



US00D837170S

(12) **United States Design Patent**
Ueda

(10) **Patent No.:** **US D837,170 S**
(45) **Date of Patent:** **** Jan. 1, 2019**

- (54) **HEAT SINK**
- (71) Applicant: **SAIJOINX Co., Ltd.**, Kyoto-shi (JP)
- (72) Inventor: **Naoki Ueda**, Kyoto (JP)
- (73) Assignee: **SAIJOINX Co., Ltd.**, Kyoto-shi (JP)
- (**) Term: **15 Years**
- (21) Appl. No.: **29/613,020**
- (22) Filed: **Aug. 7, 2017**

(30) **Foreign Application Priority Data**

- Feb. 15, 2017 (JP) 2017-002911
- (51) **LOC (11) Cl.** **13-03**
- (52) **U.S. Cl.**
USPC **D13/179**
- (58) **Field of Classification Search**
USPC D13/179, 122, 182; D26/67, 138, 141,
D26/152
CPC .. H05K 7/20; H05K 7/20172; H05K 7/20127;
H05K 7/20336; H05K 7/202; H05K
7/20272; H01L 23/34; H01L 23/3672;
H01L 23/40; H01L 23/4006; H01L
23/4093; F28D 15/0208; F28D 15/04
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

- D218,748 S * 9/1970 Ritzow et al. D13/179
- D315,832 S * 4/1991 Rocheleau D13/179
- D338,449 S * 8/1993 Sahyoun D13/179
- D571,037 S * 6/2008 Lou D26/138
- D619,550 S * 7/2010 Hwang D13/179
- D645,829 S * 9/2011 Yu D13/179
- D669,046 S * 10/2012 Kajiya D13/182
- D672,730 S * 12/2012 Lin D13/179
- D687,397 S * 8/2013 Kajiya D13/182
- D790,760 S * 6/2017 Klus D26/138

- D810,034 S * 2/2018 Mira D13/179
- 2003/0188848 A1* 10/2003 Kuo F28F 3/02
165/80.3
- 2011/0024160 A1* 2/2011 Quan H05K 1/024
174/254

OTHER PUBLICATIONS

ECVV, "Precision machining aluminum extrusion heat sink, front panel", Accessed Jun. 5, 2018. (<https://www.ecvv.com/product/3075709.html>).*

Original Twist Blog, "Silent gaming PC", Posted May 7, 2018. (<https://originaltwist.com/2018/05/07/silent-gaming-pc/>).*

* cited by examiner

Primary Examiner — Jennifer Rivard
Assistant Examiner — April Rivas
 (74) *Attorney, Agent, or Firm* — Locke Lord LLP

(57) **CLAIM**

The ornamental design for a heat sink, as shown and described.

DESCRIPTION

FIG. 1 is a front view of the heat sink, with a back view being the same;
 FIG. 2 is a top plan view thereof;
 FIG. 3 is a right-side view thereof, with a left-side view being the same;
 FIG. 4 is a bottom view thereof;
 FIG. 5 is an enlarged partial view shown in FIG. 6, thereof;
 FIG. 6 is a front view thereof; showing the section where FIG. 5 is taken within broken lines; and,
 FIG. 7 is a top perspective view thereof.
 The broken lines encircling a section of FIG. 6 are for indicating where the enlarged FIG. 5 view is taken and form no part of the claimed design.

