



US00D950608S

(12) **United States Design Patent** (10) **Patent No.:** **US D950,608 S**  
**Yacoub et al.** (45) **Date of Patent:** **\*\* \*May 3, 2022**

(54) **INJECTOR**

(71) Applicant: **CATERPILLAR INC.**, Peoria, IL (US)

(72) Inventors: **Victor Iskander Yacoub**, Washington, IL (US); **Cory A. Brown**, Peoria, IL (US); **Satya Naga Deepak Pillarisetti**, Pontiac, IL (US); **Kevin J. Schreader**, East Peoria, IL (US); **Hoisan Kim**, Dunlap, IL (US); **Jianhua Zhang**, Dunlap, IL (US)

D263,711 S 4/1982 Dean  
4,420,973 A 12/1983 Garcia  
4,548,356 A 10/1985 Hofmann et al.  
4,550,875 A 11/1985 Teerman et al.

(Continued)

FOREIGN PATENT DOCUMENTS

CN 206092256 U 4/2017  
JP S59-119059 A 7/1984  
JP H02-140455 A 5/1990

OTHER PUBLICATIONS

(73) Assignee: **Caterpillar Inc.**, Peoria, IL (US)

(\*) Notice: This patent is subject to a terminal disclaimer.

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

(21) Appl. No.: **29/788,886**

(22) Filed: **Aug. 10, 2021**

Design U.S. Appl. No. 29/722,349 of Victor Iskander Yacoub et al., entitled "Injector," filed Jan. 29, 2020.

(Continued)

*Primary Examiner* — Ania Aman

(74) *Attorney, Agent, or Firm* — Finnegan, Henderson, Farabow, Garrett & Dunner, LLP

(57) **CLAIM**

The ornamental design for an injector, as shown and described.

**Related U.S. Application Data**

(63) Continuation of application No. 29/722,349, filed on Jan. 29, 2020.

(51) **LOC (13) Cl.** ..... **15-01**

(52) **U.S. Cl.**  
USPC ..... **D15/5**

(58) **Field of Classification Search**  
USPC ..... D15/4, 5, 6  
CPC .. F02M 61/165; F02M 61/1833; F02M 61/18;  
F02M 61/00; F02F 1/242  
See application file for complete search history.

**DESCRIPTION**

FIG. 1 is a front, top, left perspective view of an injector showing the new design;  
FIG. 2 is a rear, bottom, right perspective view thereof;  
FIG. 3 is front elevation view thereof;  
FIG. 4 is a rear elevation view thereof;  
FIG. 5 is a right-side elevation view thereof;  
FIG. 6 is a left-side elevation view thereof;  
FIG. 7 is a top plan view thereof;  
FIG. 8 is a bottom plan view thereof; and,  
FIG. 9 is an enlarged partial front elevation view as indicated in FIG. 3.

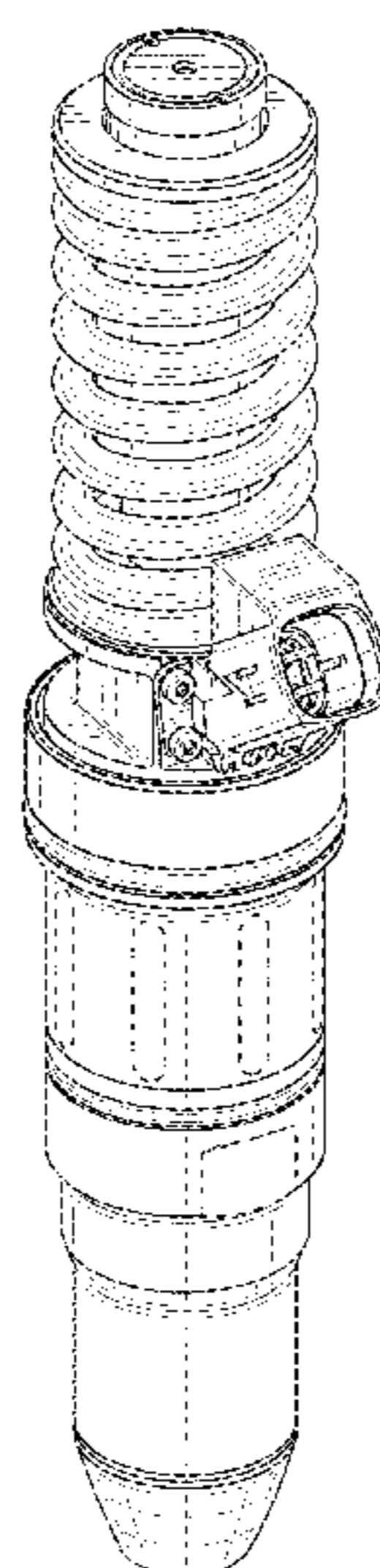
The broken lines of even length shown in the drawings illustrate portions of the injector that form no part of the claimed design.

