



US00D874645S

(12) **United States Design Patent**
McCool et al.

(10) **Patent No.:** **US D874,645 S**

(45) **Date of Patent:** **** Feb. 4, 2020**

(54) **CIRCUIT KIT FOR A HUMIDIFIER AND CHAMBER ASSEMBLY**

(71) Applicant: **Fisher & Paykel Healthcare Limited, Auckland (NZ)**

(72) Inventors: **Kiel Anthony McCool, Auckland (NZ); Callum McDonald Ross, Auckland (NZ)**

(73) Assignee: **Fisher & Paykel Healthcare Limited, Auckland (NZ)**

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

(21) Appl. No.: **29/674,255**

(22) Filed: **Dec. 20, 2018**

Related U.S. Application Data

(62) Division of application No. 29/541,180, filed on Sep. 30, 2015, now Pat. No. Des. 841,147.

(51) **LOC (12) Cl.** **29-02**

(52) **U.S. Cl.**
USPC **D24/110**

(58) **Field of Classification Search**
USPC D24/110, 110.1–110.5, 127, 129
CPC A61M 16/0616; A61M 16/0633; A61M 16/06; A61M 16/0666; A61M 16/0683; A61M 16/0875; A61M 16/0816; A61M 16/08; A61M 16/0605; A61M 16/0622; A61M 16/0644

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

2,516,864 A * 8/1950 Gilmore B29B 13/00
156/143
4,188,081 A * 2/1980 Holden A47L 9/246
439/192

4,686,354 A * 8/1987 Makin A61M 16/1075
392/472
7,226,302 B2 * 6/2007 Walter A47L 9/246
439/191
D628,288 S * 11/2010 Row D24/129
(Continued)

FOREIGN PATENT DOCUMENTS

WO WO 2012/164407 A1 12/2012
WO WO 2014/077706 A1 5/2014
(Continued)

OTHER PUBLICATIONS

International Standard, ISO 11664-4, dated Nov. 1, 2008; 18 pages.
(Continued)

Primary Examiner — Lilyana Bekic

(74) *Attorney, Agent, or Firm* — Knobbe, Martens, Olson & Bear LLP

(57) **CLAIM**

The ornamental design for a circuit kit for a humidifier and chamber assembly, as shown and described.

DESCRIPTION

FIG. 1 is a top, rear and left side perspective view of a circuit kit for a humidifier and chamber assembly showing our new design;

FIG. 2 is a rear view thereof;

FIG. 3 is a front view thereof;

FIG. 4 is a left side view thereof;