1 Claim, 7 Drawing Sheets

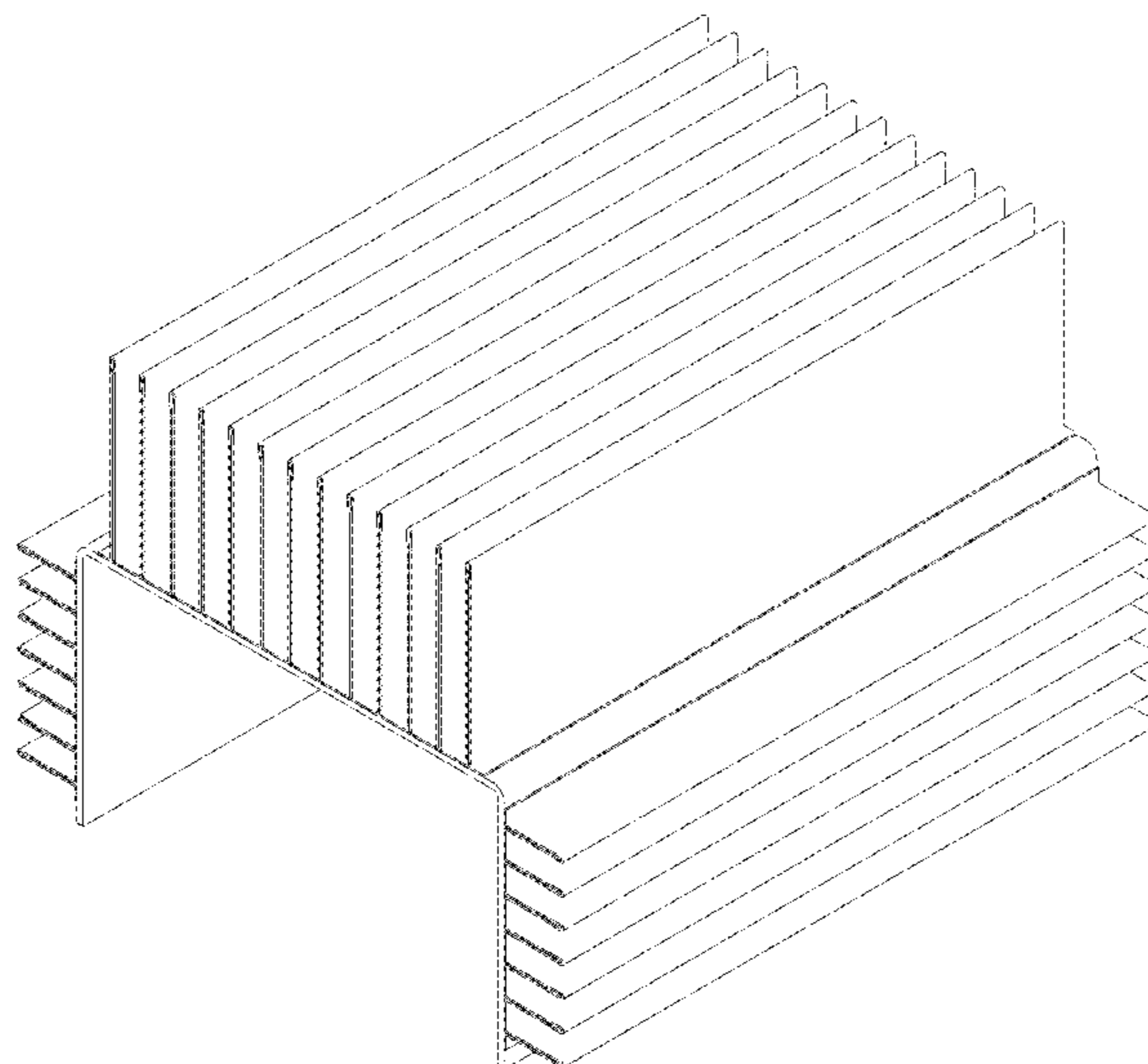


