



US00D921879S

(12) **United States Design Patent** (10) **Patent No.:** **US D921,879 S**
Klauer et al. (45) **Date of Patent:** **** Jun. 8, 2021**

- (54) **HVACR LOUVER**
- (71) Applicant: **TRANE INTERNATIONAL INC.**,
Davidson, NC (US)
- (72) Inventors: **Eric Klauer**, Lindale, TX (US); **Jeff T. Cool**, Tyler, TX (US); **Jose Luis Balderrama**, Tyler, TX (US); **Bryan Hawkins**, Chandler, TX (US)
- (73) Assignee: **TRANE INTERNATIONAL INC.**,
Davidson, NC (US)
- (**) Term: **15 Years**
- (21) Appl. No.: **29/648,421**
- (22) Filed: **May 21, 2018**
- (51) **LOC (13) Cl.** **23-03**
- (52) **U.S. Cl.**
USPC **D23/397; D7/409**
- (58) **Field of Classification Search**
USPC D7/332, 334, 337, 338, 339, 348, 409;
D23/327, 354, 385, 386, 387, 388, 389,
D23/392, 393, 397, 403, 407, 415
CPC F24F 11/30
See application file for complete search history.

- (56) **References Cited**
- U.S. PATENT DOCUMENTS
- 661,638 A * 11/1900 Hart F24F 13/08
454/330
- D77,771 S * 2/1929 Hicks D23/335
- D149,302 S * 4/1948 Reinecke D23/335
- 2,718,901 A * 9/1955 Nutter B01D 3/163
137/512.1
- D233,399 S * 10/1974 Marshall D7/337
- D244,293 S * 5/1977 Carluccio
- D246,751 S * 12/1977 Yonkers D7/409
- D255,413 S * 6/1980 Alexander D7/409
- D258,232 S * 2/1981 Weis D13/102

D263,511 S * 3/1982 Bartscher D25/156
D265,584 S * 7/1982 Butt D23/386
4,428,281 A * 1/1984 Miller A47J 37/067
99/445

(Continued)

OTHER PUBLICATIONS

Perforated Metal website, Hengda Slotted Filter Sheet, Wayback Machine date May 13, 2017, [site visited Oct. 1, 2020], Available on the Internet URL <https://www.perforated-metal.net/> (Year: 2017).*

(Continued)

Primary Examiner — Karen S Acker
Assistant Examiner — Steven B Reinholdt, Jr.
(74) *Attorney, Agent, or Firm* — Hamre, Schumann,
Mueller & Larson, P.C.

