



US00D934798S

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

(10) **Patent No.:** **US D934,798 S**
(45) **Date of Patent:** **** Nov. 2, 2021**

(54) **TRANSFORMER**

(71) Applicant: **Siemens Aktiengesellschaft**, Munich (DE)

(72) Inventors: **Andreas Beer**, Grasbrunn (DE);
Grzegorz Dudkiewicz, Munich (DE);
Florian Lohse, Munich (DE)

(73) Assignee: **SIEMENS ENERGY GLOBAL GMBH & CO. KG**, Munich (DE)

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

(21) Appl. No.: **29/581,776**

(22) Filed: **Oct. 21, 2016**

(30) **Foreign Application Priority Data**

Apr. 22, 2016 (EM) 001448724-0001

(51) **LOC (13) Cl.** **13-02**

(52) **U.S. Cl.**
USPC **D13/110**

(58) **Field of Classification Search**
USPC D13/101-110, 116, 118, 123, 133-135,
D13/146-151, 153-156, 159, 161, 173,
D13/184, 199; D14/356, 432
CPC H01F 19/04; H01F 27/00; H02M 7/00;
H02M 7/02; H02M 7/04; H02M 7/06;
H02M 3/28; H02M 3/325; H02M 3/335;
H02M 3/33523; H02M 3/3376; H02M
3/3378; H02M 7/10; Y10T 29/49071;
Y10T 307/406
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

1,720,413 A * 7/1929 Greenwood H01H 33/66
200/289
4,005,297 A * 1/1977 Cleaveland F28D 15/02
165/104.26

4,692,577 A * 9/1987 Swanson H01H 39/006
200/82 B
D567,755 S * 4/2008 Heinzig D13/110
D567,757 S * 4/2008 Hammer D13/110
8,278,582 B2 * 10/2012 Tu H01H 33/6606
200/289
9,384,923 B1 * 7/2016 Matuszak H01H 9/52
9,767,978 B1 * 9/2017 Brandt H01H 71/0235
9,793,701 B2 * 10/2017 Springborn H01C 7/12

(Continued)

OTHER PUBLICATIONS

800-kV converter transformer, posted at Siemens.com, posted on Oct. 1, 2008. online, site visited Oct. 24, 2017. Available from Internet: https://www.siemens.com/press/en/pressrelease/?press=/en/pressrelease/2008/power_transmission/ept200810001.htm.*

(Continued)