FIG. 1

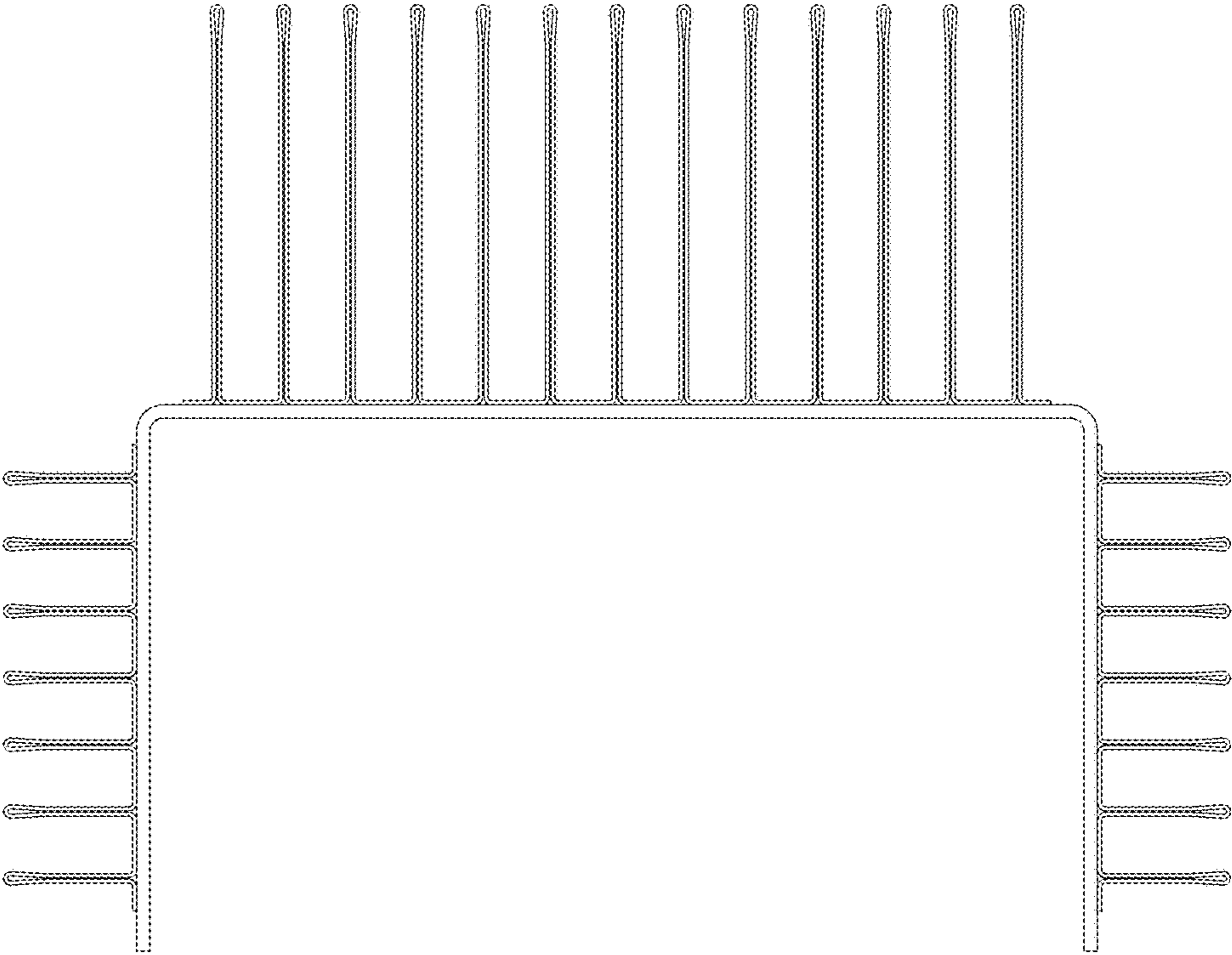