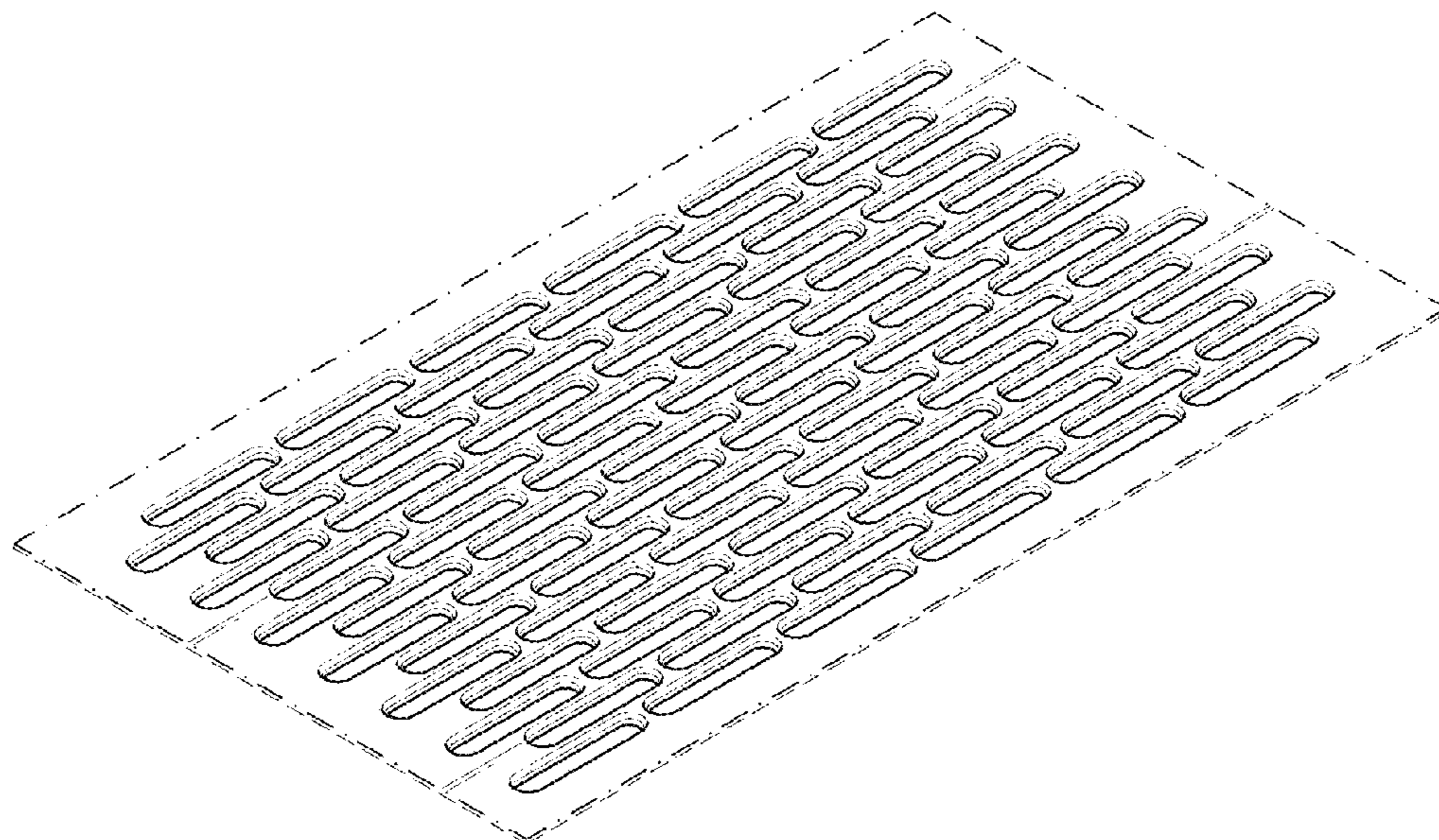
(57) **CLAIM**

The ornamental design for an HVACR louver, as shown and described.

DESCRIPTION

FIG. 1 is an isometric view of a first embodiment of an HVACR louver.
FIG. 2 is front elevational view thereof.
FIG. 3 is a rear elevational view thereof.
FIG. 4 is a left side view thereof; with the right side view being a mirror image thereto.
FIG. 5 is a top plan view thereof; the bottom plan view being the same thereto.
FIG. 6 is front elevational view of a second embodiment of an outer surface of an HVACR louver.
FIG. 7 is a rear elevational view thereof.
FIG. 8 is a left side view thereof; and,
FIG. 9 is a top plan view thereof.
The dashed lines in FIGS. 1-9 show environmental subject matter and form no part of the claimed design. The dash-dot-dash lines represent the boundaries of the HVACR louver and form no part of the claimed design.