Primary Examiner — Mary Ann Calabrese

Assistant Examiner — Catherine Ho

(74) *Attorney, Agent, or Firm* — Henry M. Feiereisen LLC

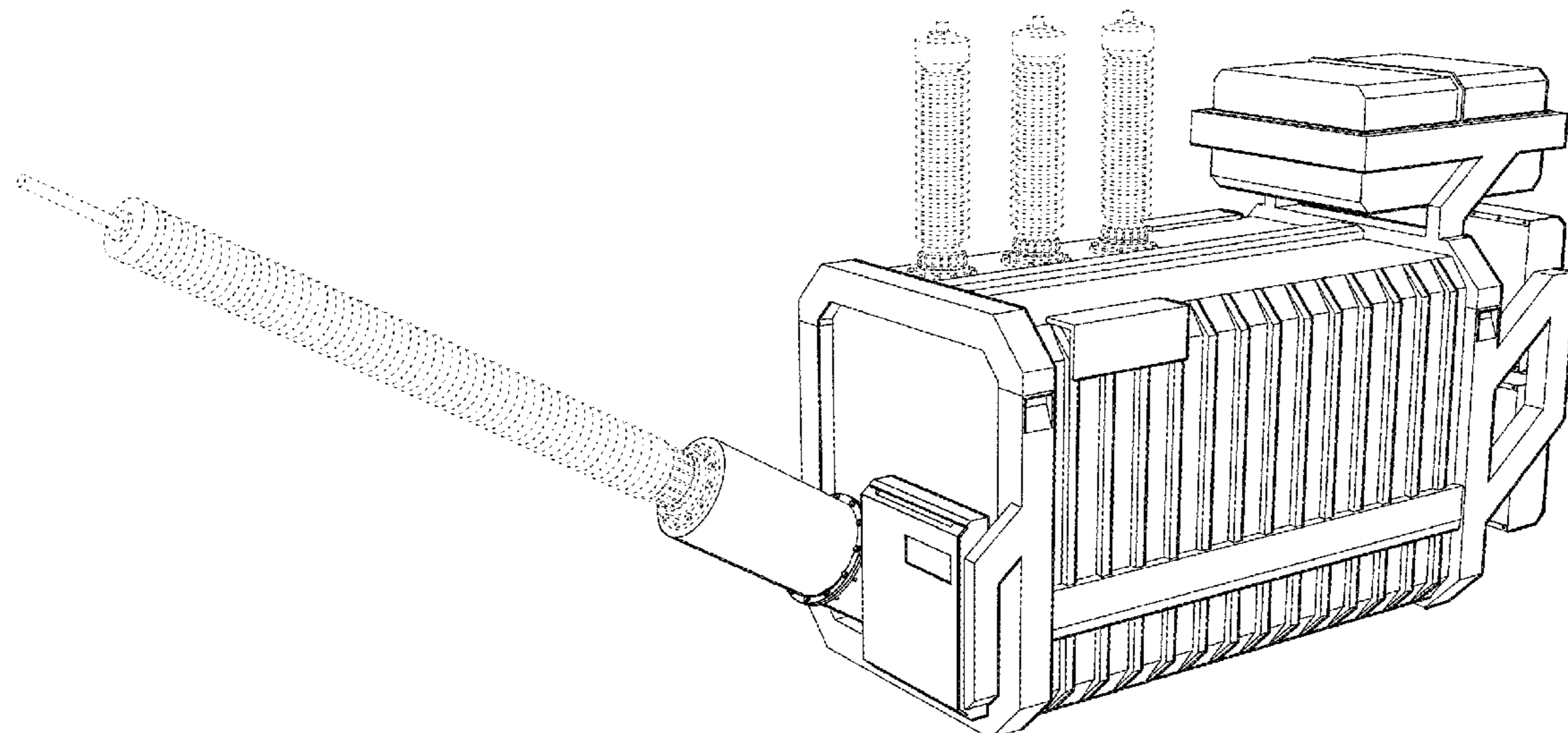
(57) **CLAIM**

The ornamental design for the transformer, as shown and described.

DESCRIPTION

FIG. 1 is a front elevational view of a transformer showing our new design;
FIG. 2 is a rear elevational view thereof;
FIG. 3 is a top elevational view thereof;
FIG. 4 is a bottom elevational view thereof;
FIG. 5 is a right side elevational view thereof;
FIG. 6 is a left side elevational view thereof; and,
FIG. 7 is a front right side perspective view thereof.
The broken line portion of the figure drawings is included to show unclaimed subject matter only and forms no part of the claimed design.

1 Claim, 7 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

2003/0006334 A1* 1/2003 Hoffmann H01F 41/02
242/437
2009/0255905 A1* 10/2009 Lee H01H 33/6606
218/139
2015/0109087 A1* 4/2015 Golner H01F 27/323
336/198

OTHER PUBLICATIONS

A single-phase three-winding converter transformer, posted at En.Wikipedia.org, posted on May 1, 2002. online, site visited Oct. 24, 2017. Available from Internet: https://en.wikipedia.org/wiki/High-voltage_direct_current#/media/File:Transformateur_du_complexe_La_Grande.jpg.*

Power Transformer Drying, posted at Youtube.com, posted on Jun. 3, 2013. online, site visited Oct. 24, 2017. Available from internet: <https://www.youtube.com/watch?v=6LLVWzh47CY>.*

