



US00D855090S

(12) **United States Design Patent** (10) **Patent No.:** **US D855,090 S**
McDonald et al. (45) **Date of Patent:** **** Jul. 30, 2019**

(54) **AFTERTREATMENT SYSTEM HOUSING**
(71) Applicant: **CUMMINS EMISSION SOLUTIONS INC.**, Columbus, IN (US)
(72) Inventors: **Carl A. McDonald**, Greenwood, IN (US); **Arvind V. Harinath**, Columbus, IN (US); **John G. Buechler**, Indianapolis, IN (US); **Ryan M. Johnson**, Cottage Grove, WI (US); **Randolph G. Zoran**, McFarland, WI (US)

(56) **References Cited**
U.S. PATENT DOCUMENTS
4,673,423 A 6/1987 Yumlu
5,043,146 A 8/1991 Ishikawa et al.
D320,837 S * 10/1991 Loeffke D23/205
5,224,621 A * 7/1993 Cannan, Jr. B29C 53/602
220/62.18

(Continued)
FOREIGN PATENT DOCUMENTS
EM 002840355 10/2015
WO WO 2016/109320 7/2016
(Continued)

(73) Assignee: **Cummins Emission Solutions Inc.**, Columbus, IN (US)

OTHER PUBLICATIONS
Office Action issued for U.S. Appl. No. 15/539,954, dated Sep. 7, 2018, 15 pages.

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

(Continued)

(21) Appl. No.: **29/664,433**

Primary Examiner — Patricia A Palasik

(22) Filed: **Sep. 25, 2018**

(74) *Attorney, Agent, or Firm* — Foley & Lardner LLP

Related U.S. Application Data

(60) Continuation of application No. 29/632,627, filed on Jan. 9, 2018, now Pat. No. Des. 831,083, which is a continuation of application No. 29/600,848, filed on Apr. 17, 2017, now Pat. No. Des. 809,577, which is a division of application No. 29/540,794, filed on Sep. 28, 2015, now Pat. No. Des. 794,100.

(51) **LOC (11) Cl.** **15-09**

(52) **U.S. Cl.**
USPC **D15/138; D23/265**

(58) **Field of Classification Search**
USPC D15/5, 138, 199; D23/265
CPC F01N 3/021; F01N 3/2006; F01N 3/2066;
F01N 2550/02; F01N 2560/021; F01N
2560/026; F01N 2610/00; Y02T 10/24;
Y02T 10/26

See application file for complete search history.