(56) **References Cited**

U.S. PATENT DOCUMENTS

2,621,077 A \* 12/1952 Pieroni ..... F23D 11/38  
239/533.2  
3,387,790 A \* 6/1968 De Luca ..... F02M 61/10  
239/453  
D262,969 S 2/1982 Howes

**1 Claim, 8 Drawing Sheets**



(56)

**References Cited**

U.S. PATENT DOCUMENTS

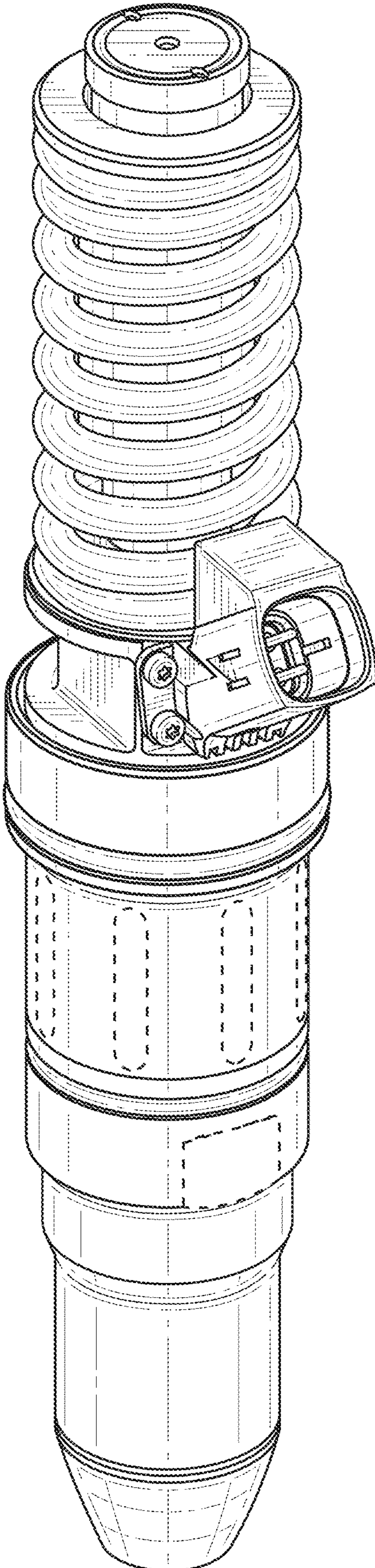
5,407,131 A \* 4/1995 Maley ..... F02M 59/366  
239/90  
5,467,924 A 11/1995 Buescher et al.  
5,628,293 A \* 5/1997 Gibson ..... F02M 63/0015  
123/446  
5,651,501 A \* 7/1997 Maley ..... F02M 59/466  
239/124  
5,807,483 A 9/1998 Cassidy et al.  
5,927,614 A 7/1999 Touvelle et al.  
5,934,559 A 8/1999 Coldren et al.  
D495,341 S \* 8/2004 O'Brien ..... D15/5  
7,448,362 B2 11/2008 Seelbach  
8,333,336 B2 12/2012 Lewis et al.  
10,371,110 B2 8/2019 Brown et al.  
2003/0116140 A1 6/2003 Forck et al.  
2003/0127532 A1 7/2003 Coldren et al.  
2004/0056114 A1 3/2004 Peterson, Jr.  
2008/0217421 A1 9/2008 Lewis et al.  
2010/0170476 A1 7/2010 Ganser et al.  
2015/0047611 A1 2/2015 Yasukawa et al.  
2016/0115924 A1 4/2016 Meek et al.