* cited by examiner

FIG. 1

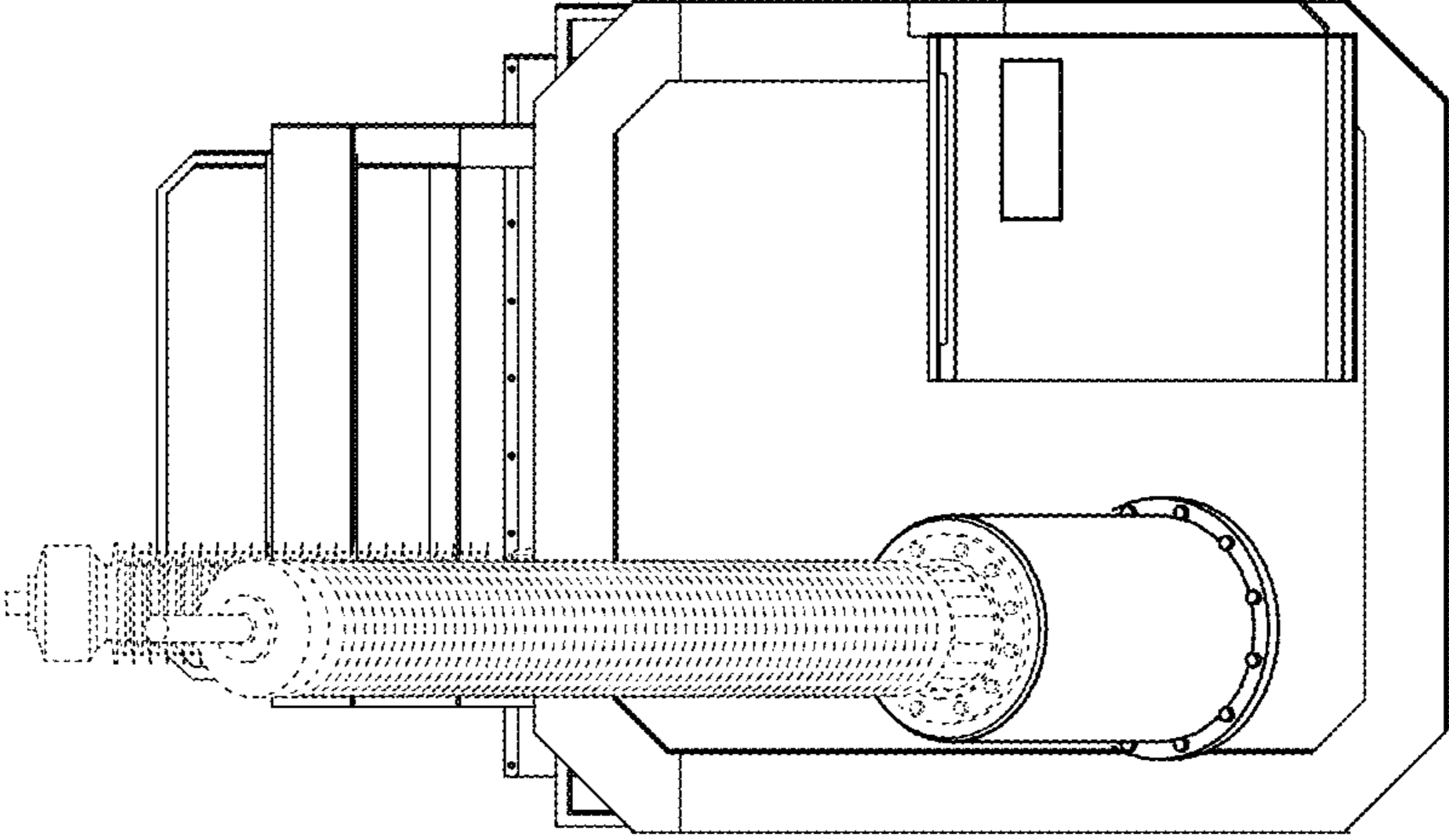


FIG. 2

