



US00D938925S

(12) **United States Design Patent** (10) **Patent No.:** **US D938,925 S**  
**Okawa et al.** (45) **Date of Patent:** **\*\* Dec. 21, 2021**

(54) **SEMICONDUCTOR DEVICE**  
(71) Applicant: **Panasonic Intellectual Property Management Co., Ltd.**, Osaka (JP)  
(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)  
(73) Assignee: **NUVOTON TECHNOLOGY CORPORATION JAPAN**, Nagaokakyo (JP)  
(\*\*) Term: **15 Years**  
(21) Appl. No.: **29/710,616**  
(22) Filed: **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 2924/181; H01L 2924/1811; H01L 2924/1815; H01L 2924/19042; H01L 2924/1905

See application file for complete search history.

(56) **References Cited**  
U.S. PATENT DOCUMENTS  
273,559 A \* 3/1883 Lockwood ..... A63F 1/02  
273/293  
729,489 A \* 5/1903 Cigol ..... A63F 1/02  
273/295  
1,998,526 A \* 4/1935 Schubert ..... A63F 9/20  
273/292  
D142,491 S \* 10/1945 Neiser ..... D21/391  
D318,461 S \* 7/1991 Hasegawa ..... D13/182  
D319,045 S \* 8/1991 Hasegawa ..... D13/182  
(Continued)

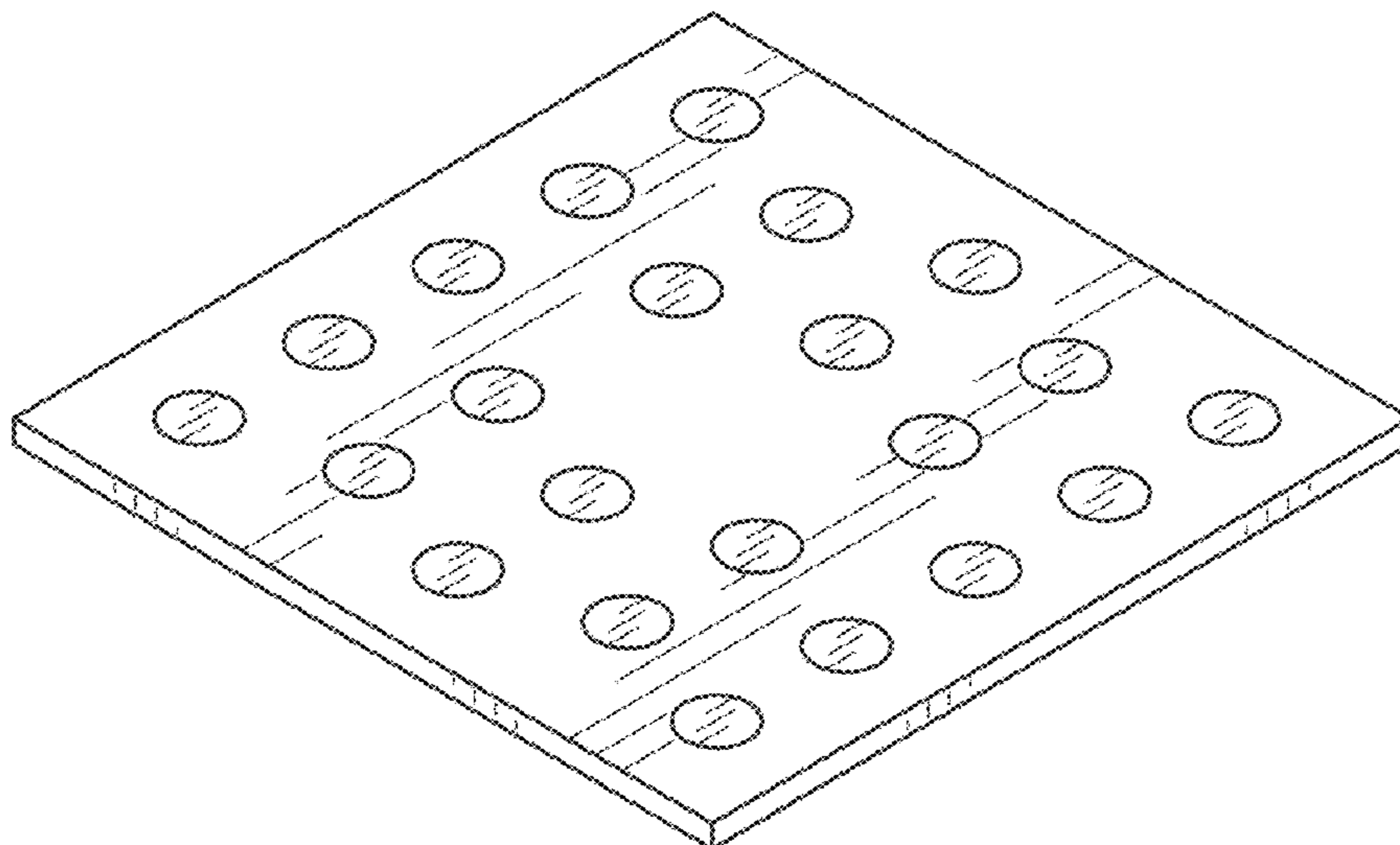
FOREIGN PATENT DOCUMENTS  
JP D1581768 7/2017  
JP D1588125 10/2017  
(Continued)