1 Claim, 7 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D288,489 S * 2/1987 Tofani D25/157
 D334,505 S * 4/1993 Gropman D7/359
 D339,415 S * 9/1993 Kiras D23/397
 D353,193 S * 12/1994 Porter D23/393
 D416,997 S * 11/1999 Prouty D23/397
 D423,661 S * 4/2000 Pelonis D23/395
 D503,784 S 4/2005 Tucker et al.
 D532,502 S 11/2006 Bartlett et al.
 D534,260 S 12/2006 David et al.
 D534,633 S 1/2007 David et al.
 D534,634 S 1/2007 David et al.
 D534,635 S 1/2007 David et al.
 D534,636 S 1/2007 David et al.
 D534,637 S 1/2007 David et al.
 D603,948 S 11/2009 Ishihara
 D629,091 S 12/2010 Maezawa et al.
 D714,927 S * 10/2014 Urano D23/388
 D738,999 S * 9/2015 Funnell, II D23/365
 D740,070 S * 10/2015 Zwanenburg D7/354
 D757,493 S * 5/2016 Lee D7/352
 D786,413 S 5/2017 Martin
 D793,161 S * 8/2017 Fullmer D7/354
 D806,471 S * 1/2018 Fullmer D7/409
 D809,114 S * 1/2018 Funnell, II D23/365
 D812,425 S * 3/2018 Reischmann D7/409
 D817,851 S * 5/2018 Perkins D12/345
 D820,041 S * 6/2018 Johnson D7/409
 D821,613 S * 6/2018 Kilian D25/138
 D824,013 S * 7/2018 Hu D23/392
 D863,886 S * 10/2019 Hubert D7/409

D869,235 S * 12/2019 Johnson D7/409
 D869,903 S * 12/2019 Zhong D7/409
 2010/0263829 A1* 10/2010 Kimura F24F 1/01
 165/59
 2017/0030597 A1 2/2017 Crespo-Calero
 2019/0353391 A1* 11/2019 Klauer F24F 11/30

OTHER PUBLICATIONS

Leac's wesbite, Monitor M8 Passivo, Publication date unknown, [site visited Oct. 1, 2020], Available on the Internet URL <http://leacs.com.br/produto/monitor-m8-passivo/> (Year: 2020).*

Made-in-China.com, Anping Qinghe, Oblong Hole, Earliest date on Wayback Jun. 9, 2015, [site visited Oct. 1, 2020], Available on the URL <https://web.archive.org/web/20150609082207/https://qhmesh.en.made-in-china.com/product/EqJmMltCqZrQ/China-Kinds-of-Materials-Oblong-Hole-Perforated-Metal-Sheet.html> (Year: 2015).*

Ideco website, Slotted Hole Perforation, Wayback Machine Jul. 25, 2017, [site visited Oct. 1, 2020], Available on the Internet URL <https://web.archive.org/web/20170725164657/http://www.ideco-metal.com/sale-8049156-slotted-hole-perforation-metal-screen-stainless-oblong-hole-perforated-sheets-for-sieves.html> (Year: 2017).*

India Mart Website, Aluminium Oblong Hole Perforated Sheet, Publication date unknown, [site visited Oct. 1, 2020], Available on the Internet URL <https://www.indiamart.com/proddetail/aluminum-oblong-hole-perforated-sheet-19535597262.html> (Year: 2020).*

Alibaba Website, Perforated Aluminium Panels, Publication date unknown, [site visited Oct. 1, 2020], Available on the Internet URL https://www.alibaba.com/product-detail/perforated-aluminum-panels-factory-perforated-steel_60785387136.html (Year: 2020).*

