



US00D937233S

(12) **United States Design Patent** (10) **Patent No.:** **US D937,233 S**
Okawa et al. (45) **Date of Patent:** **** Nov. 30, 2021**

(54) **SEMICONDUCTOR DEVICE**

2924/181; H01L 2924/1811; H01L 2924/1815; H01L 2924/19042; H01L 2924/1905

(71) Applicant: **Nuvoton Technology Corporation**
Japan, Kyoto (JP)

See application file for complete search history.

(72) Inventors: **Ryosuke Okawa**, Nara-ken (JP);
Toshikazu Imai, Hyogo-ken (JP);
Kazuma Yoshida, Kyoto-fu (JP);
Tsubasa Inoue, Osaka-fu (JP); **Takeshi Imamura**, Kyoto-fu (JP)

(56) **References Cited**

U.S. PATENT DOCUMENTS

273,559 A	3/1883	Lockwood
729,489 A	5/1903	Cigol
1,998,526 A	4/1935	Schubert
D142,491 S	10/1945	Neiser
D318,461 S	7/1991	Hasegawa
D319,045 S	8/1991	Hasegawa
D319,629 S	9/1991	Hasegawa
D319,814 S	9/1991	Hasegawa

(Continued)

(73) Assignee: **Nuvoton Technology Corporation**
Japan, Nagaokakyo (JP)

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

(21) Appl. No.: **29/801,768**

(22) Filed: **Jul. 30, 2021**

FOREIGN PATENT DOCUMENTS

JP	D1581768	7/2017
JP	D1588125	10/2017

(Continued)

Primary Examiner — Elizabeth J Oswecki

(74) *Attorney, Agent, or Firm* — Crowell & Moring LLP

Related U.S. Application Data

(62) Division of application No. 29/710,622, filed on Oct. 24, 2019.

(51) **LOC (13) Cl.** **13-03**

(52) **U.S. Cl.**
USPC **D13/182**

(58) **Field of Classification Search**
USPC D13/182; D21/391
CPC H01L 21/00; H01L 21/02; H01L 21/4814;
H01L 21/4846; H01L 21/4871; H01L 21/67144; H01L 2224/42; H01L 2224/43;
H01L 2224/01; H01L 2224/08055; H01L 2224/08054; H01L 23/12; H01L 23/13;
H01L 23/14; H01L 23/147; H01L 23/00;
H01L 23/48; H01L 23/4926; H01L 23/495;
H01L 23/49517; H01L 23/498; H01L 23/49805;
H01L 23/49811; H01L 23/49861; H01L 23/49866;
H01L 23/49872; H01L 23/49575; H01L 23/49579;
H01L 2924/171; H01L 2924/1711; H01L 2924/1715; H01L