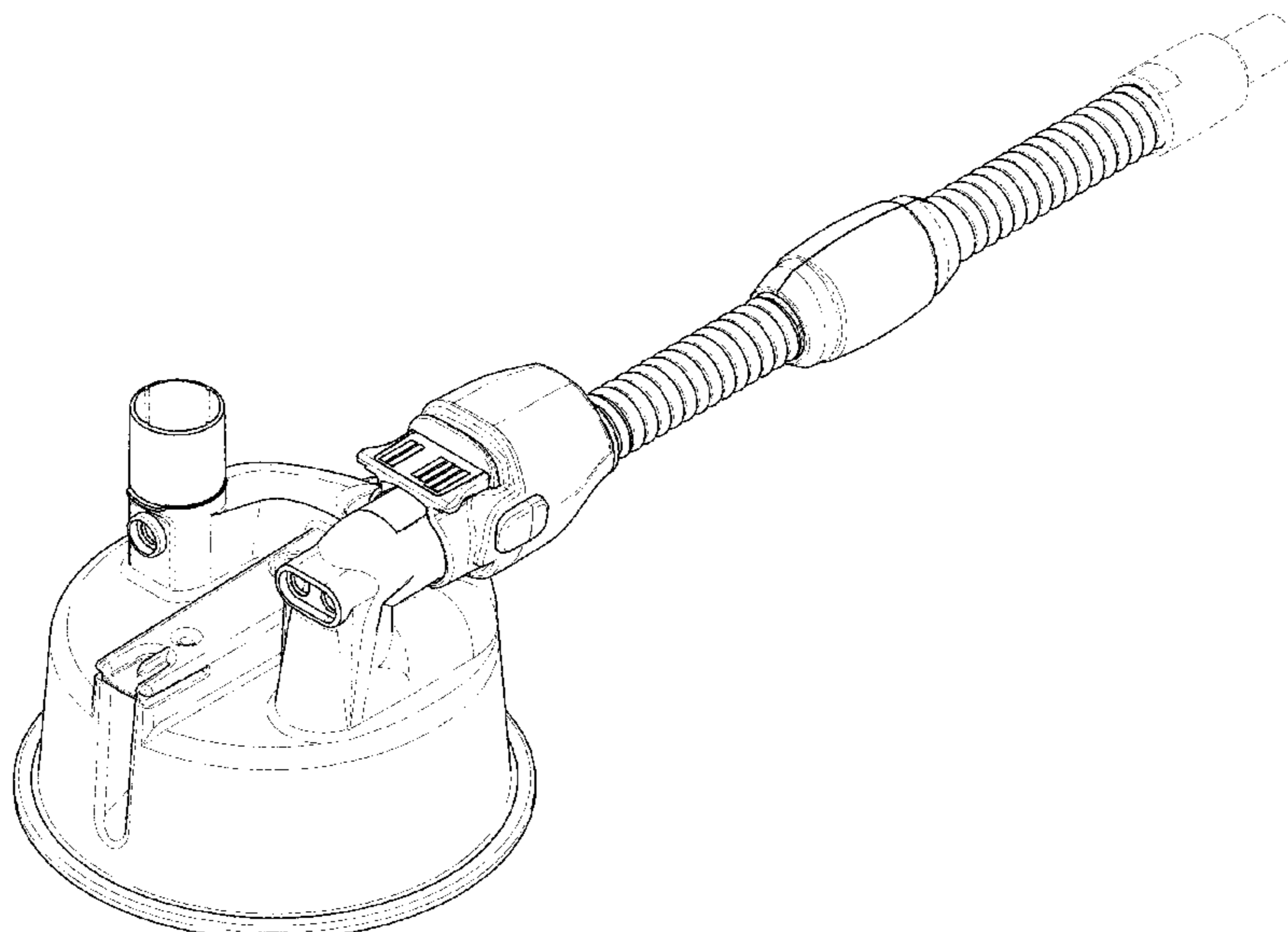
FIG. 5 is a right side view thereof;

FIG. 6 is a top view thereof; and,

FIG. 7 is a bottom view thereof.

Broken lines are used to illustrate features of the circuit kit for a humidifier and chamber assembly which form no part of the claimed design.

1 Claim, 7 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D629,891 S * 12/2010 Virr D24/129
 D629,892 S * 12/2010 Hill D24/129
 D638,536 S * 5/2011 Row D24/129
 D638,537 S * 5/2011 Virr D24/129
 D638,933 S * 5/2011 Hill D24/129
 D652,917 S * 1/2012 Hill D24/129
 D671,209 S * 11/2012 Row D24/129
 D742,508 S * 11/2015 Row D24/129
 D751,687 S * 3/2016 Daly D24/110
 D751,688 S * 3/2016 Daly D24/110
 D761,422 S * 7/2016 Row D24/129
 D762,843 S * 8/2016 Formica D24/110
 D807,995 S * 1/2018 Maeckelberghe D23/358
 D822,817 S * 7/2018 Maeckelberghe D23/358
 D822,818 S * 7/2018 Maeckelberghe D23/358
 D841,147 S * 2/2019 McCool D24/110
 D841,148 S * 2/2019 Stoks D24/110
 2012/0227738 A1 * 9/2012 Virr A61M 16/0051
 128/204.21

2013/0333701 A1* 12/2013 Herron A61M 16/0875
 128/203.27
 2015/0128944 A1* 5/2015 Buechi A61M 16/1065
 128/203.27
 2015/0306332 A1* 10/2015 Bafle A61M 16/0875
 128/202.27
 2017/0100556 A1* 4/2017 Munkelt A61M 16/0808
 2017/0304578 A1 10/2017 Stoks
 2019/0076620 A1 3/2019 Stoks

FOREIGN PATENT DOCUMENTS

WO WO 2014/088430 A1 6/2014
 WO WO 2015/142192 A1 9/2015

OTHER PUBLICATIONS

News Release; Airvo Nasal High Flow System; May 12, 2015; 2 pages.