2017/0009724 A1 1/2017 Izzo et al.  
2017/0306913 A1 10/2017 Krejci  
2018/0023438 A1 1/2018 McFarland  
2018/0209390 A1 7/2018 Caceres  
2019/0039178 A1 2/2019 Shirai et al.  
2019/0040790 A1 2/2019 Kusakabe et al.  
2019/0063392 A1 2/2019 Ishii et al.  
2019/0072025 A1 3/2019 Rabhi  
2019/0162147 A1 5/2019 Caceres et al.  
2019/0195181 A1 6/2019 Brown et al.  
2019/0309719 A1\* 10/2019 Brown ..... B01D 29/31  
2019/0360445 A1\* 11/2019 Sugii ..... B05B 1/3053  
2020/0132030 A1 4/2020 Caceres et al.  
2020/0173408 A1 6/2020 Kim et al.  
2020/0240380 A1 7/2020 Itaya et al.

OTHER PUBLICATIONS

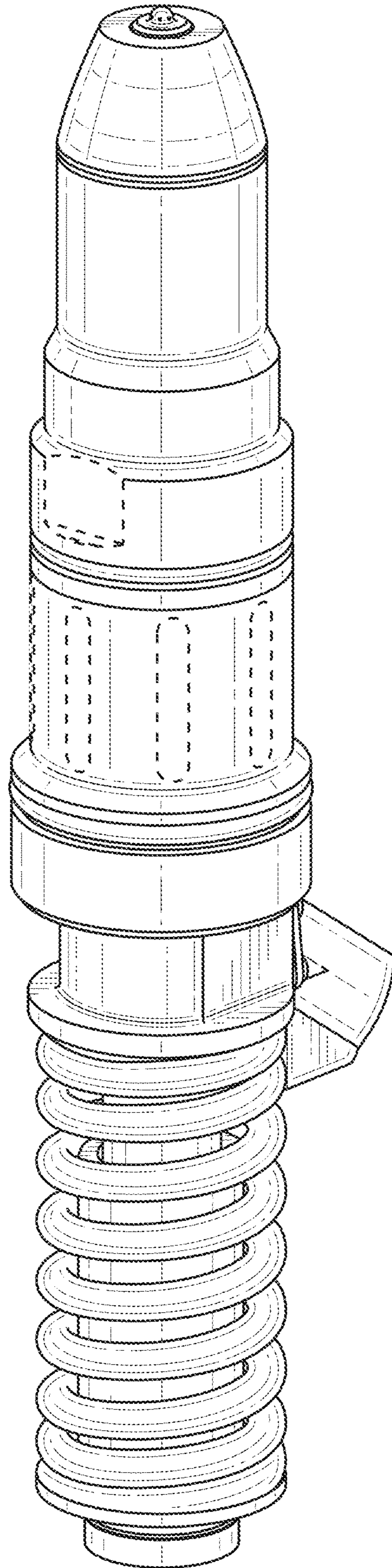
Design U.S. Appl. No. 29/722,356 of Victor Iskander Yacoub et al.,  
entitled "Injector," filed Jan. 29, 2020.  
U.S. Design Patent Application of Victor Iskander Yacoub et al.,  
entitled "Injector," filed Aug. 12, 2021.