* cited by examiner

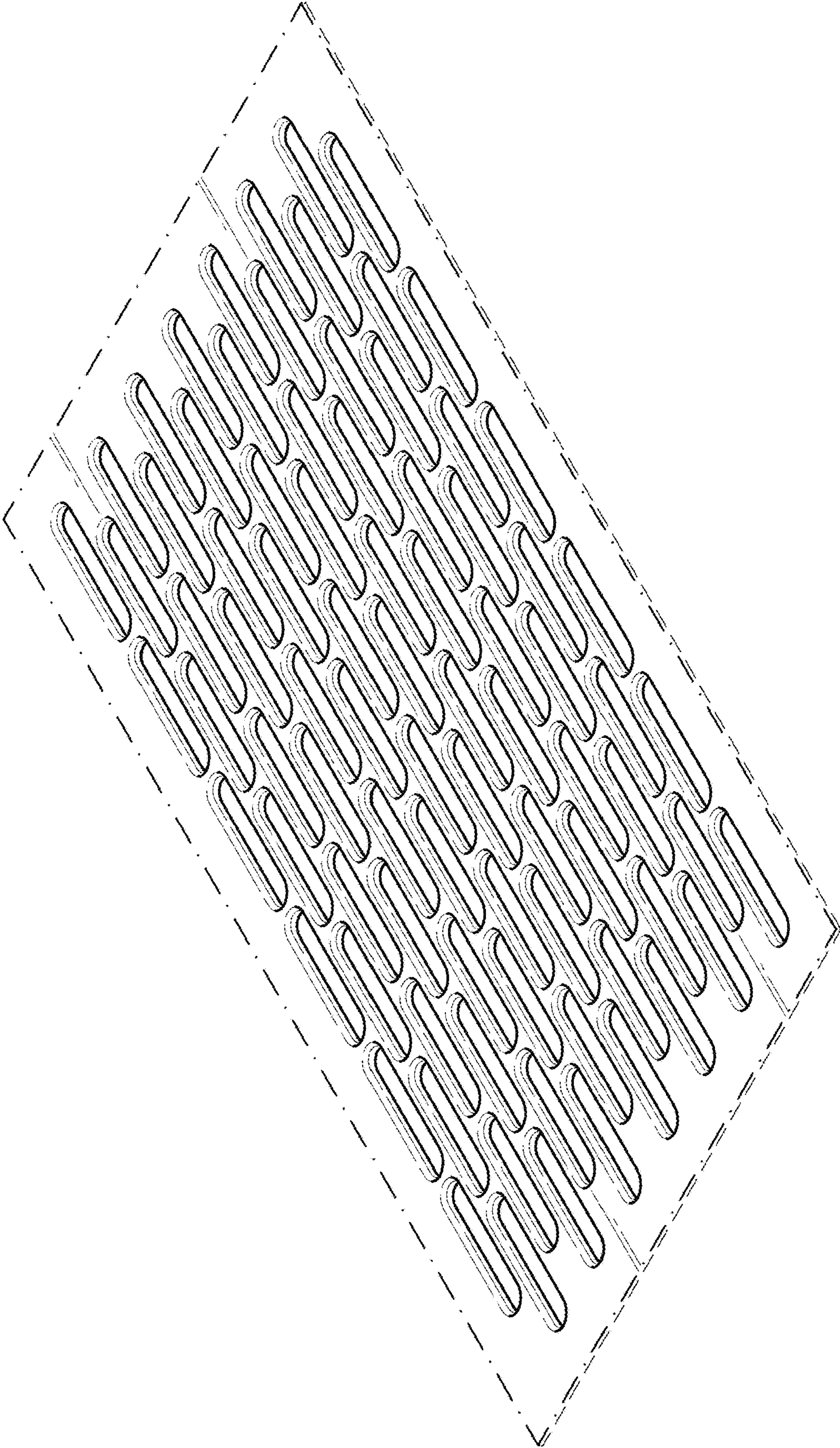


FIG. 1