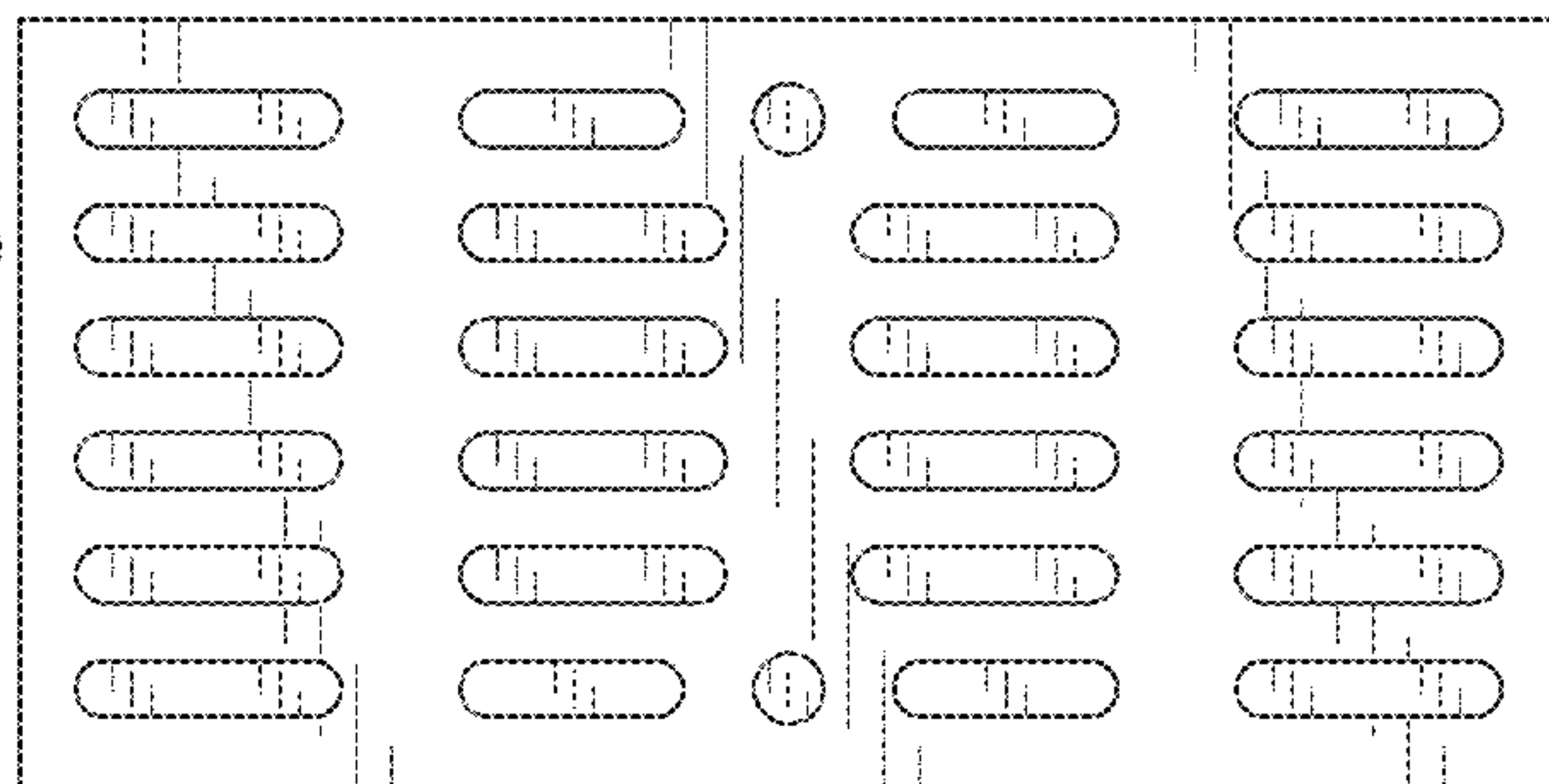
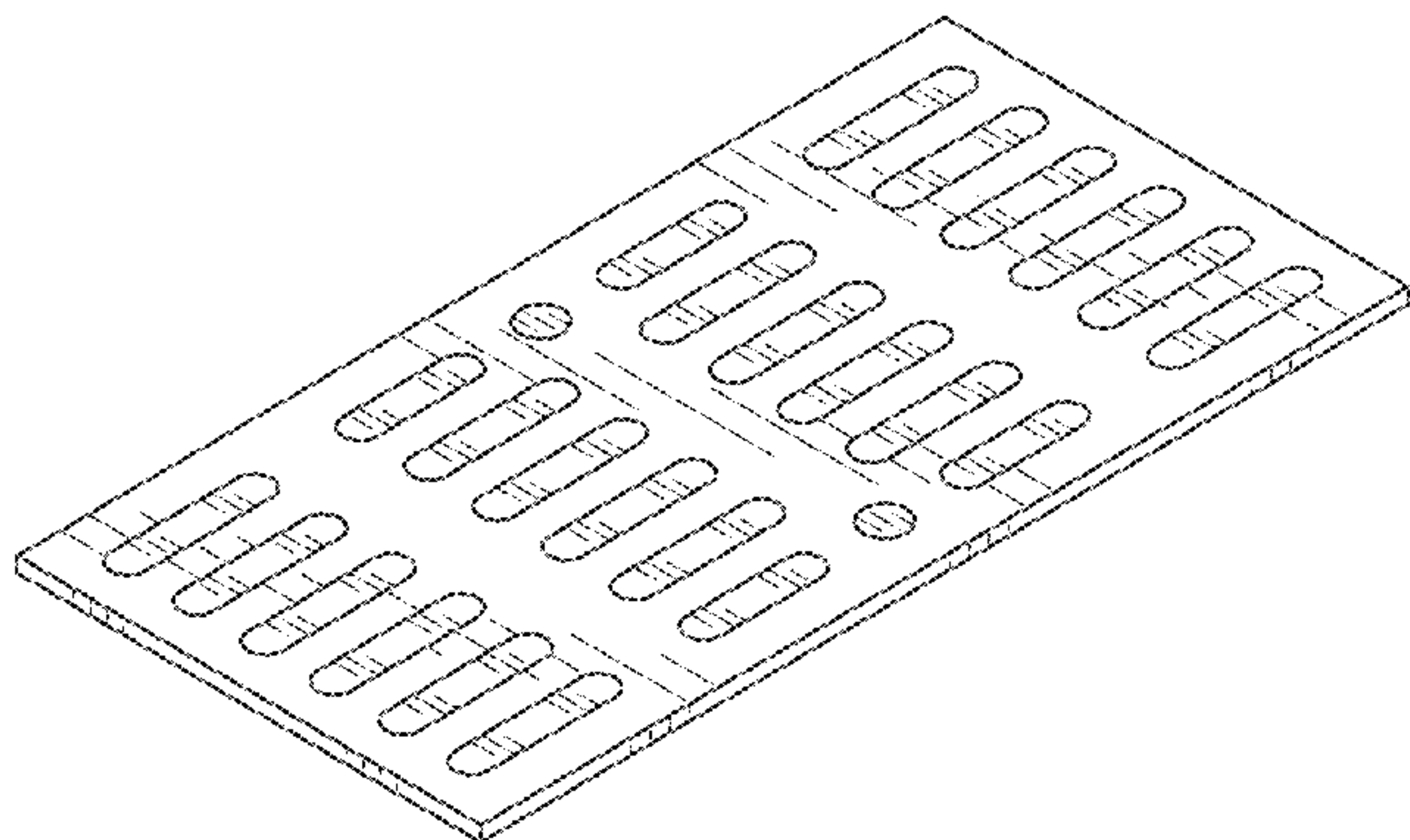
(57) **CLAIM**