* cited by examiner

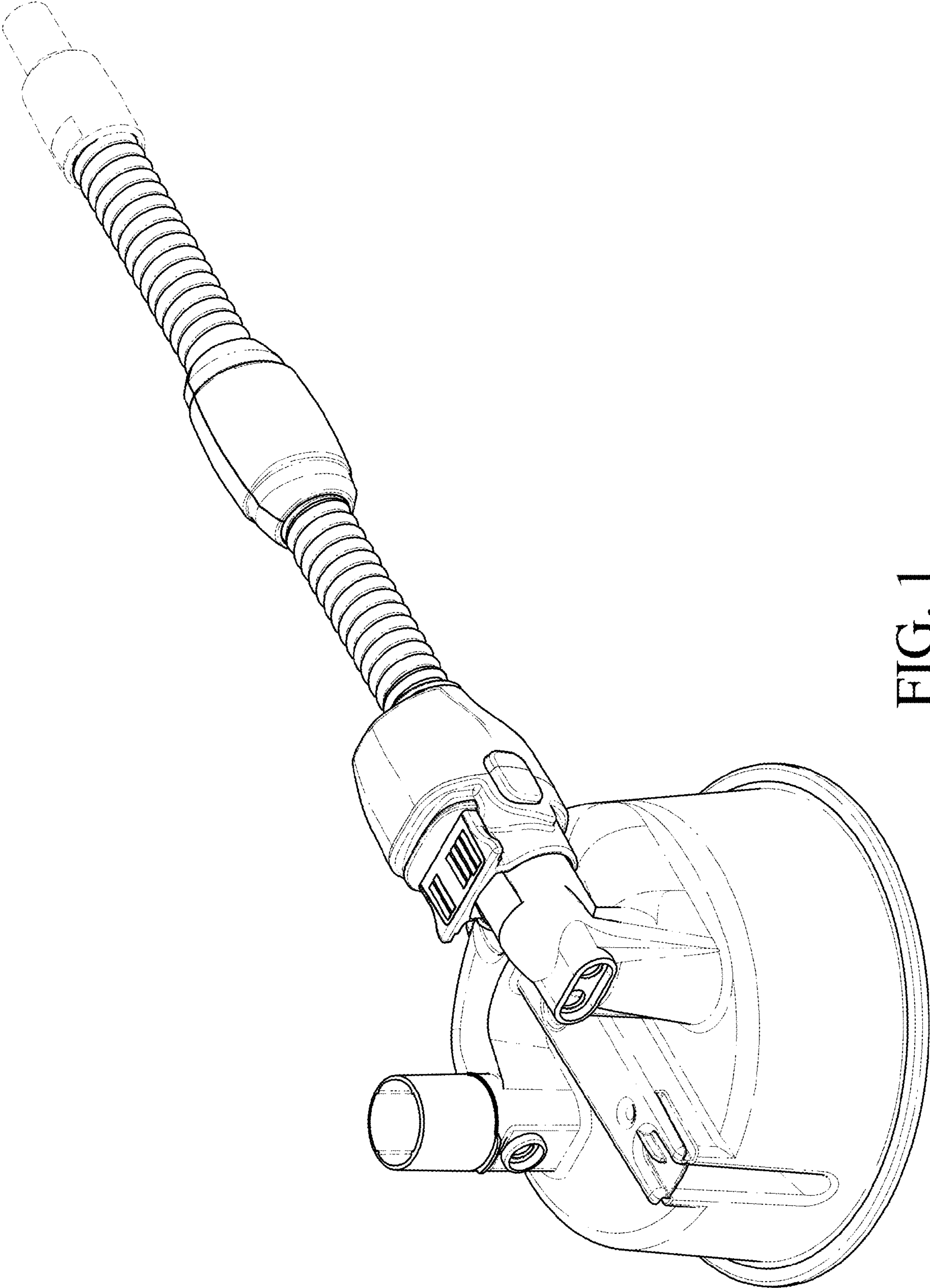


FIG. 1