FIG. 2

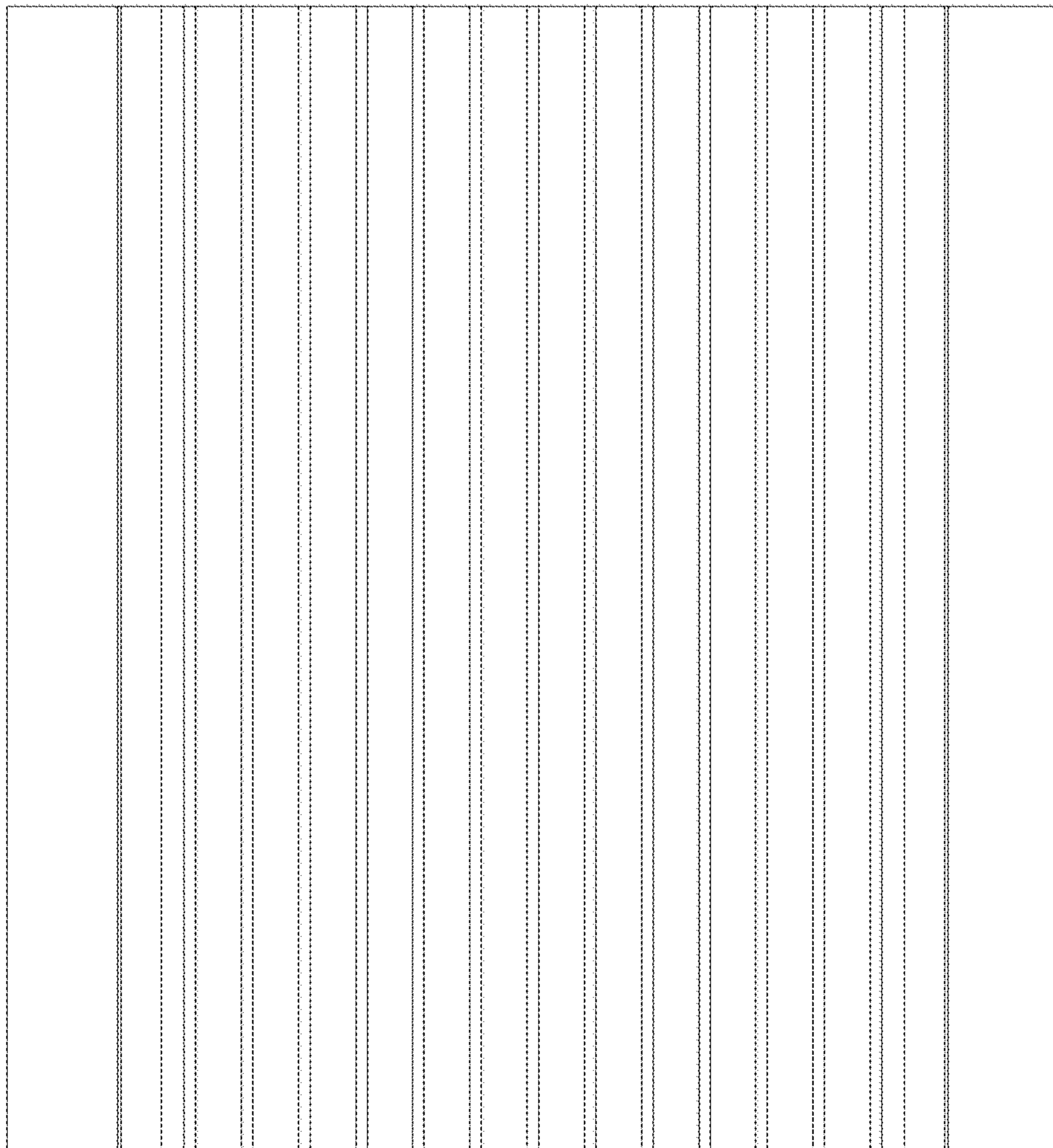


FIG. 3