\* cited by examiner



**FIG. 1**





**FIG. 2**

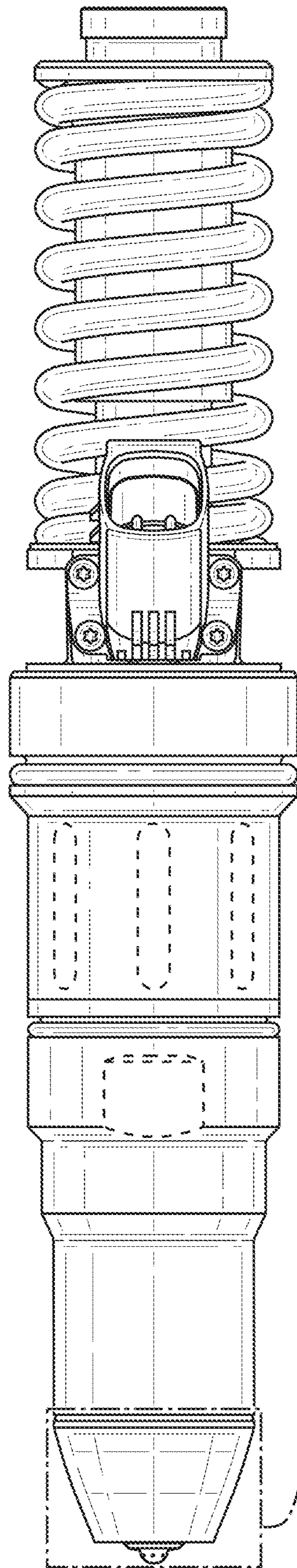
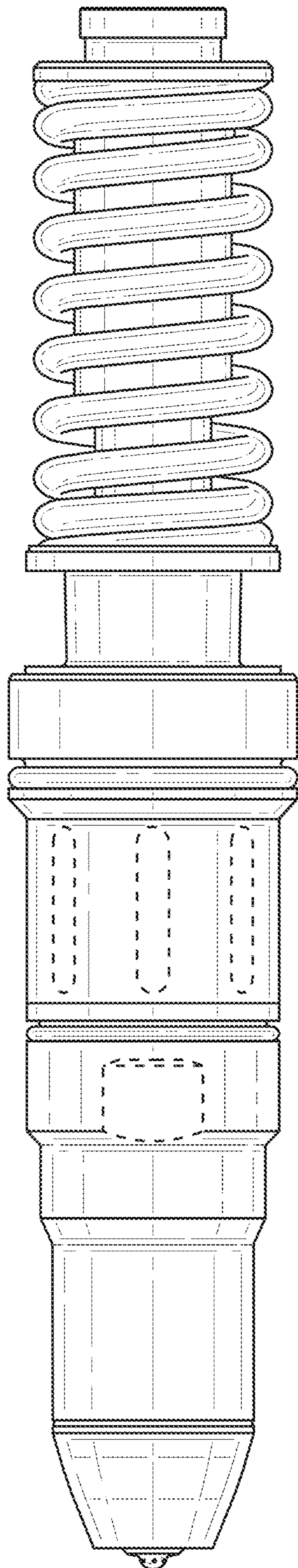
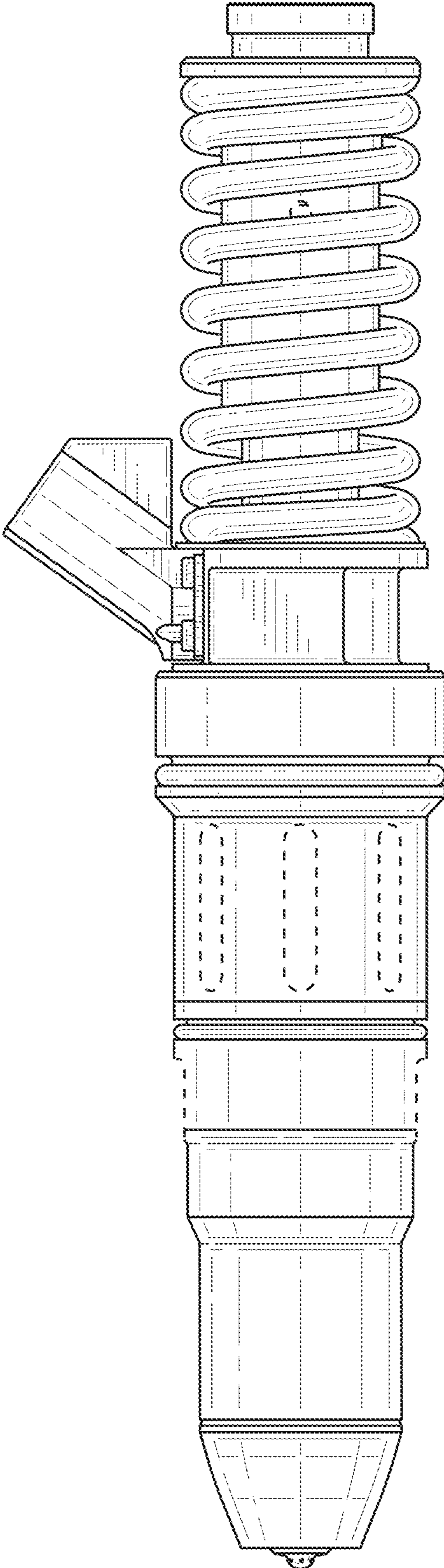