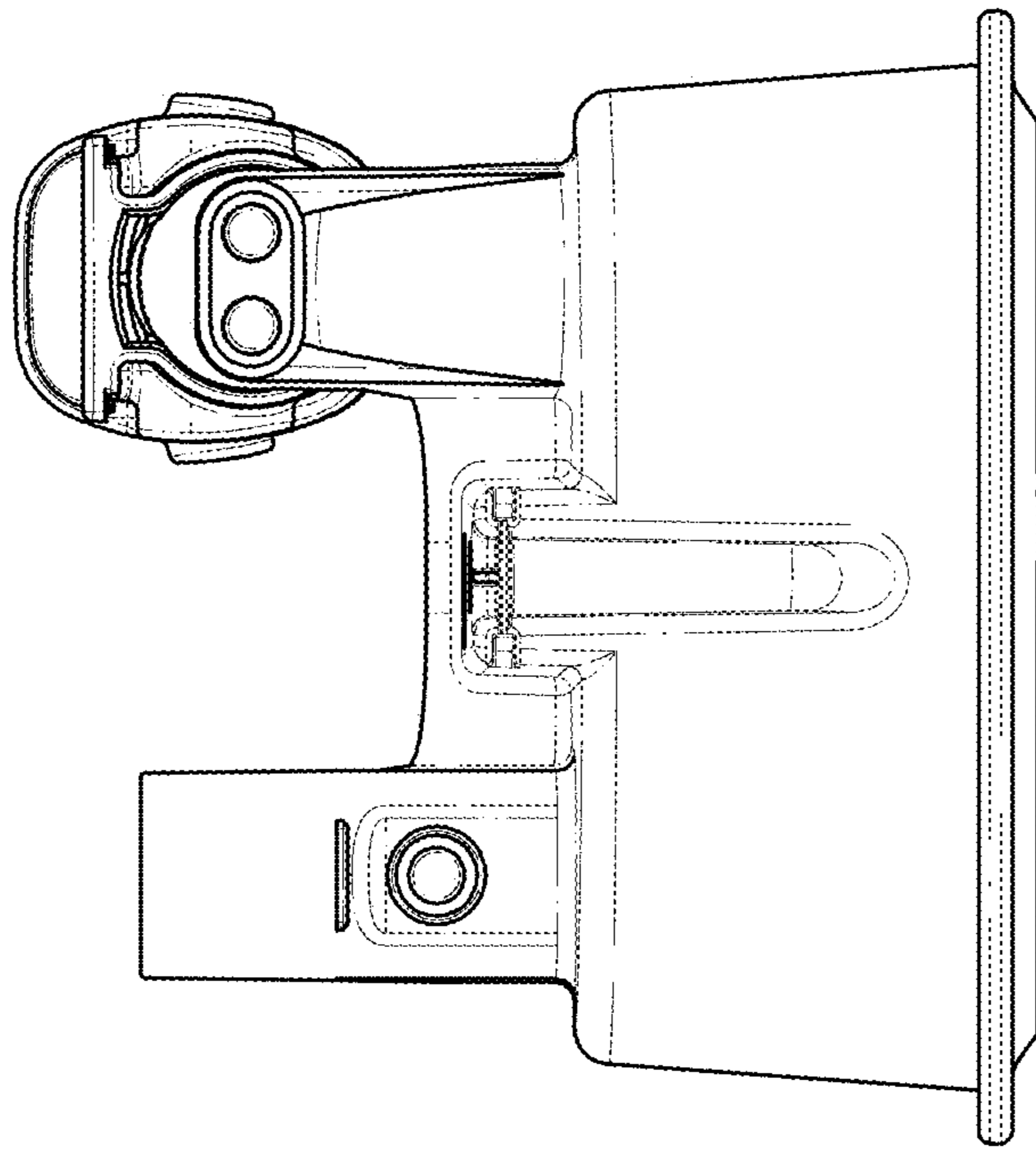


FIG. 2

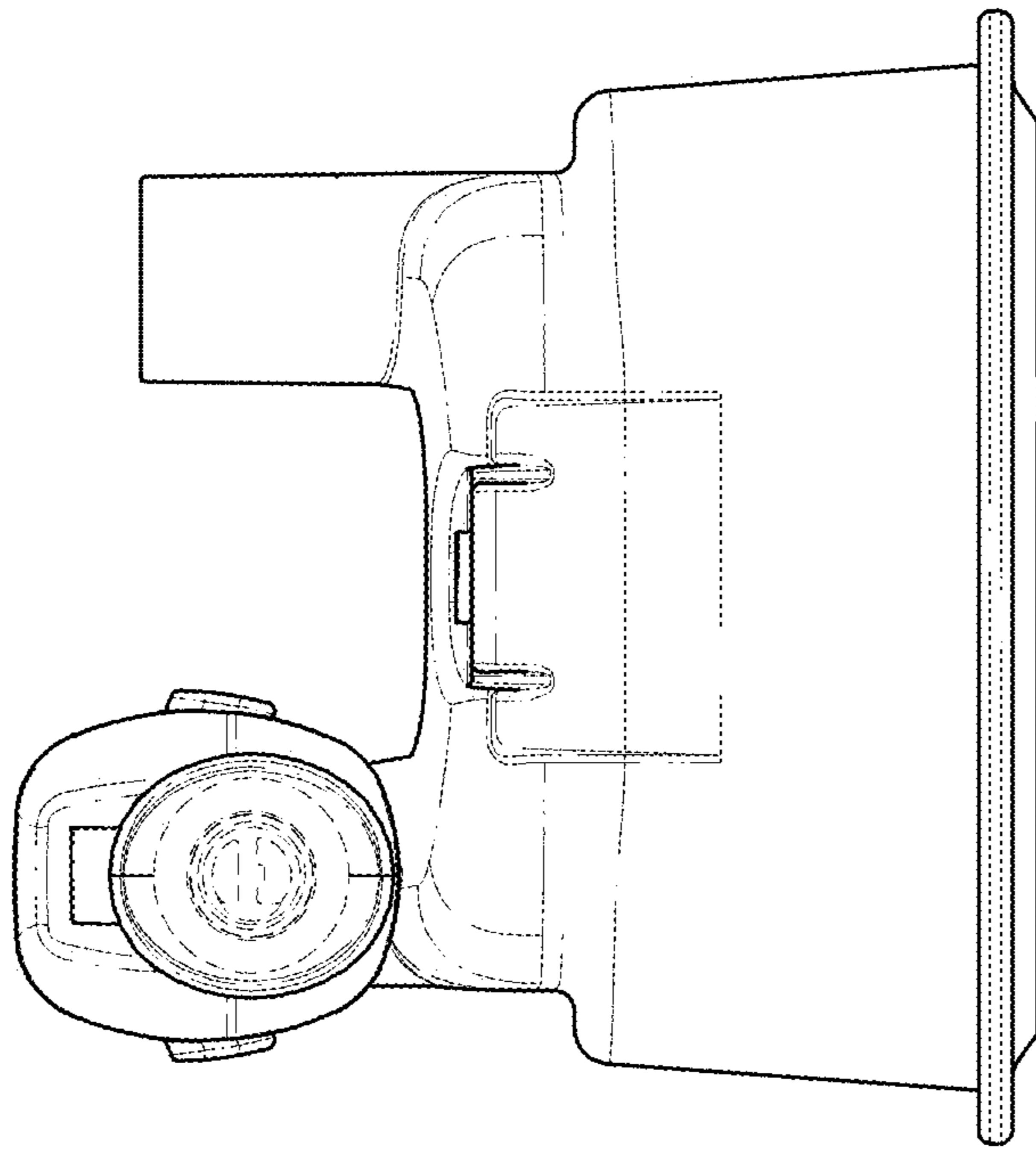