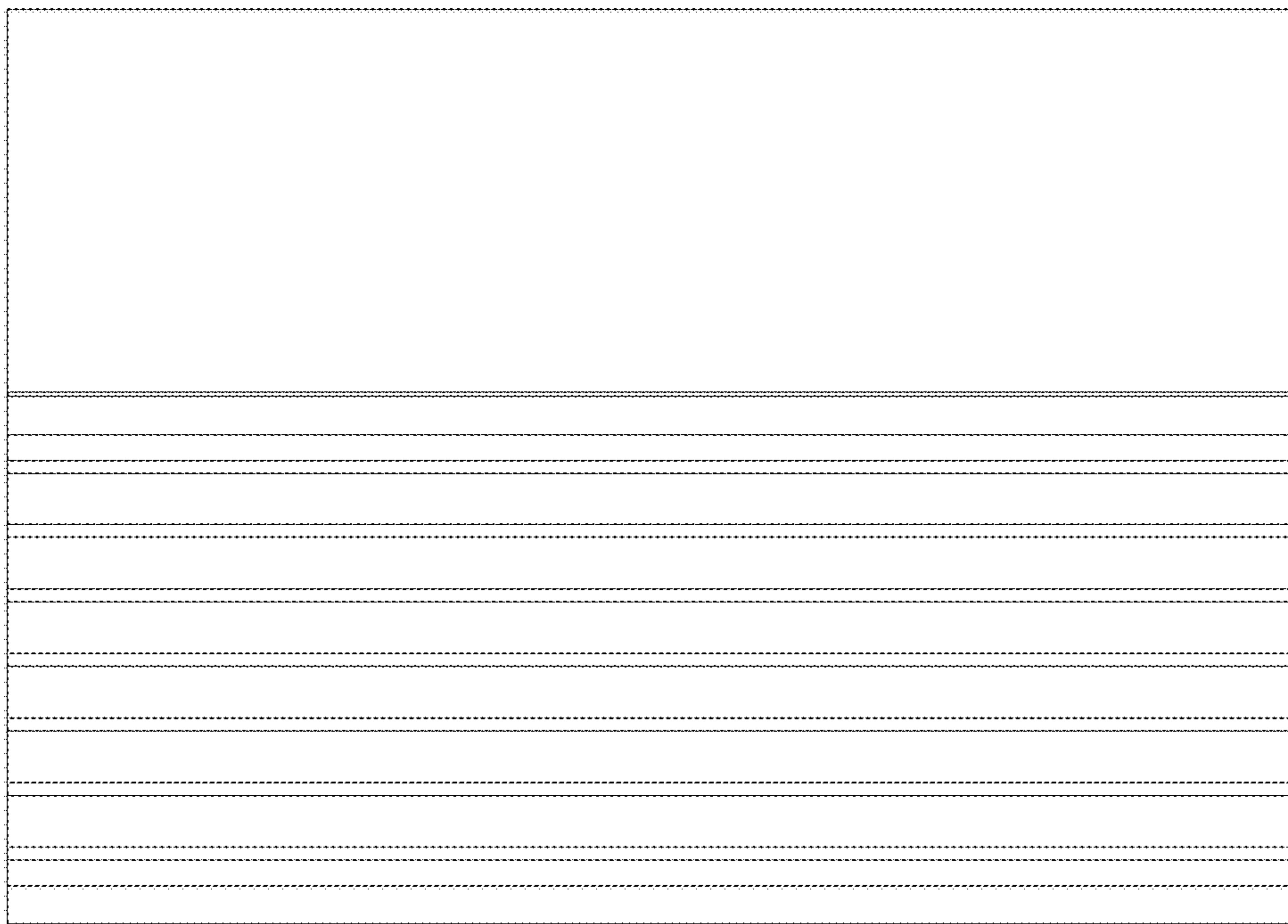


FIG. 4