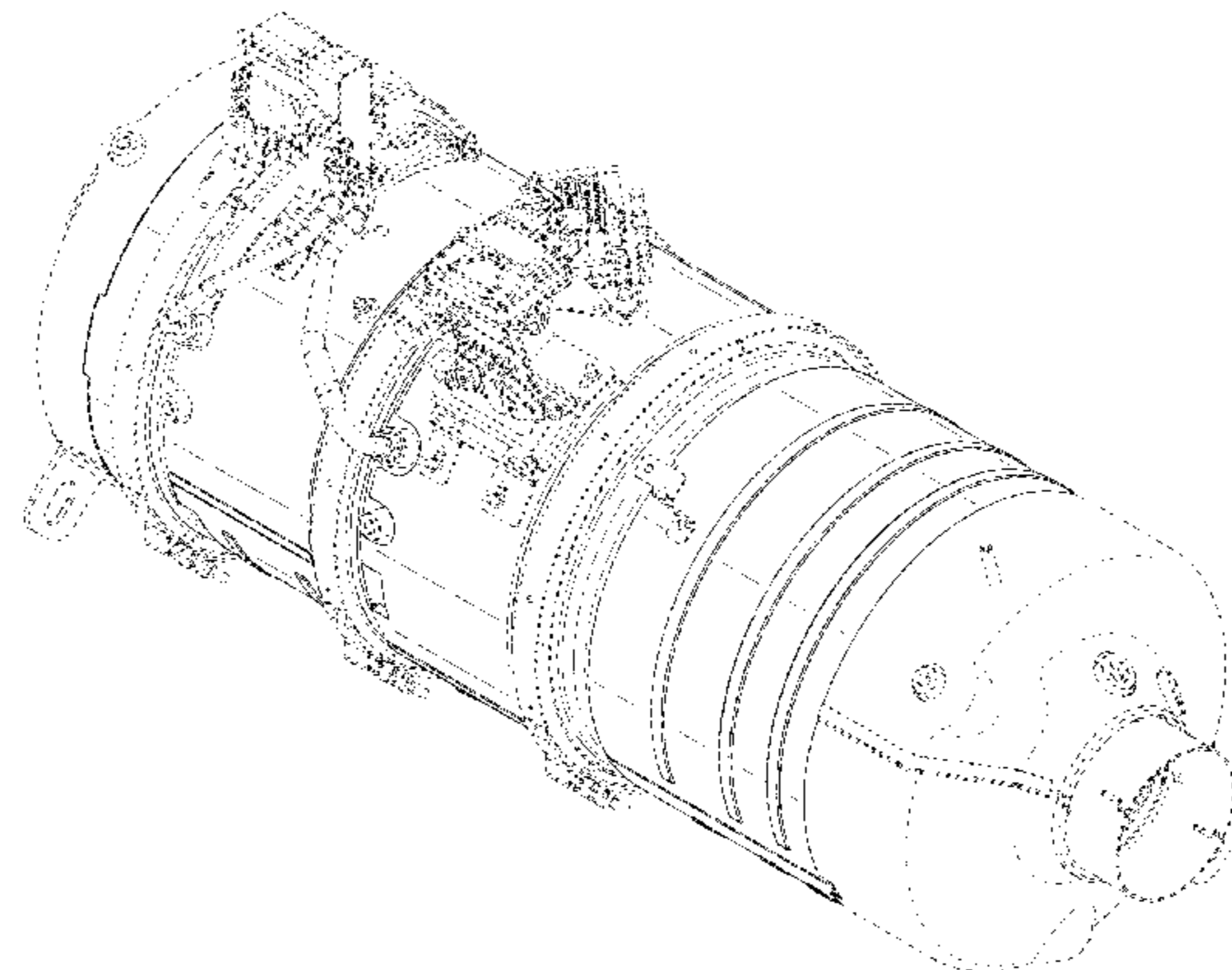
(57) **CLAIM**

We claim the ornamental design for an aftertreatment system housing, as shown and described.

DESCRIPTION

FIG. 1 is a top, front, left perspective view of the claimed design;
FIG. 2 is a top plan view thereof;
FIG. 3 is a bottom plan view thereof;
FIG. 4 is a front elevation view thereof;
FIG. 5 is a rear elevation view thereof;
FIG. 6 is a left elevation view thereof; and,
FIG. 7 is a right elevation view thereof.

(Continued)



The broken lines in the drawings depict unclaimed environmental subject matter, are for illustrative purposes only, and form no part of the claimed design.

1 Claim, 7 Drawing Sheets

(56)

References Cited

U.S. PATENT DOCUMENTS

5,597,948 A * 1/1997 Sharp B65D 90/503
220/565

5,611,832 A 3/1997 Suzuki et al.

6,475,944 B1 11/2002 Yang et al.

D590,419 S 4/2009 Duffek et al.

D607,536 S * 1/2010 Filo D23/205

8,341,949 B2 1/2013 Tarabulski

8,609,047 B2 12/2013 Dotzel et al.

D702,735 S 4/2014 Sandou

D757,919 S 5/2016 Kimura

D794,100 S 8/2017 McDonald et al.

D798,992 S * 10/2017 Rowsey D23/202

D809,577 S 2/2018 McDonald et al.

D819,778 S * 6/2018 Polacek D23/202

10,092,879 B2 10/2018 McDonald et al.

2003/0221424 A1 12/2003 Woerner et al.

2004/0159657 A1 * 8/2004 Chism B08B 9/093
220/4.12

2007/0039316 A1 2/2007 Bosanec et al.

2008/0060351 A1 3/2008 Pawson et al.