We claim the ornamental design for a semiconductor device, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a semiconductor device according to the present invention;
FIG. 2 is a front view thereof;
FIG. 3 is a rear view thereof;
FIG. 4 is a left side view thereof;
FIG. 5 is a right side view thereof;
FIG. 6 is a top view thereof; and,
FIG. 7 is a bottom view thereof.

1 Claim, 7 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

5,858,815 A * 1/1999 Heo H01L 23/3114
438/112

6,307,269 B1 10/2001 Akiyama

D466,093 S 11/2002 Ebihara

D471,167 S 3/2003 Ebihara

6,589,817 B1 * 7/2003 Takahashi H01L 23/49572
438/117

D487,430 S 3/2004 Asaka

6,836,002 B2 12/2004 Chikawa

D598,380 S 8/2009 Kuriki

8,177,993 B2 * 5/2012 Seah H01L 21/67028
216/83

8,294,250 B2 * 10/2012 Yoon H01L 24/49
257/680

8,424,119 B2 * 4/2013 Blackford A43B 1/00
2/456

8,479,322 B2 * 7/2013 Blackford A43B 1/00
2/456

D687,898 S 8/2013 Lupkas

D691,101 S 10/2013 Ishizawa

D704,155 S 5/2014 Chang

D721,047 S 1/2015 Vinciarelli

D730,304 S 5/2015 Matsumoto

D754,083 S 4/2016 Vinciarelli

D757,693 S 5/2016 Sudo

D764,424 S 8/2016 Matsumoto

D775,093 S 12/2016 Vinciarelli

D778,850 S 2/2017 Matsumoto

D797,066 S 9/2017 Zhang

D813,182 S 3/2018 Imai et al.