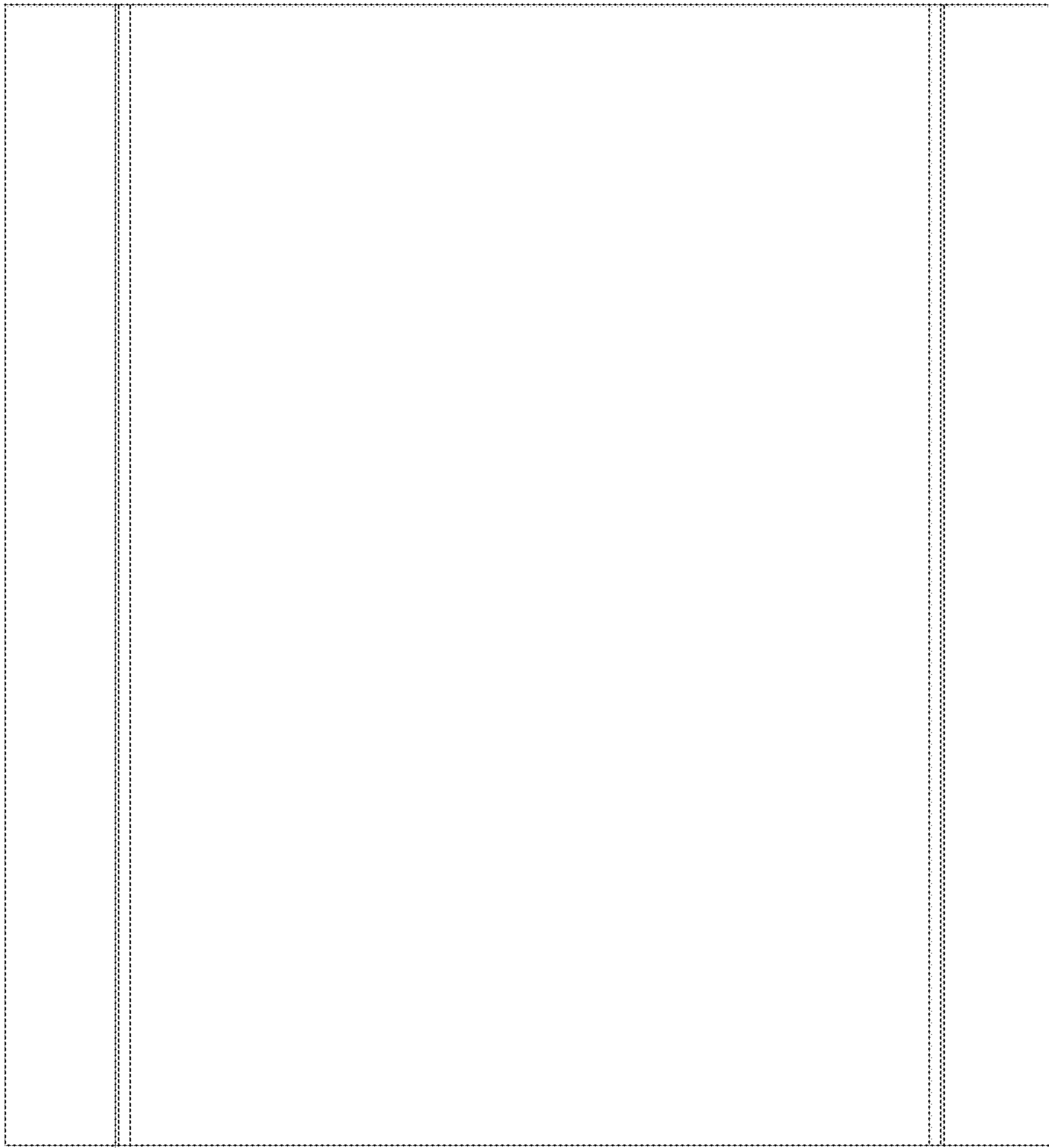


FIG. 5

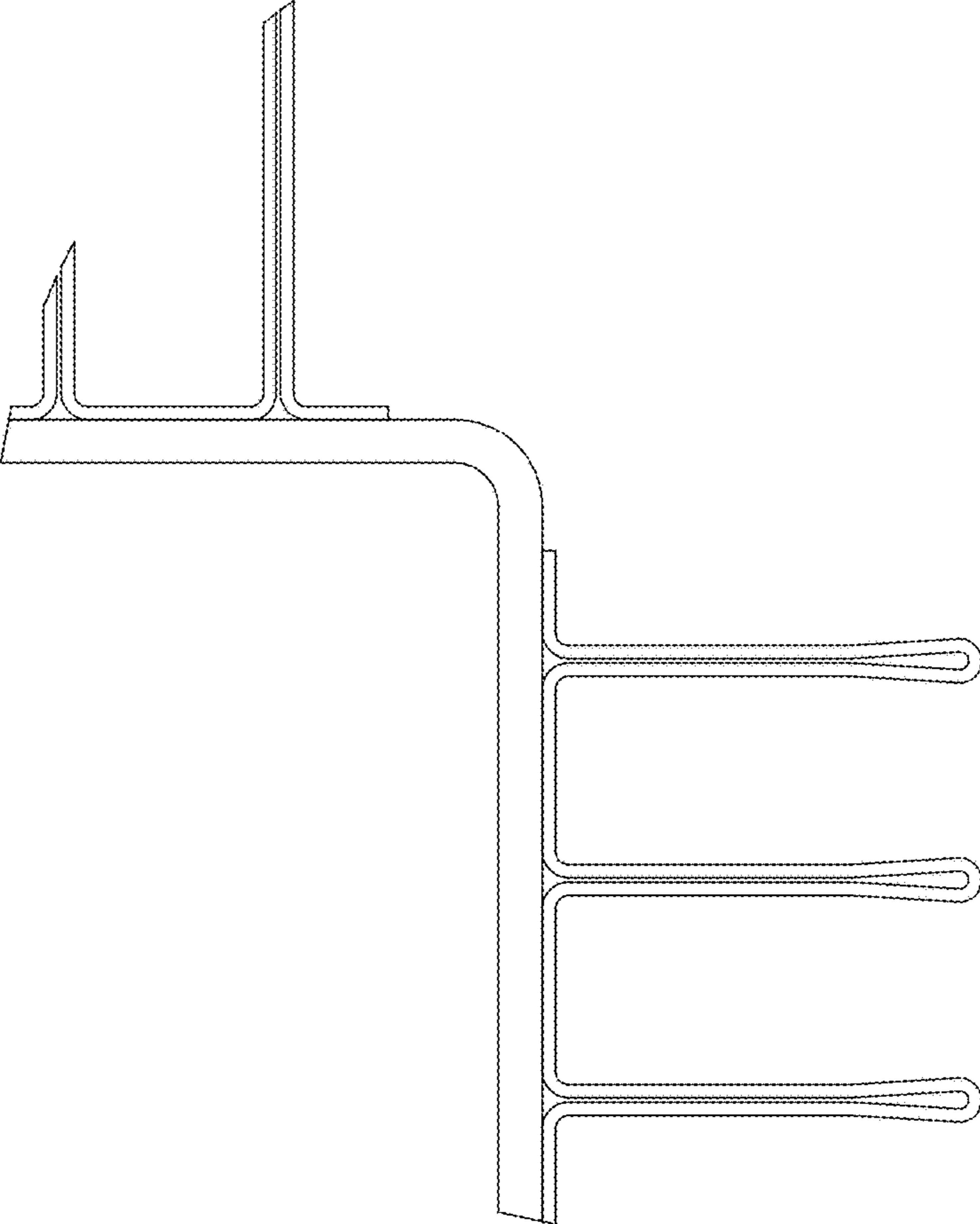