2008/0297362 A1 * 12/2008 Veenstra F17C 13/025
340/632

2009/0084094 A1 4/2009 Goss et al.

2009/0136387 A1 5/2009 Picton et al.

2010/0242451 A1 9/2010 Werni et al.

2010/0300082 A1 12/2010 Zhang

2011/0030351 A1 2/2011 Kato

2011/0047973 A1 3/2011 Wilhelm et al.

2011/0052454 A1 3/2011 Kato

2011/0099978 A1 5/2011 Davidson et al.

2011/0311928 A1 * 12/2011 Zimmer F17C 7/04
432/9

2012/0004863 A1 1/2012 Ardanese et al.

2012/0210697 A1 8/2012 Garimella et al.

2013/0125524 A1 5/2013 Plummer et al.

2013/0213008 A1 8/2013 Kumar et al.

2013/0232958 A1 9/2013 Ancimer et al.

2013/0270278 A1 * 10/2013 Schneider B23P 17/04
220/567.1

2014/0007562 A1 1/2014 Justin

2014/0260202 A1 9/2014 Bays et al.

2014/0262590 A1 9/2014 Daborn et al.

2014/0363358 A1 12/2014 Udd et al.

2014/0373721 A1 12/2014 Sandou et al.

2015/0000389 A1 1/2015 Runde et al.

2015/0128566 A1 5/2015 Osumi

2015/0224870 A1 8/2015 Shin et al.

2016/0069239 A1 3/2016 Freeman et al.

2016/0076430 A1 3/2016 Freeman et al.

2016/0115847 A1 4/2016 Chapman et al.

2016/0245207 A1 8/2016 Ball et al.

2016/0326931 A1 11/2016 Freeman et al.

2016/0369940 A1 12/2016 Patil et al.

2017/0036165 A1 2/2017 Schmid et al.

2017/0043295 A1 2/2017 Minezawa et al.

2017/0074146 A1 3/2017 Maletic et al.

2017/0089248 A1 3/2017 Evans et al.

2017/0327273 A1 * 11/2017 Lee B29C 49/02

2017/0370262 A1 12/2017 Zoran et al.

2018/0290826 A1 * 10/2018 Polacek B65D 88/027

FOREIGN PATENT DOCUMENTS

WO WO 2016/109321 7/2016

WO WO 2016/109323 7/2016

OTHER PUBLICATIONS

International Search Report and Written Opinion for PCT/US2015/067302, dated Mar. 11, 2016, 10 pages.

International Search Report and Written Opinion for PCT/US2015/067317, dated Apr. 22, 2016, 18 pages.

International Search Report and Written Opinion for PCT/US2015/067324, dated Feb. 23, 2016, 8 pages.

Office Action for U.S. Appl. No. 15/539,954 dated Sep. 7, 2018, 15 pages.

Office Action cited for U.S. Appl. No. 15/539,886, dated Mar. 1, 2018, 14 pages.