FIG. 9

**FIG. 3**

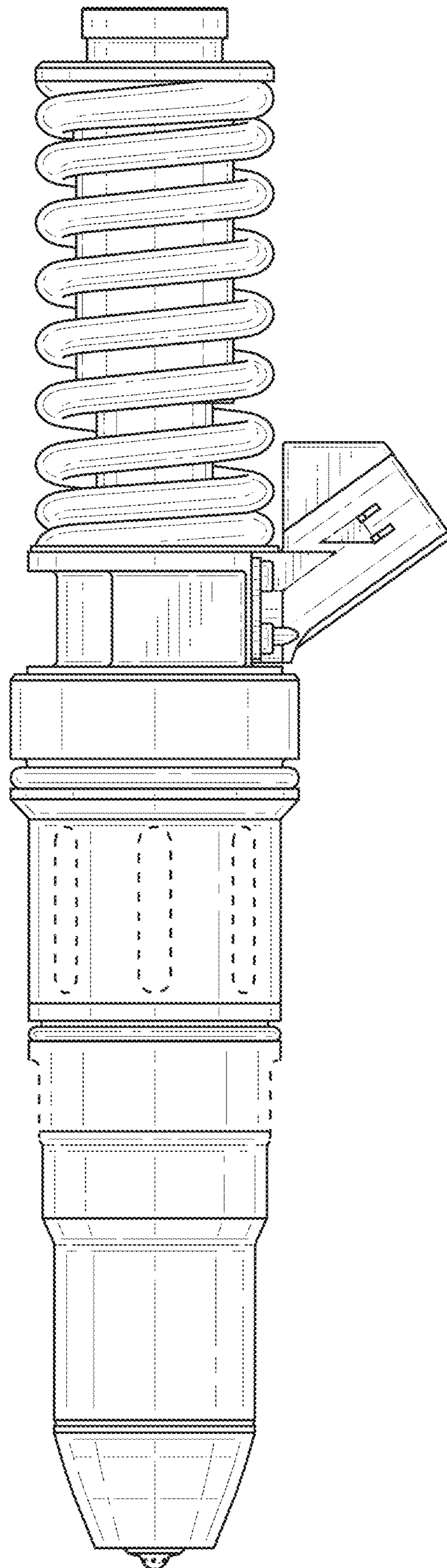