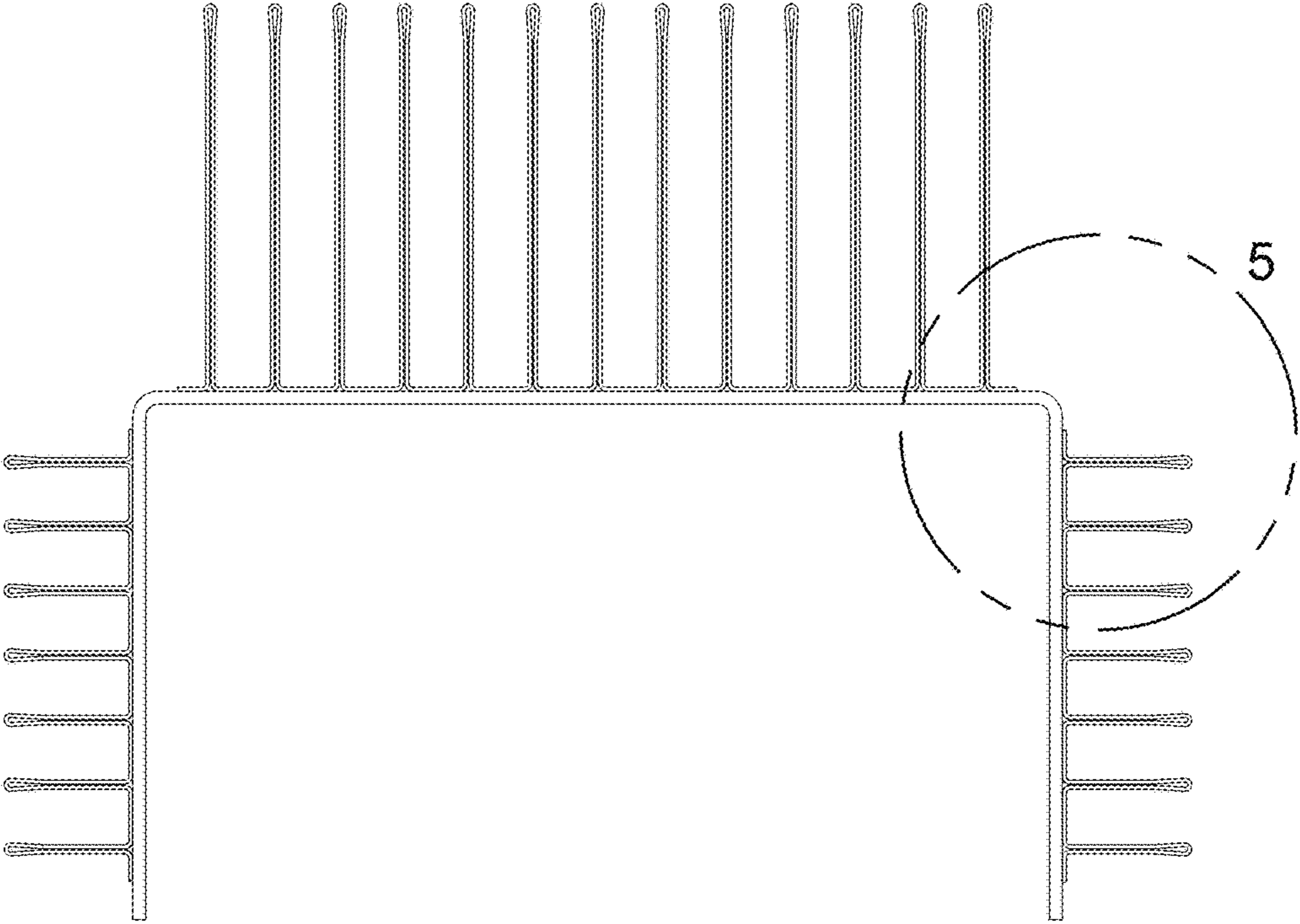