FIG. 3

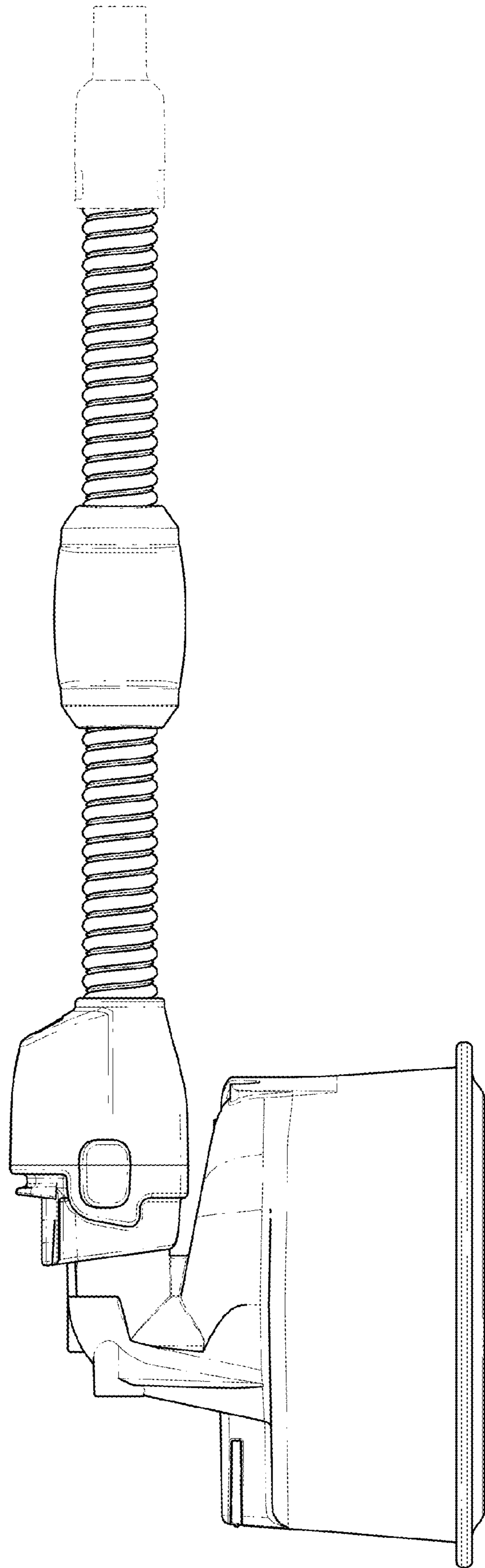


FIG. 4