D821,337 S * 6/2018 Adams D13/182

D821,338 S * 6/2018 Adams D13/182

D831,009 S * 10/2018 Horn D14/230

D837,171 S 1/2019 Vasoya

D850,309 S 6/2019 Jovanovic

D864,882 S 10/2019 Sakamoto

D864,883 S 10/2019 Sakamoto

D865,690 S 11/2019 Sakamoto

D881,854 S * 4/2020 Campbell D14/230

D887,999 S * 6/2020 Chen D13/182

D902,164 S 11/2020 Kondo

D904,325 S 12/2020 Omichi

D904,355 S * 12/2020 Horn D14/230

D927,429 S * 8/2021 Adams D13/147

2006/0164315 A1 * 7/2006 Munk H01Q 21/28
343/776

2010/0326710 A1 * 12/2010 Zhang H01G 9/04
174/257

2018/0013208 A1 * 1/2018 Izadian H01P 11/002

FOREIGN PATENT DOCUMENTS

JP D1588481 10/2017

JP D1632160 5/2019

JP D1632597 5/2019

JP D1640664 9/2019

JP D1641048 9/2019

JP D1641049 9/2019

* cited by examiner

FIG. 1

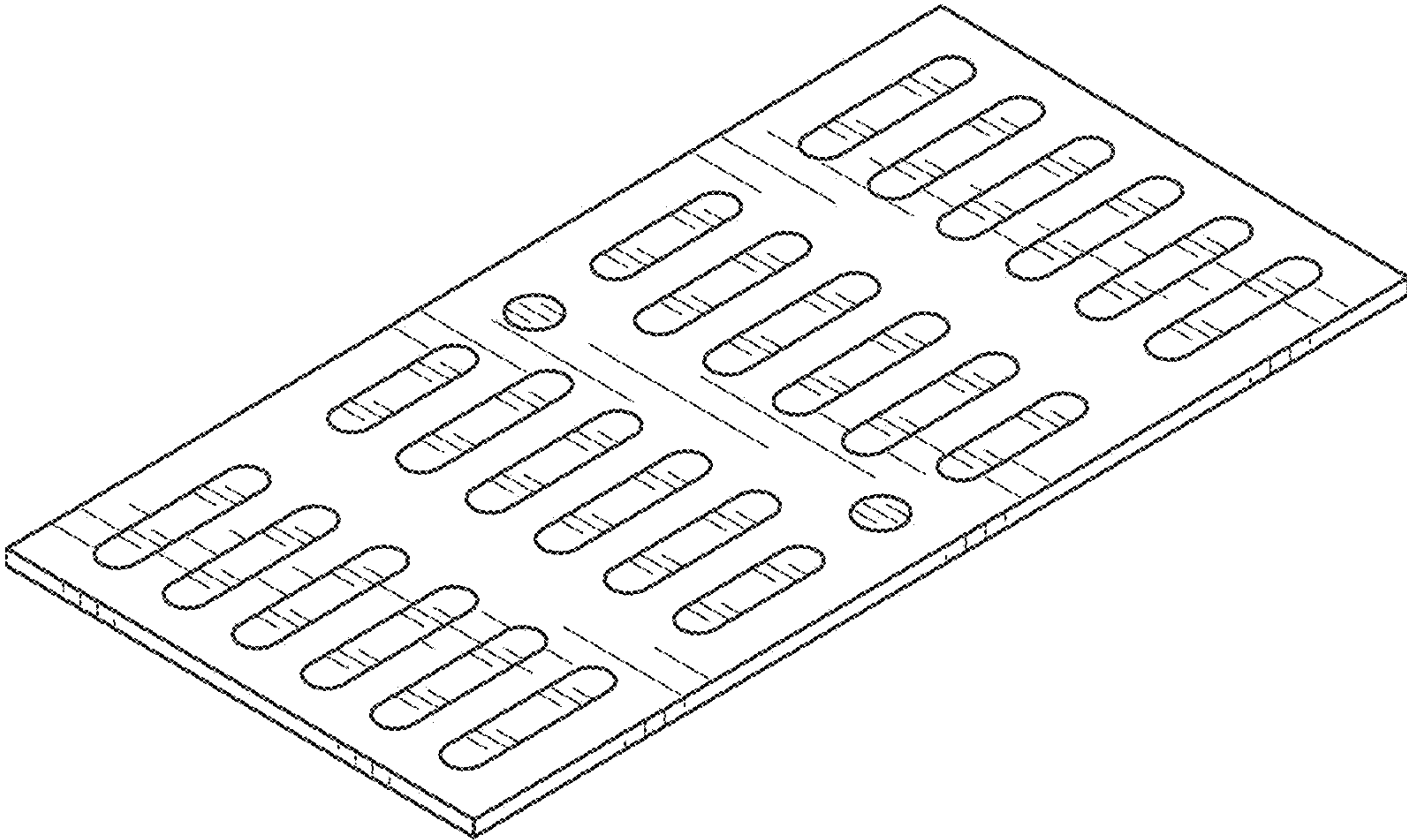


FIG. 2

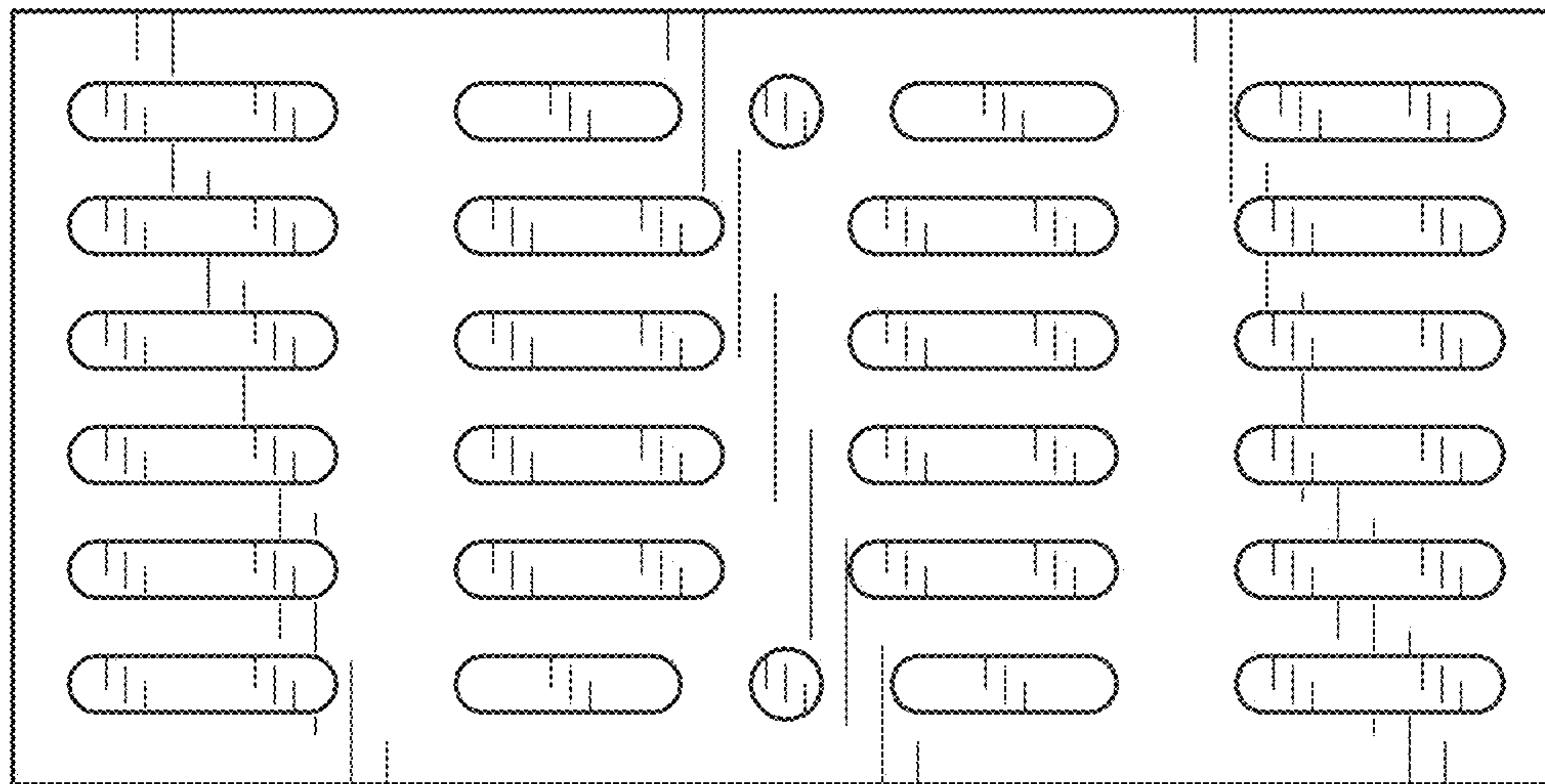


FIG. 3

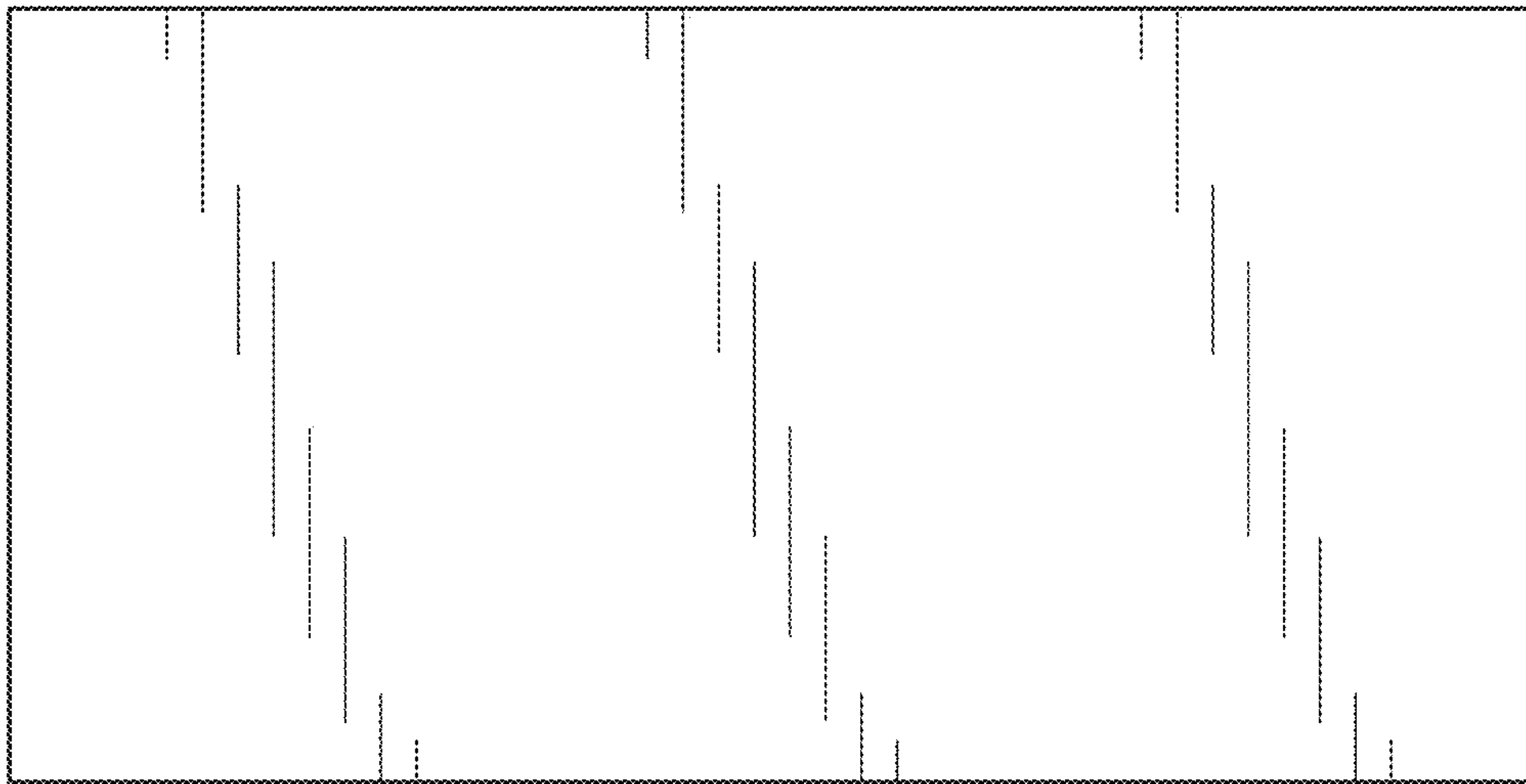


FIG. 4



FIG. 5



FIG. 6



FIG. 7