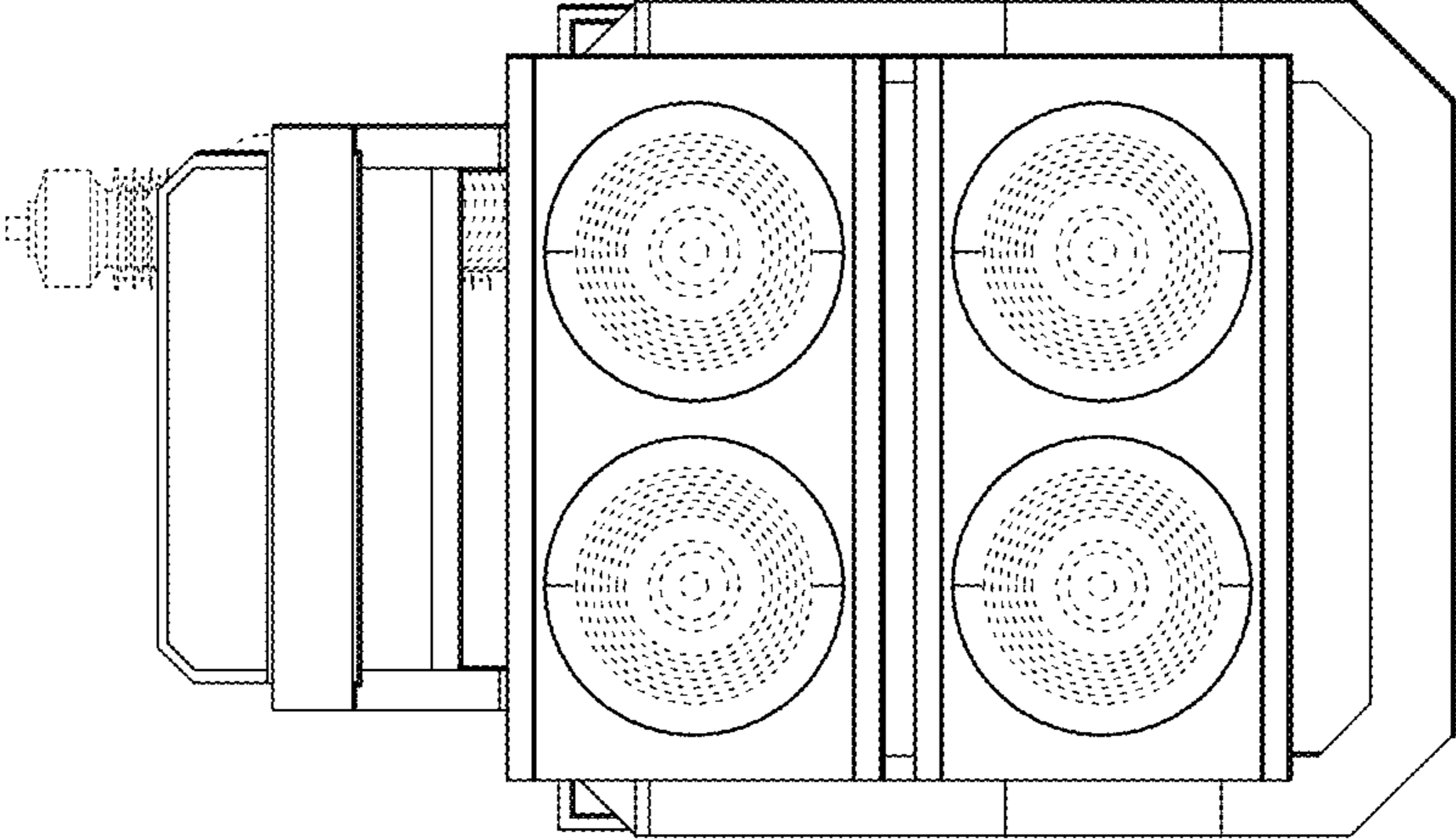


FIG. 3

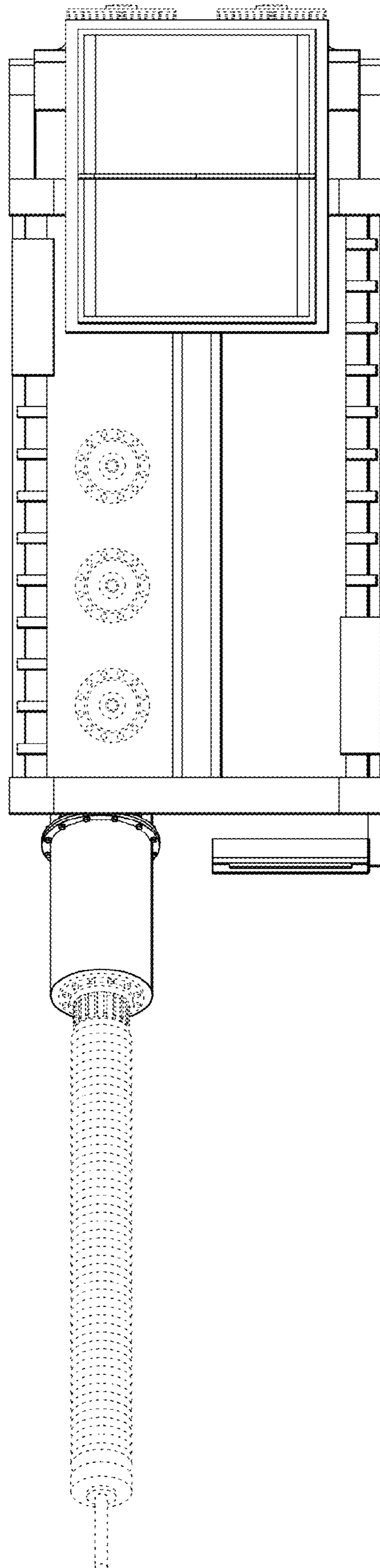