* cited by examiner

FIG. 1

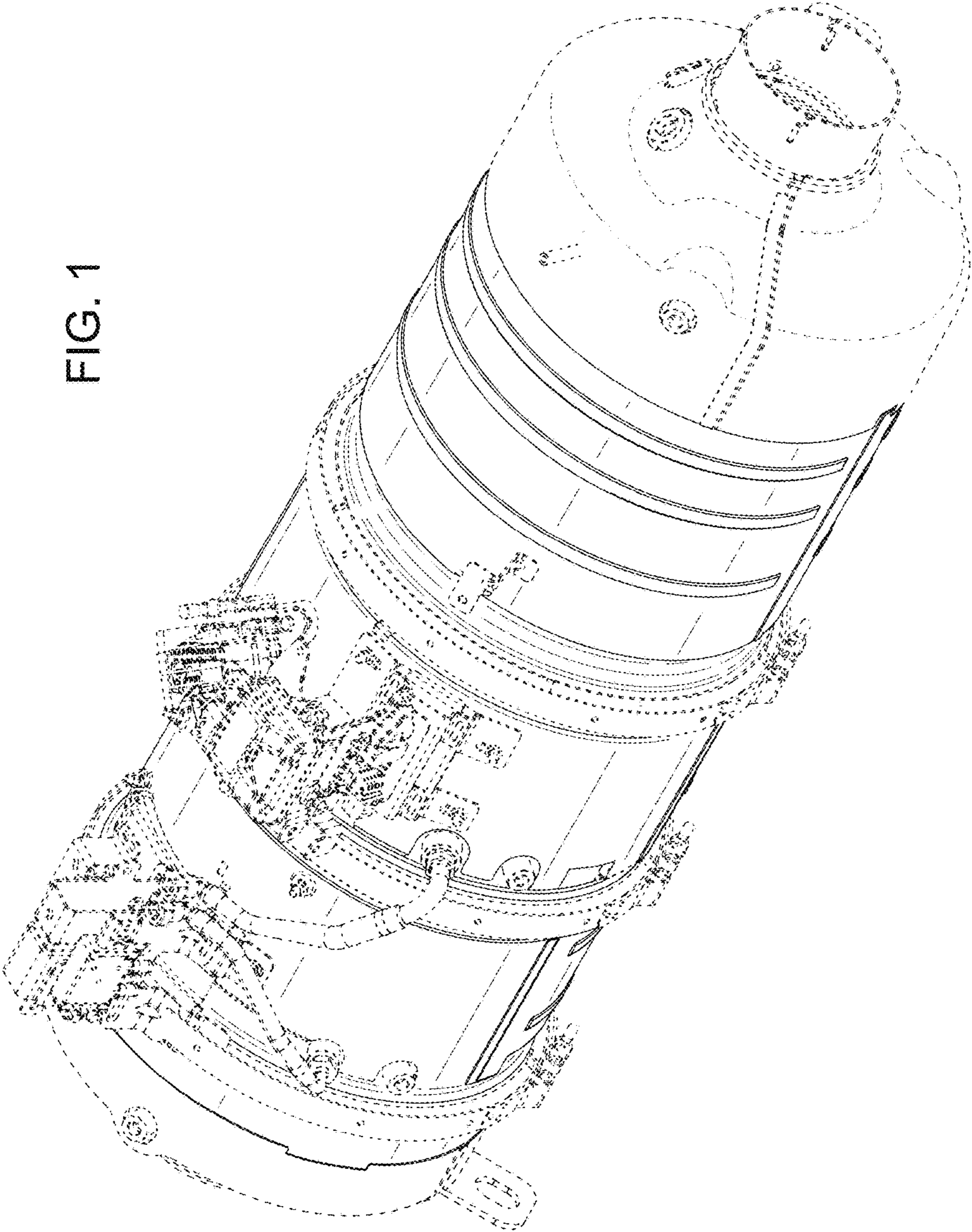