FIG. 2

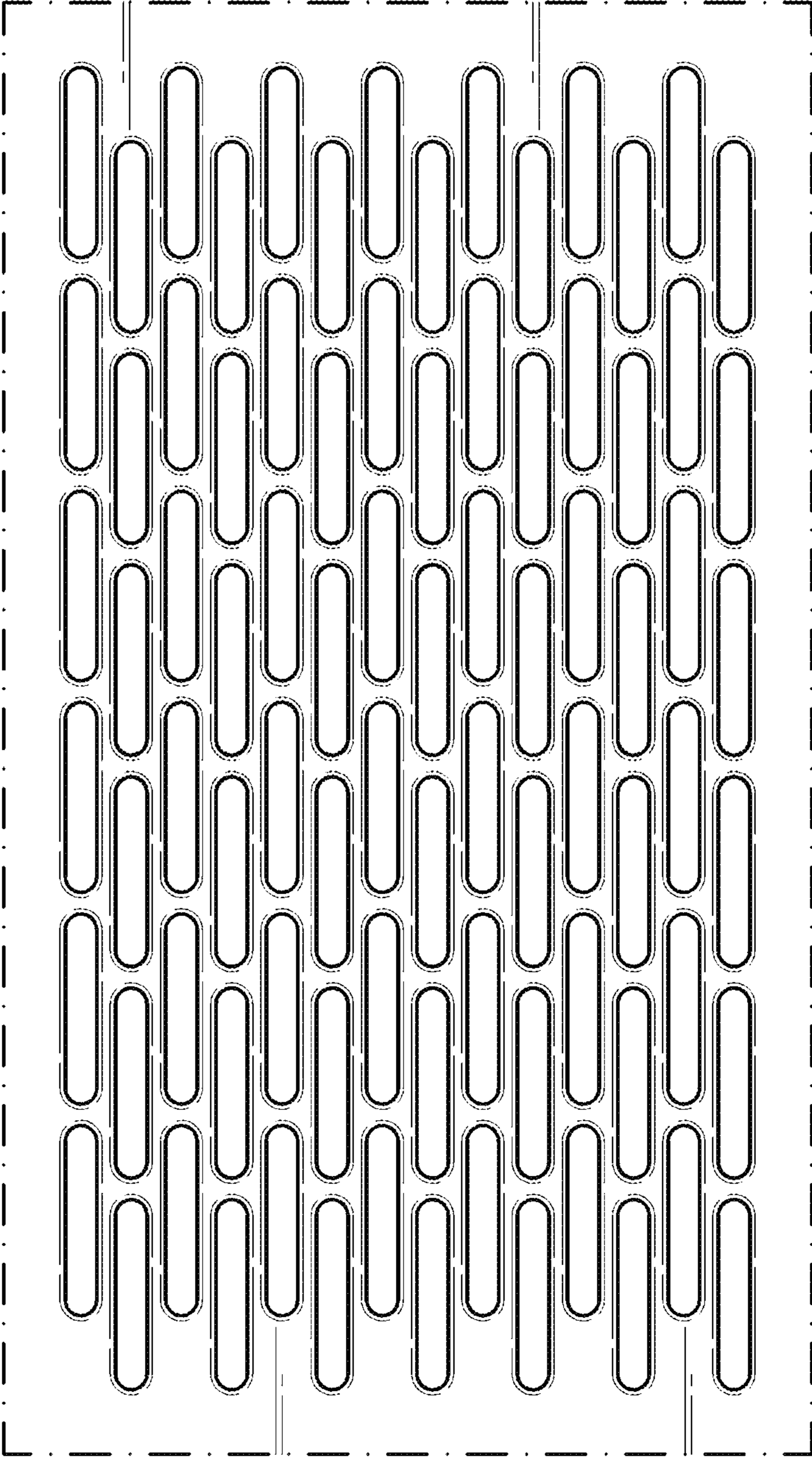


FIG. 3