FIG. 4

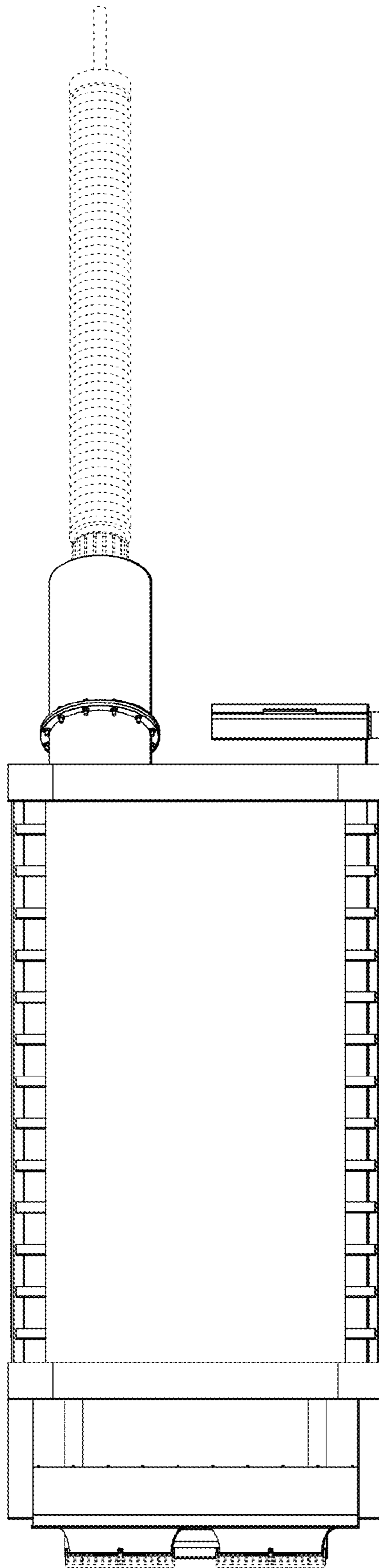


FIG. 5