FIG. 2

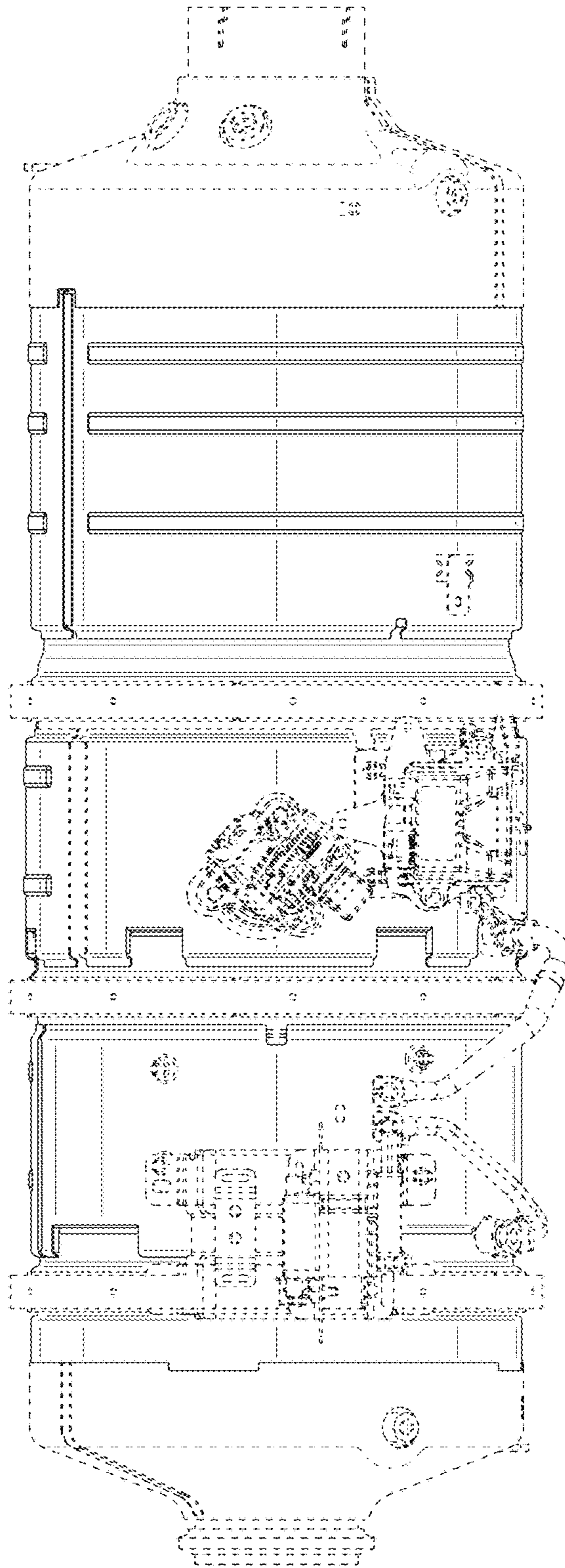


FIG. 3