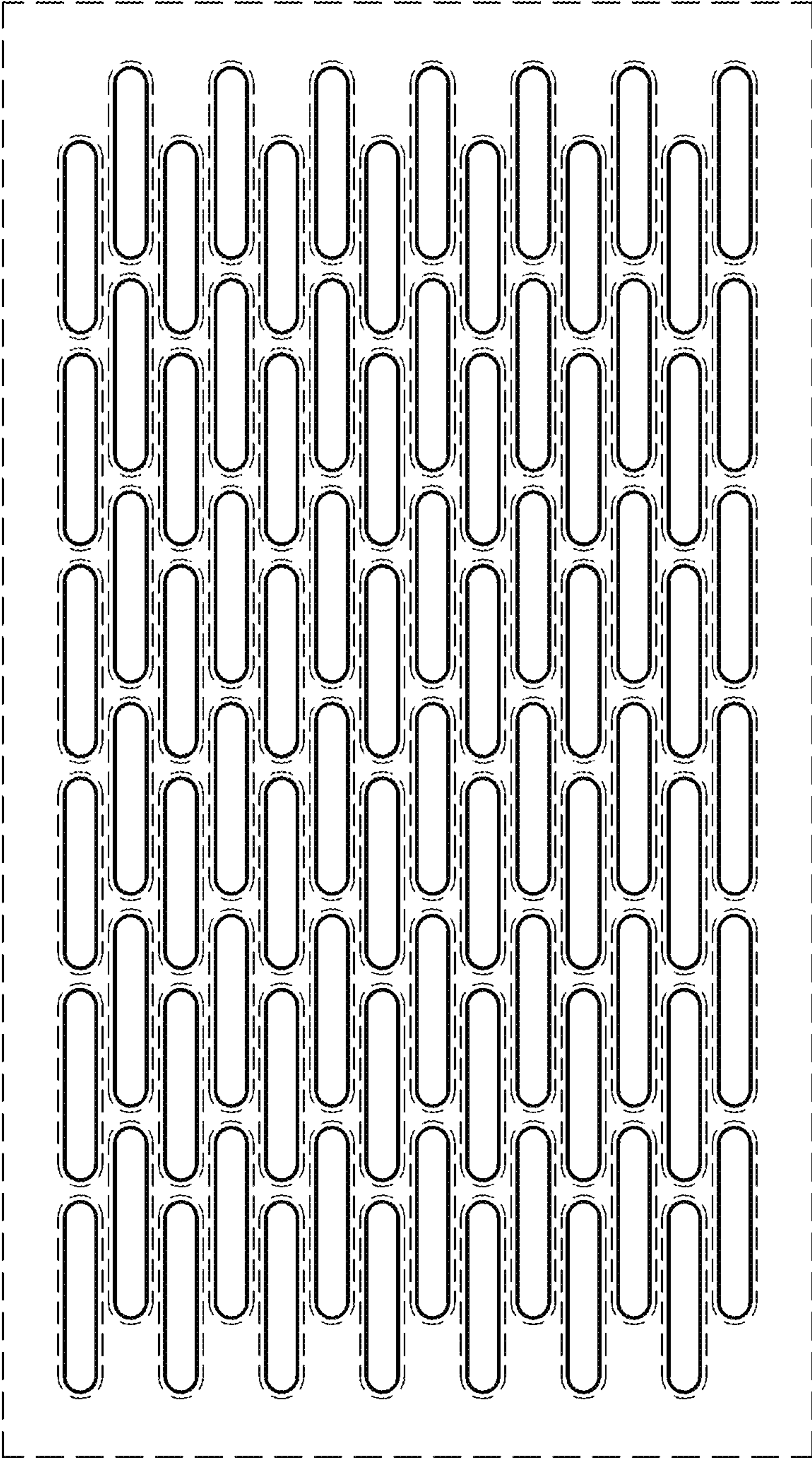


FIG. 4



FIG. 5