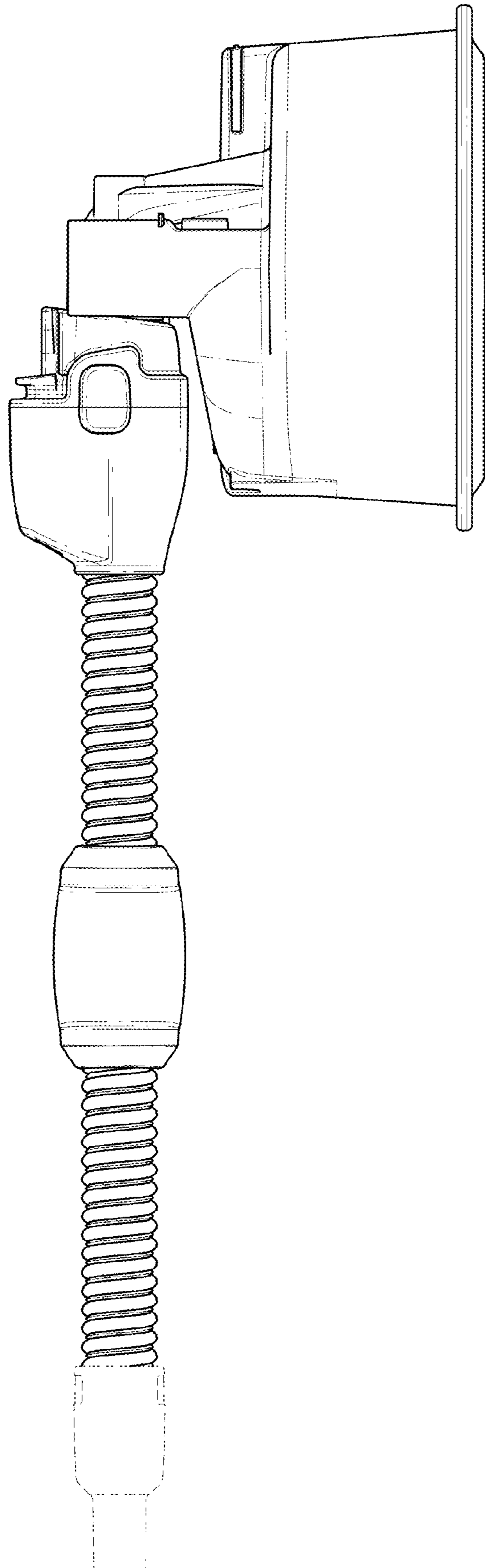


FIG. 5

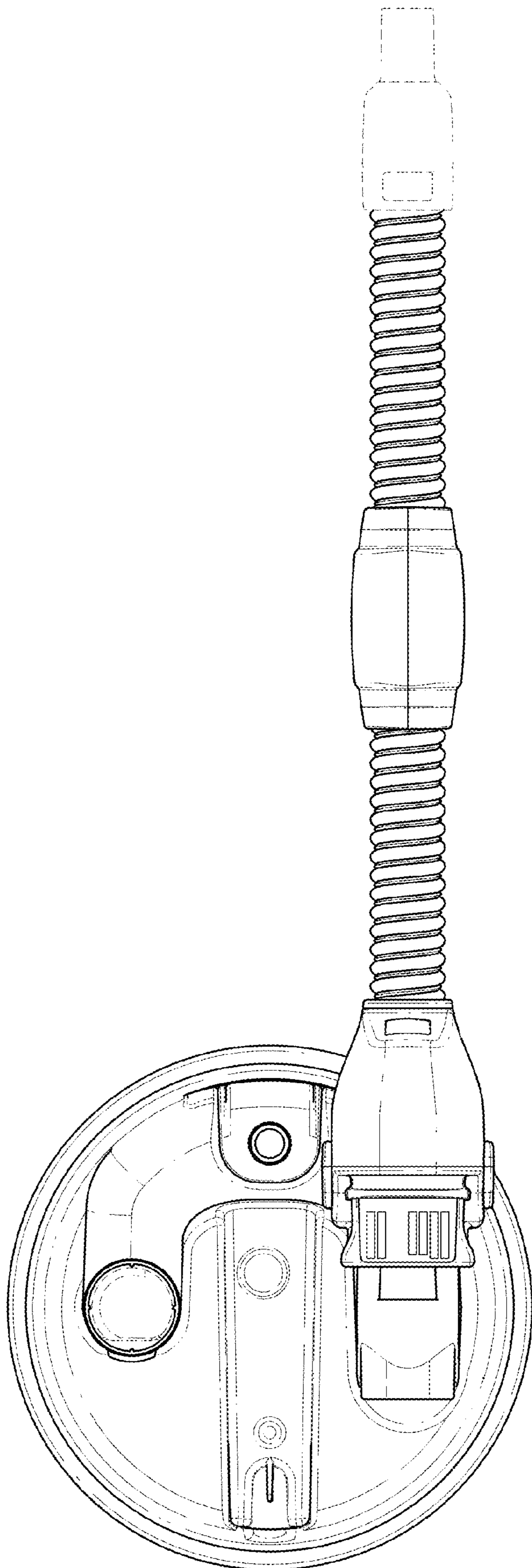