**FIG. 4**



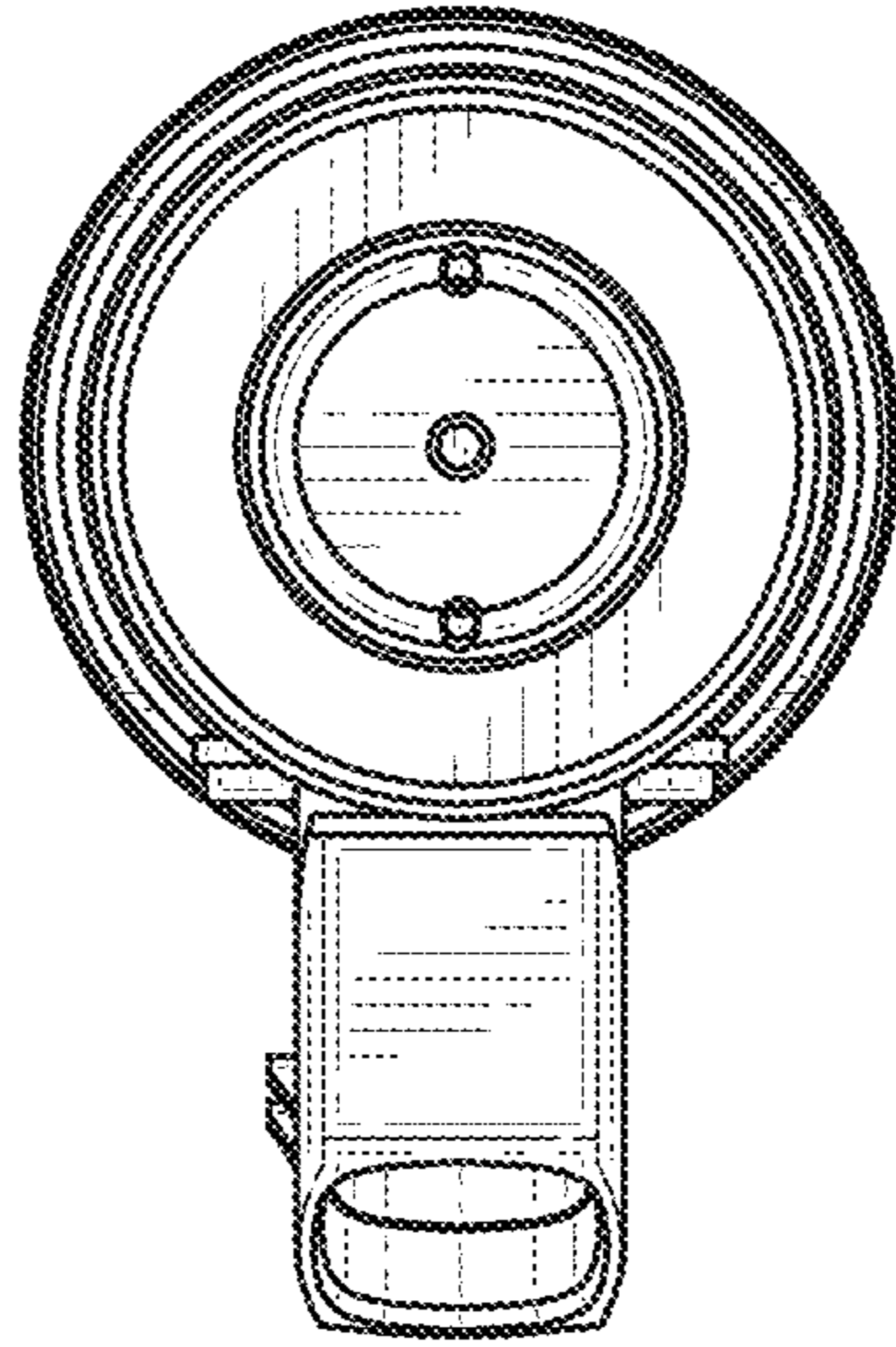
**FIG. 5**