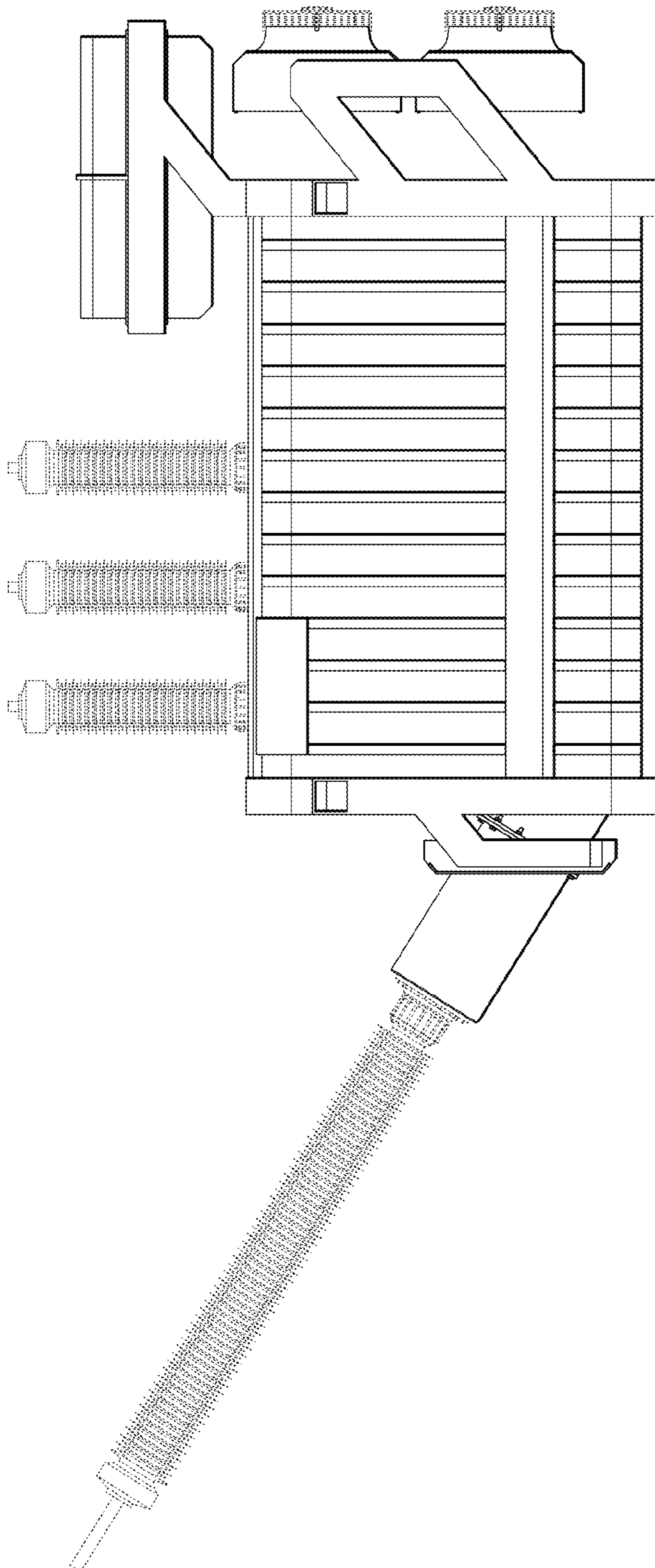


FIG. 6

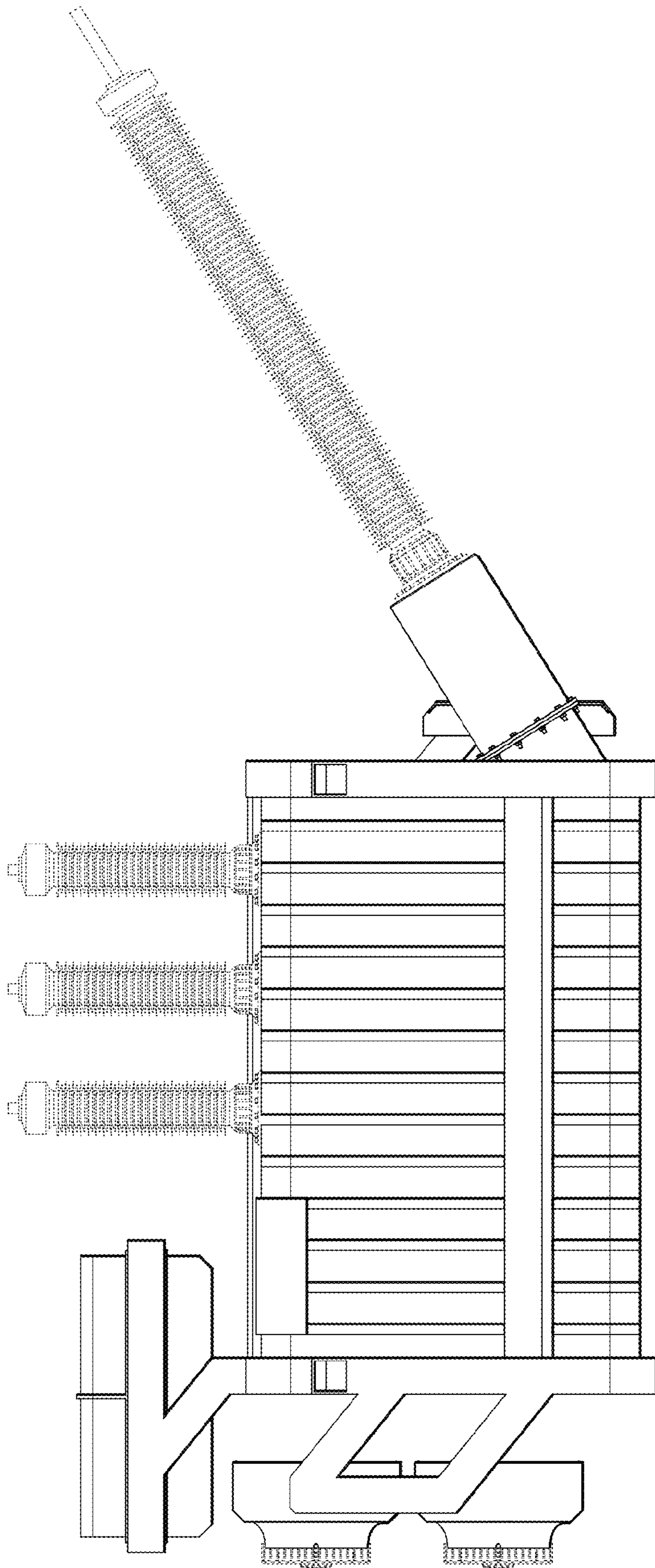


FIG. 7