FIG. 6

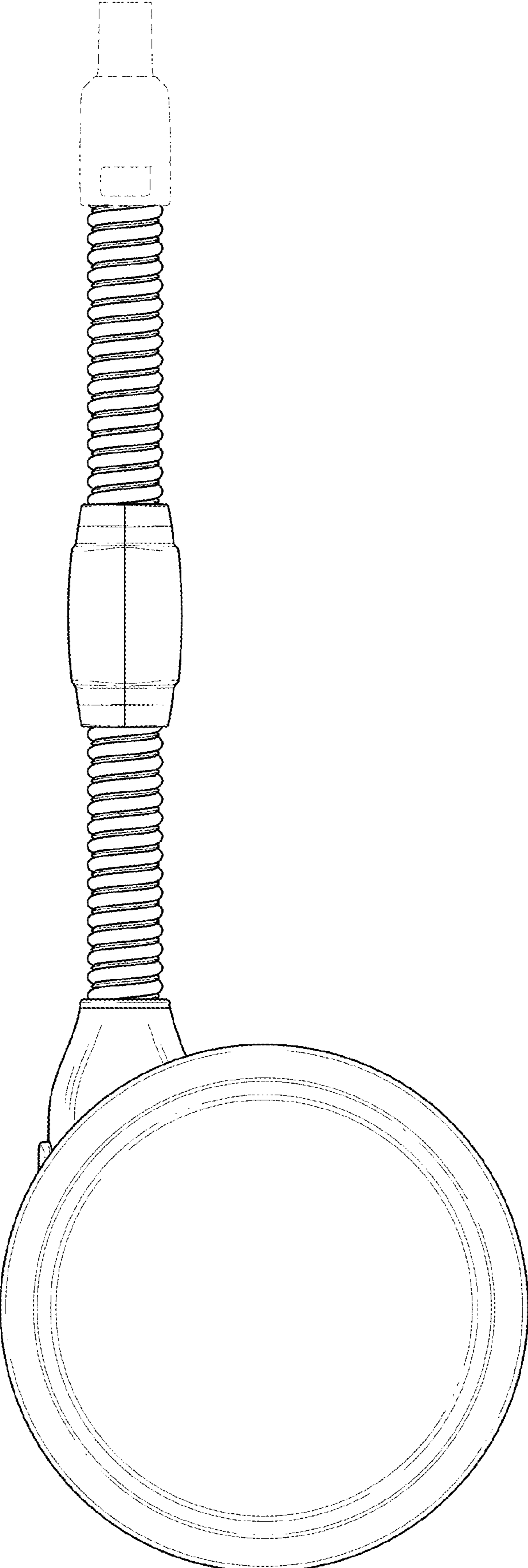


FIG. 7