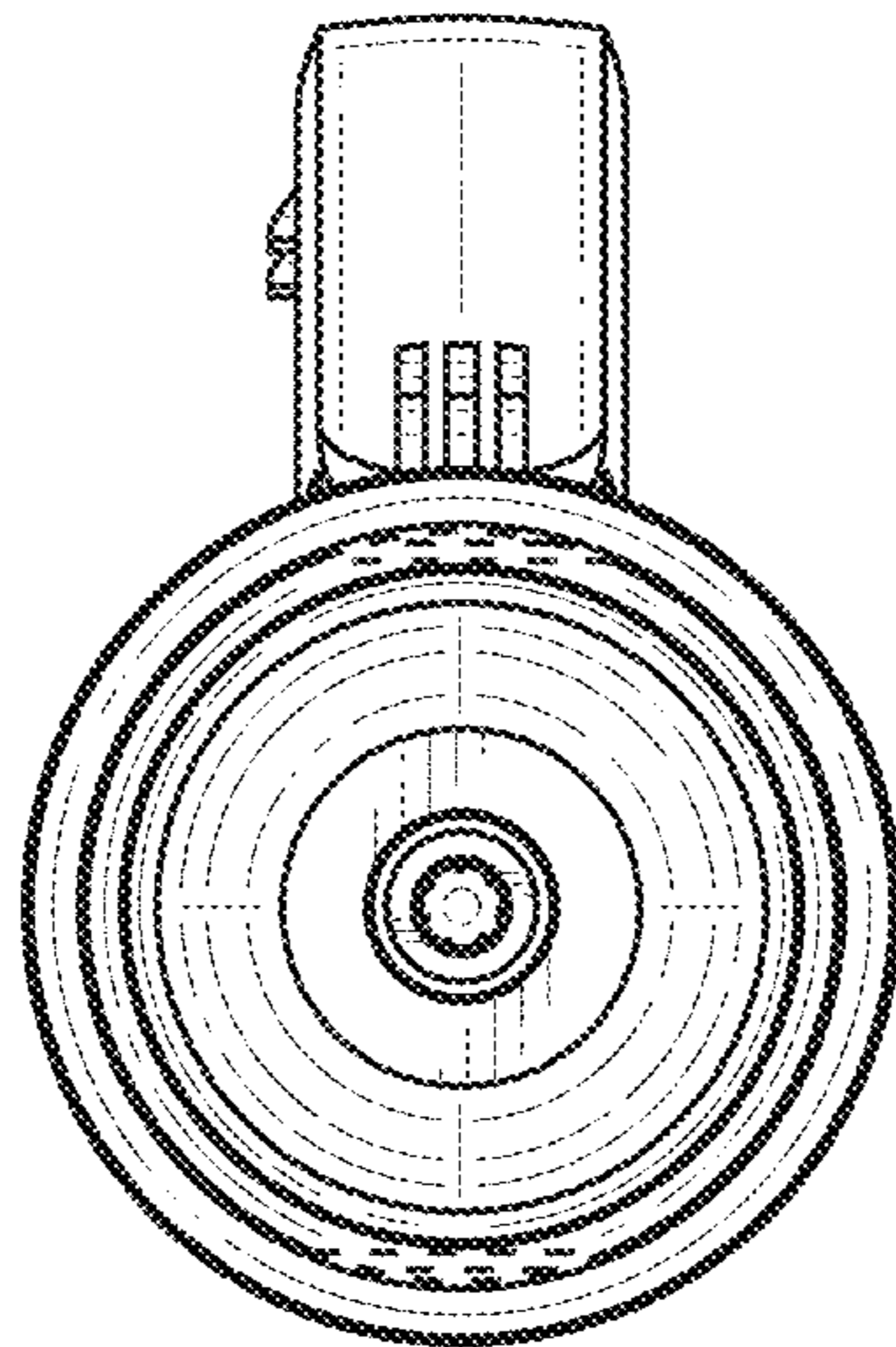


**FIG. 6**

