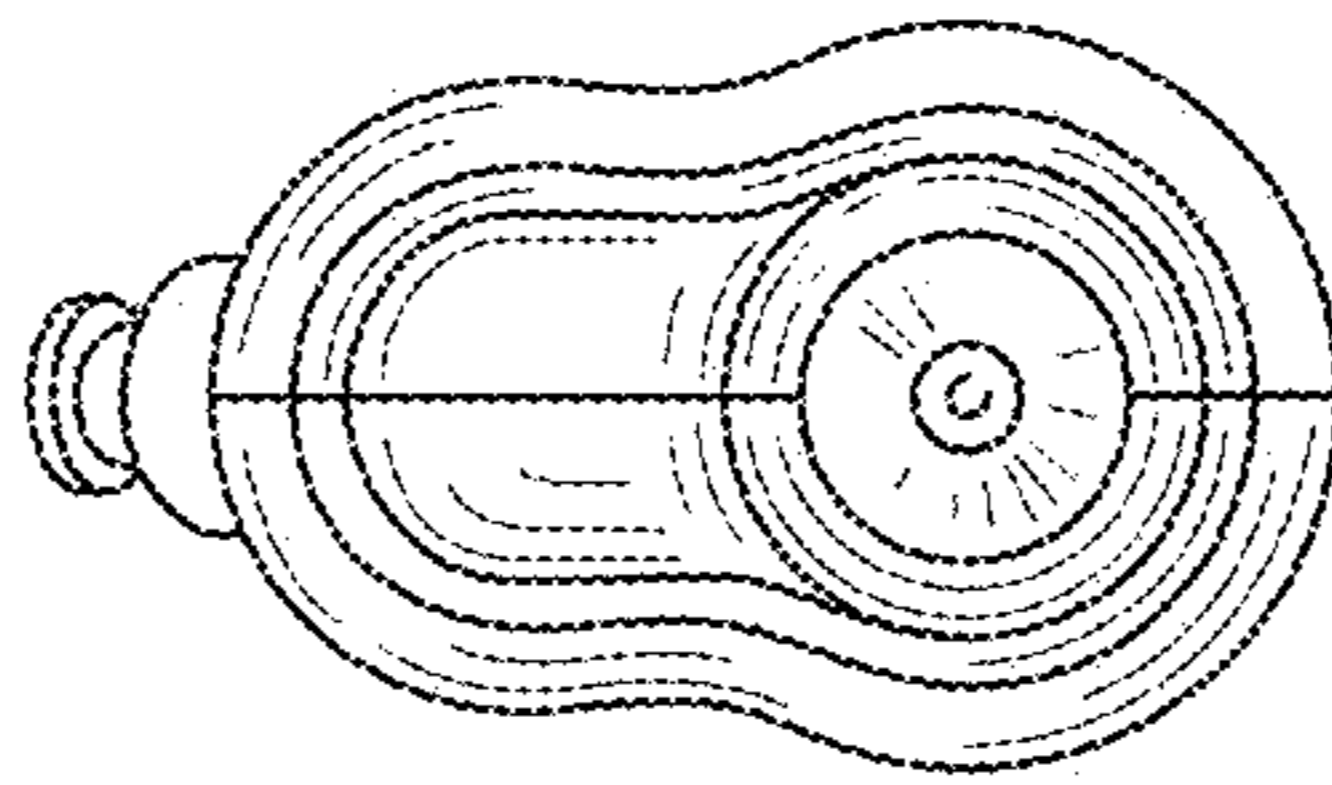


FIG. 6





**FIG. 7**



**FIG. 8**