OTHER PUBLICATIONS  
Notice of Allowance in U.S. Appl. No. 29/801,764, dated Oct. 4, 2021, 12 pages.  
*Primary Examiner* — Elizabeth J Oswecki  
(74) *Attorney, Agent, or Firm* — Crowell & Moring LLP

(57) **CLAIM**  
The ornamental design for a semiconductor device, as shown and described.

**DESCRIPTION**  
FIG. 1 is a perspective view of a semiconductor device showing our new design;  
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 plan view thereof; and,  
FIG. 7 is a bottom plan view thereof.

**1 Claim, 4 Drawing Sheets**



(56)

References Cited

U.S. PATENT DOCUMENTS

D319,629 S \* 9/1991 Hasegawa ..... D13/182  
 D319,814 S \* 9/1991 Hasegawa ..... D13/182  
 5,370,398 A \* 12/1994 Nguyen ..... A63F 9/20  
 273/293  
 5,757,082 A \* 5/1998 Shibata ..... H01L 24/48  
 257/786  
 5,858,815 A 1/1999 Heo  
 6,307,269 B1 \* 10/2001 Akiyama ..... H01L 24/50  
 257/778  
 6,589,817 B1 7/2003 Takahashi  
 D487,430 S \* 3/2004 Asaka ..... D13/182  
 6,836,002 B2 \* 12/2004 Chikawa ..... H01L 23/522  
 257/666  
 D598,380 S \* 8/2009 Kuriki ..... D13/133  
 D633,672 S 3/2011 McKnight  
 8,177,993 B2 5/2012 Seah  
 8,294,250 B2 10/2012 Yoon  
 D687,898 S \* 8/2013 Lupkas ..... D21/391  
 D704,155 S \* 5/2014 Chang ..... D13/182  
 D730,304 S \* 5/2015 Matsumoto ..... D13/182  
 D754,083 S \* 4/2016 Vinciarelli ..... D13/182  
 D757,693 S \* 5/2016 Sudo ..... D14/230  
 D764,424 S \* 8/2016 Matsumoto ..... D13/182  
 D775,093 S \* 12/2016 Vinciarelli ..... D13/182  
 D778,850 S \* 2/2017 Matsumoto ..... D13/182

D789,456 S \* 6/2017 Frost ..... D21/391  
 D797,066 S \* 9/2017 Zhang ..... D13/180  
 D813,182 S \* 3/2018 Imai ..... D13/182  
 D821,337 S 6/2018 Adams  
 D821,338 S 6/2018 Adams  
 D831,009 S 10/2018 Horn  
 D837,171 S \* 1/2019 Vasoya ..... D13/182  
 D850,309 S \* 6/2019 Jovanovic ..... D10/80  
 D856,948 S \* 8/2019 Vasoya ..... D13/182  
 10,510,626 B2 \* 12/2019 Braun ..... H01L 22/30  
 D872,032 S \* 1/2020 Morelli ..... D13/147  
 D872,033 S \* 1/2020 Morelli ..... D13/147  
 D887,999 S 6/2020 Chen  
 D893,439 S \* 8/2020 Vasoya ..... D13/182  
 D902,164 S \* 11/2020 Kondo ..... D13/182  
 D904,325 S \* 12/2020 Omichi ..... D13/182  
 D904,355 S \* 12/2020 Horn ..... D14/230  
 D927,429 S 8/2021 Adams  
 2010/0326710 A1 12/2010 Zhang