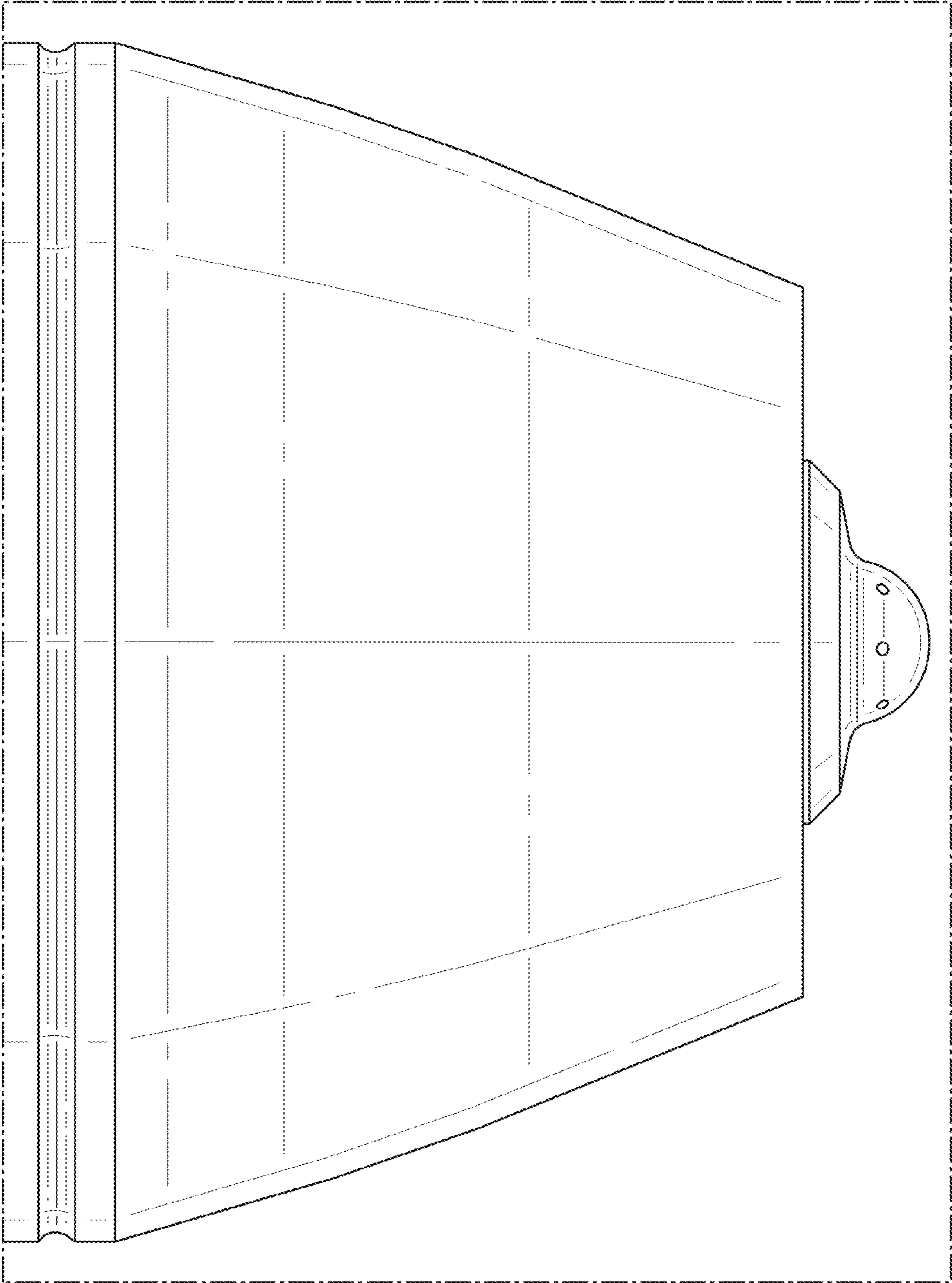




**FIG. 7**



**FIG. 8**



**FIG. 9**