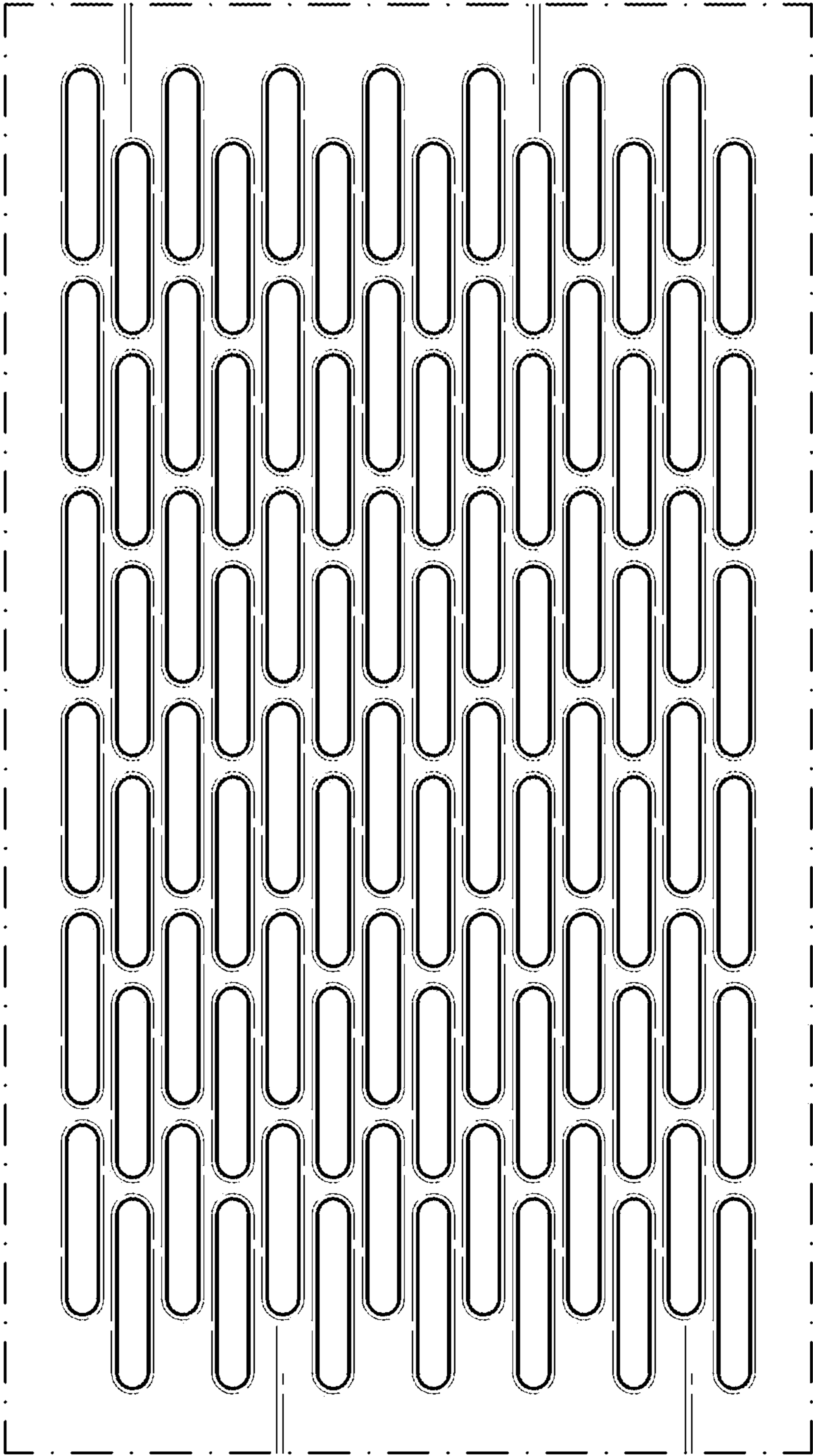


FIG. 6

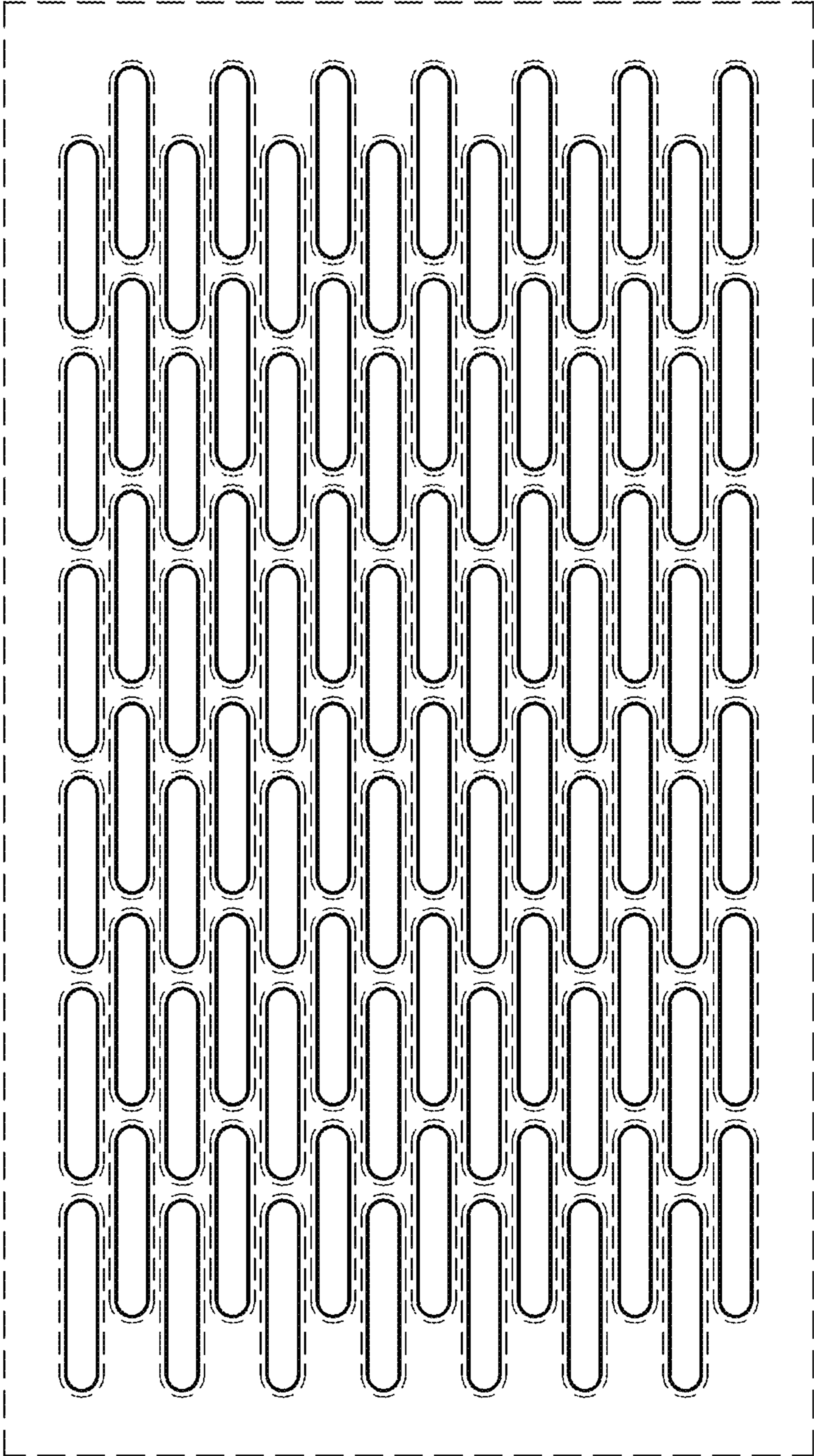


FIG. 7

FIG. 8

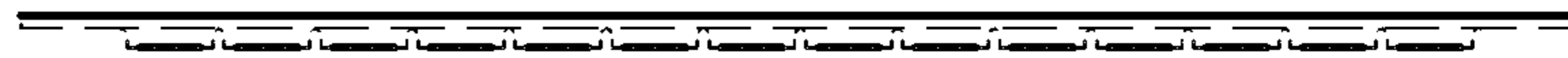


FIG. 9