FIG. 6



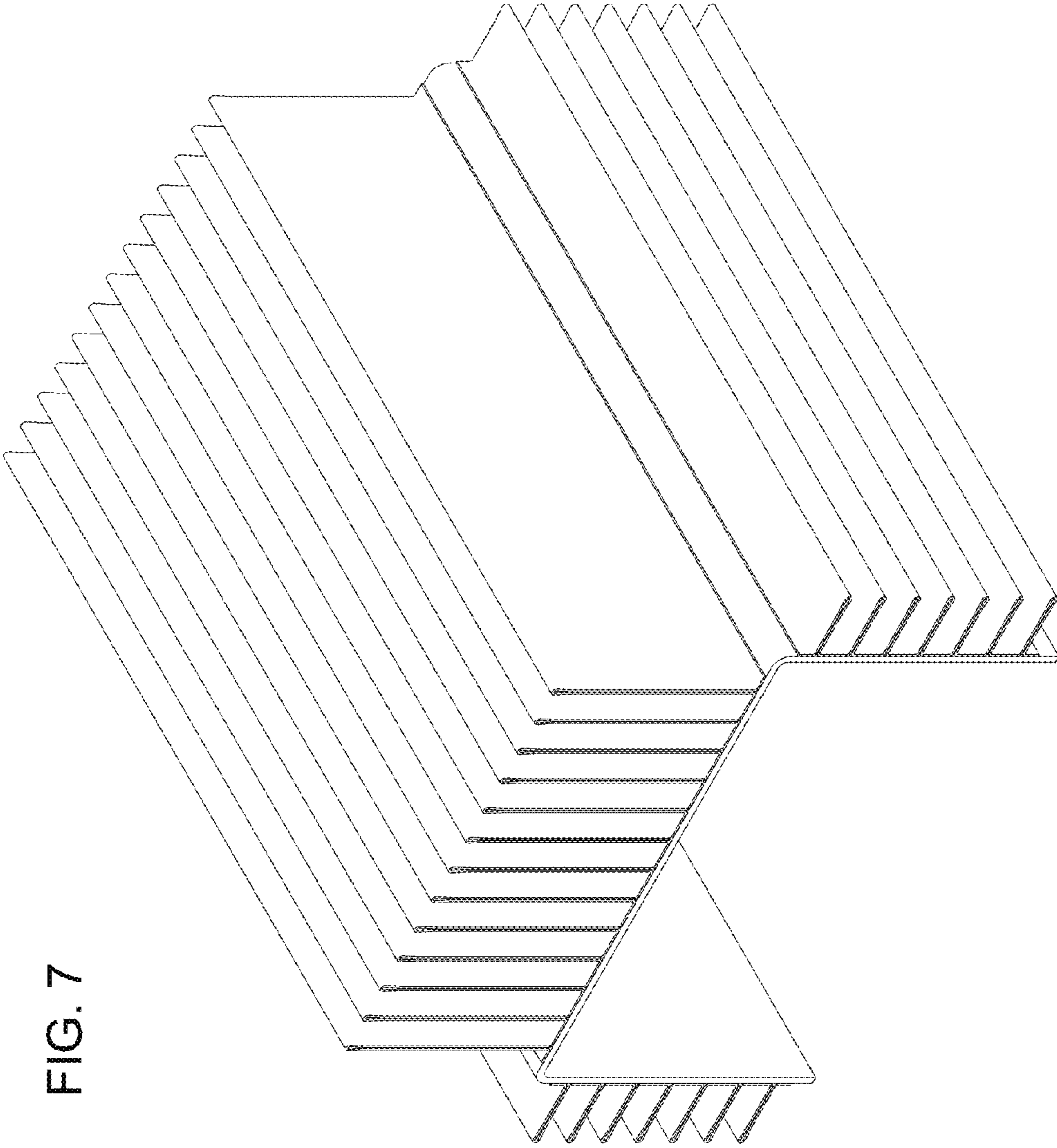


FIG. 7