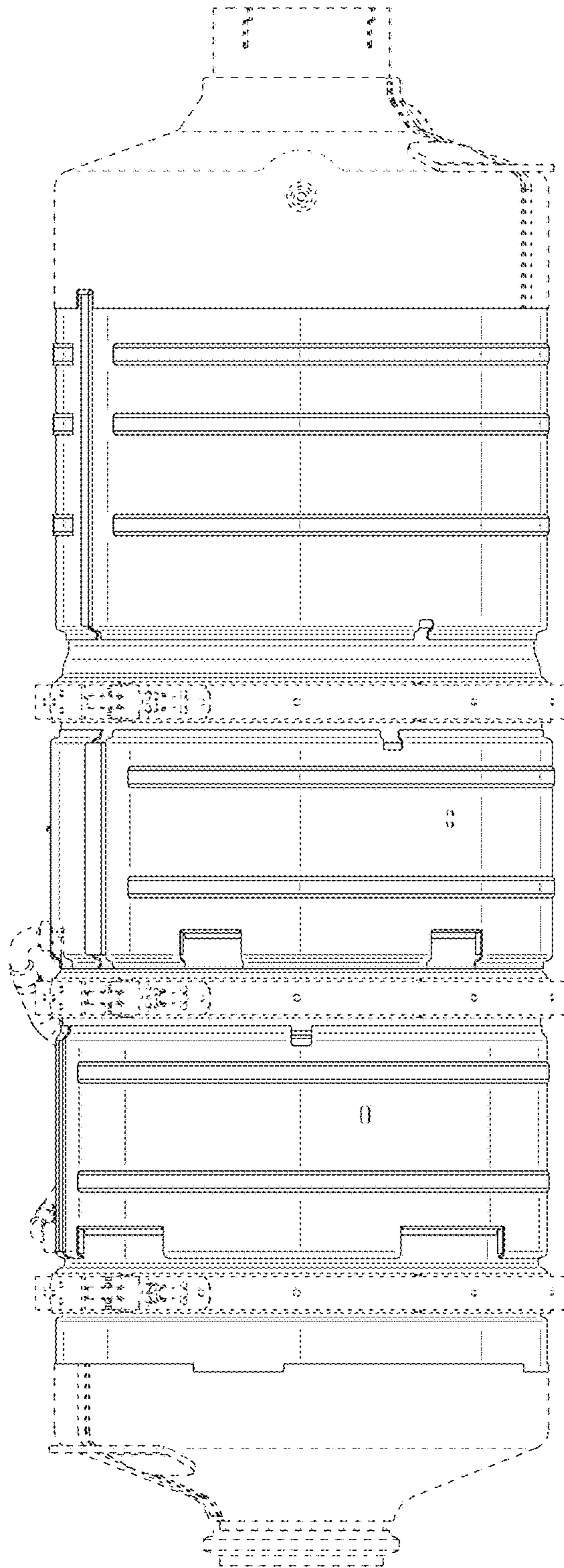


FIG. 4

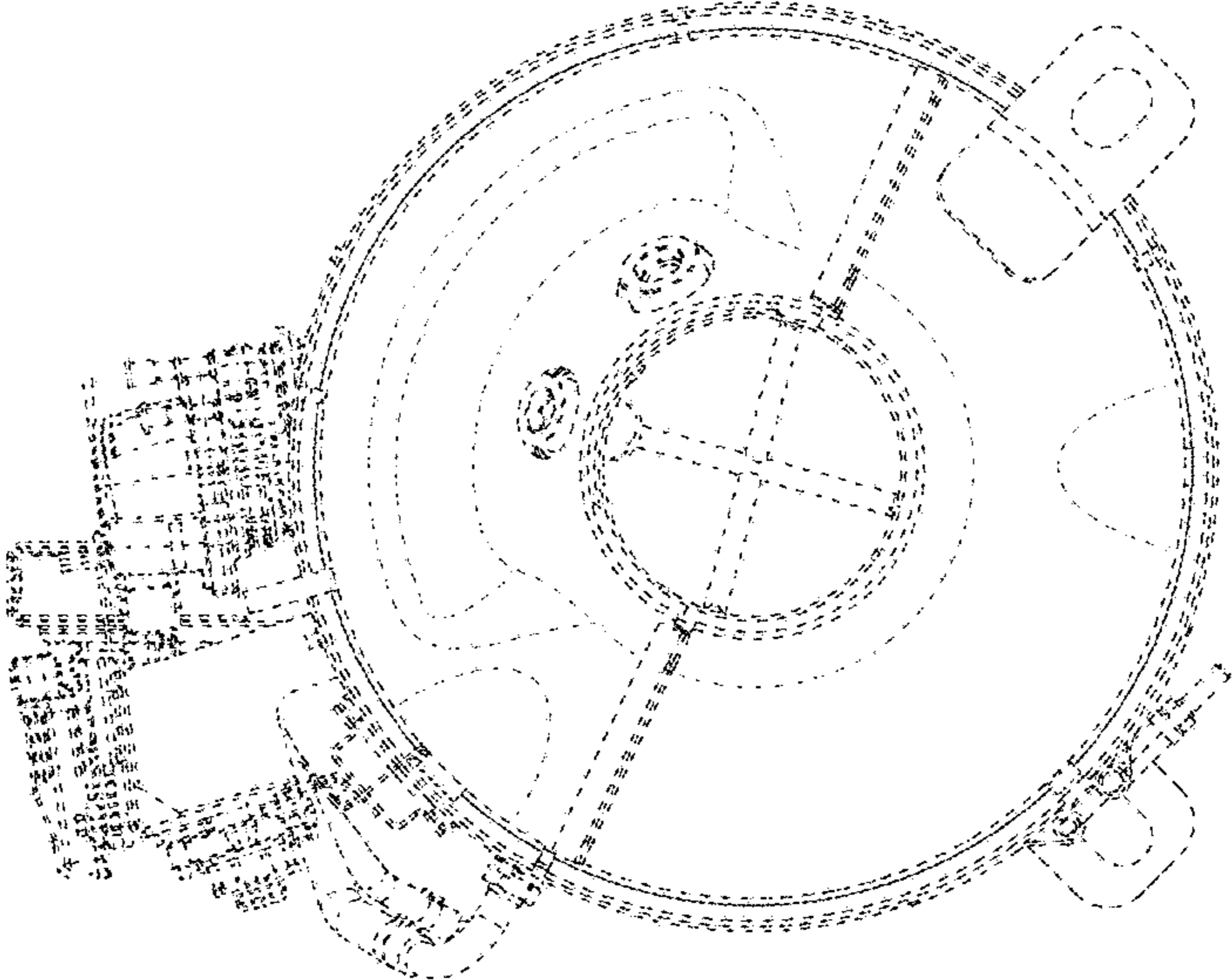


FIG. 5

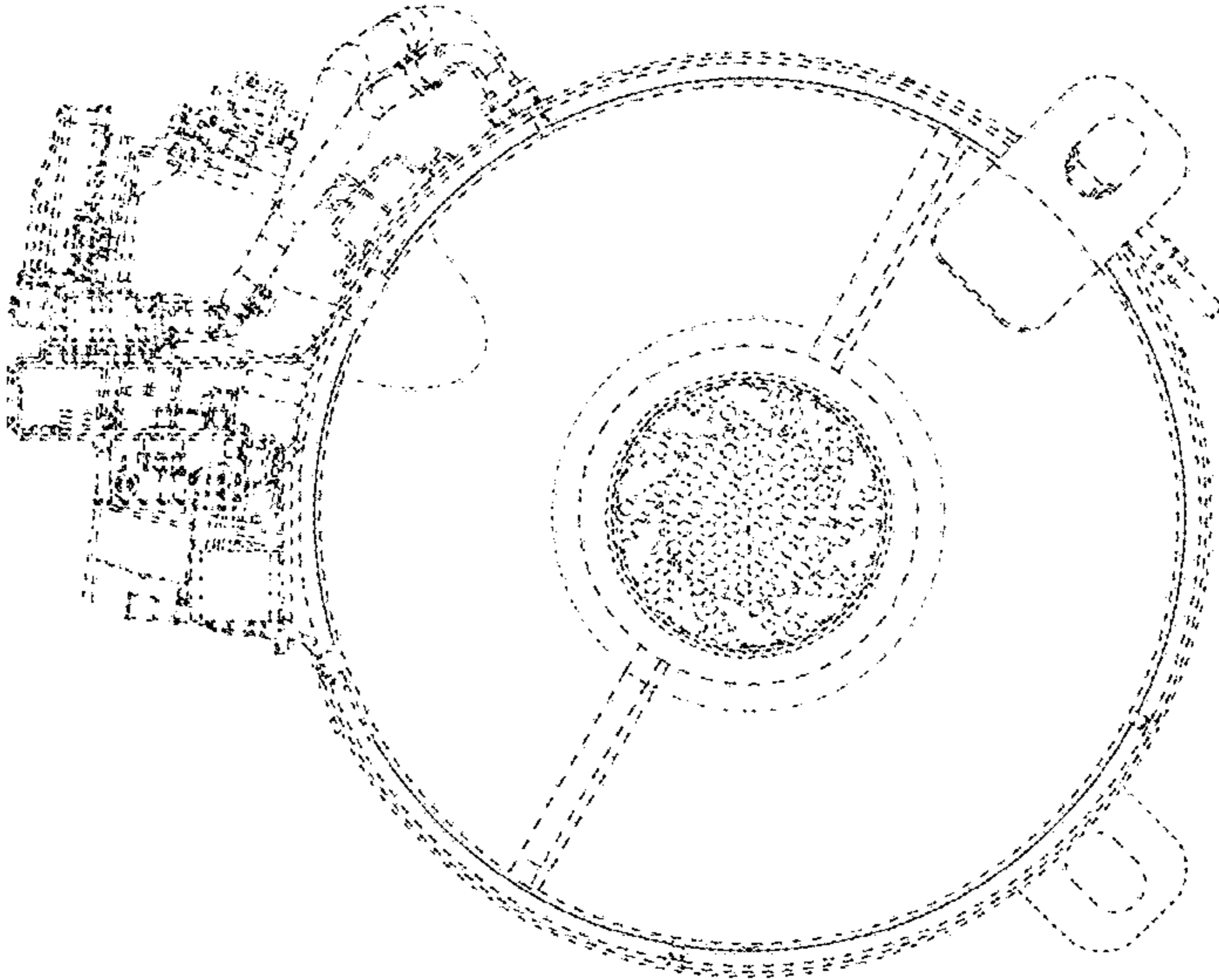


FIG. 6

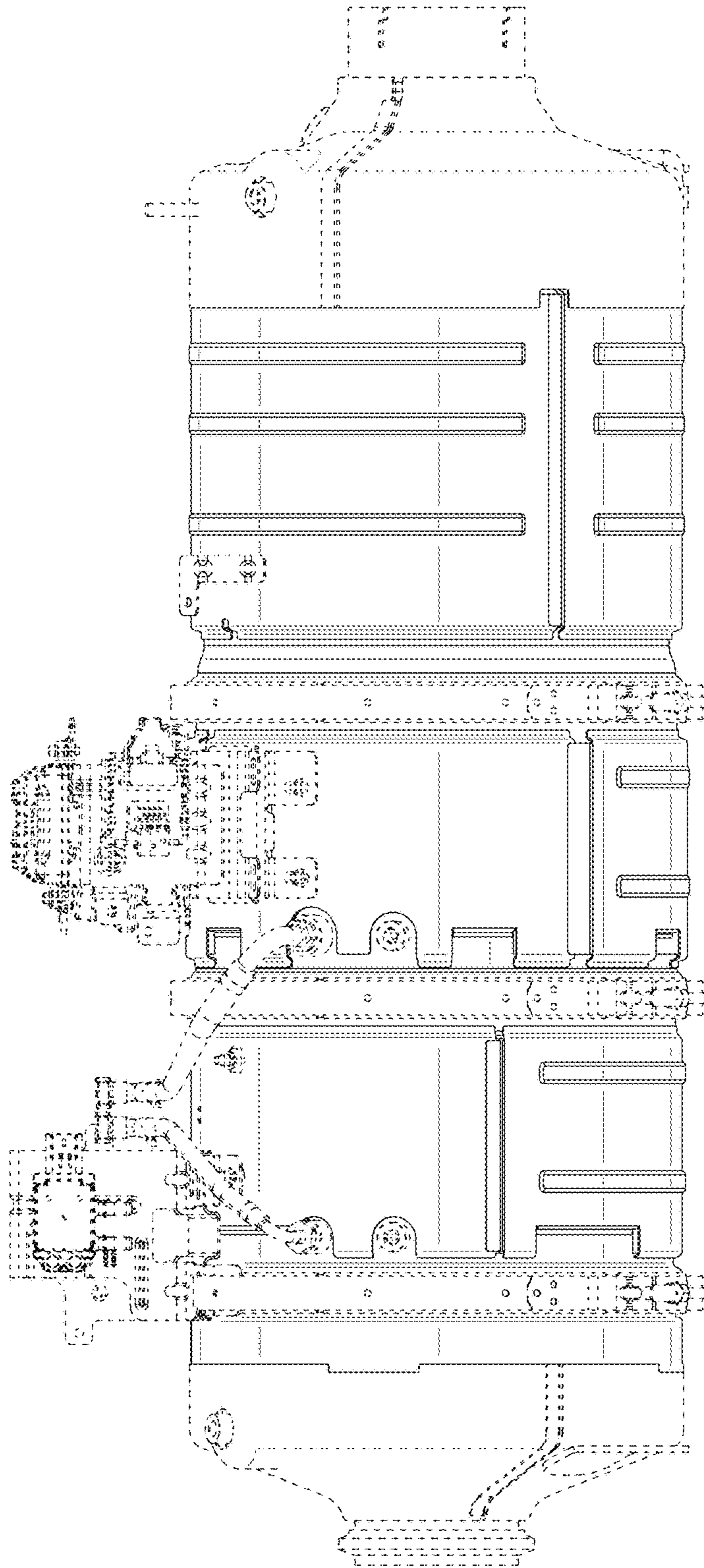


FIG. 7