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

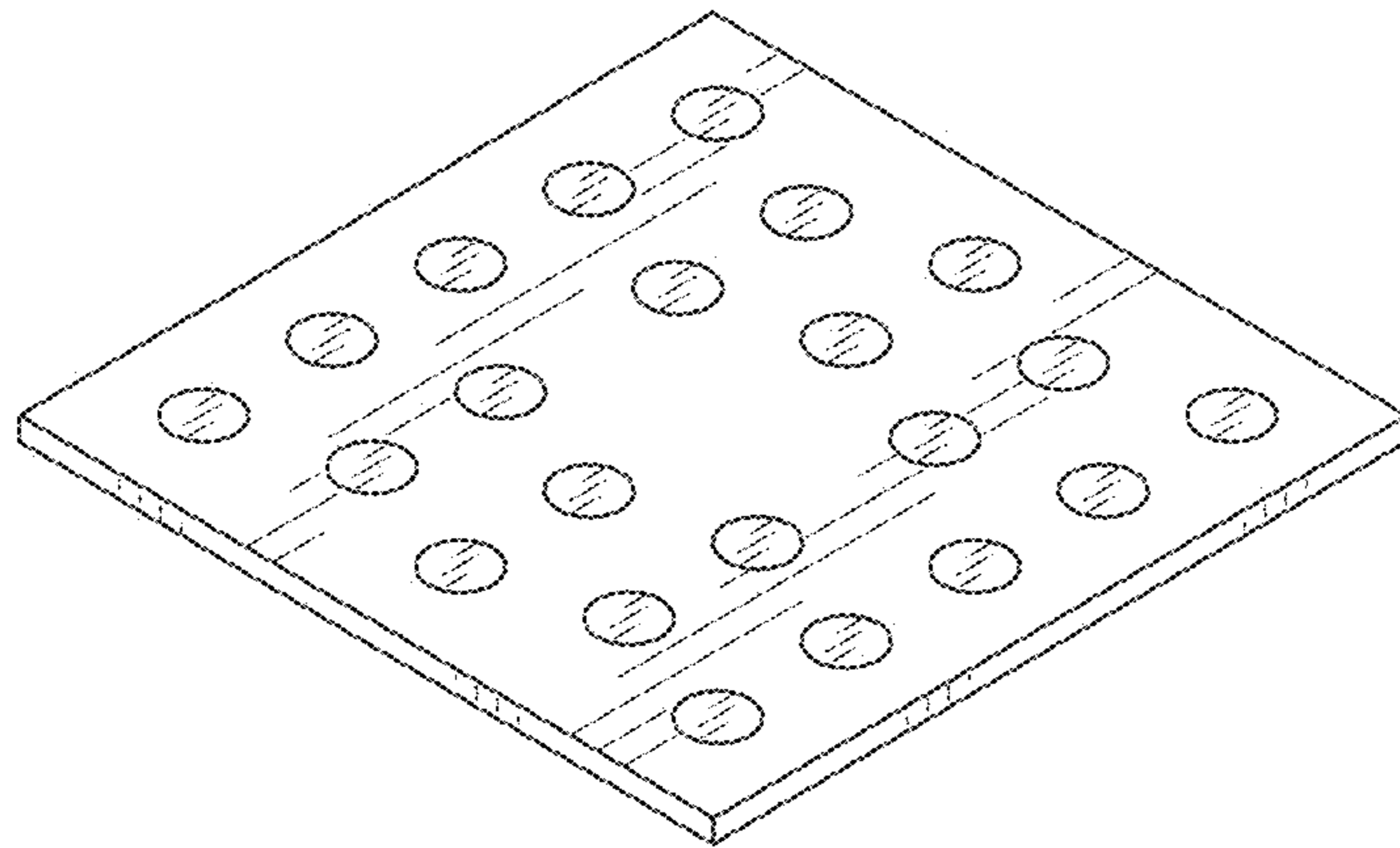


FIG. 2

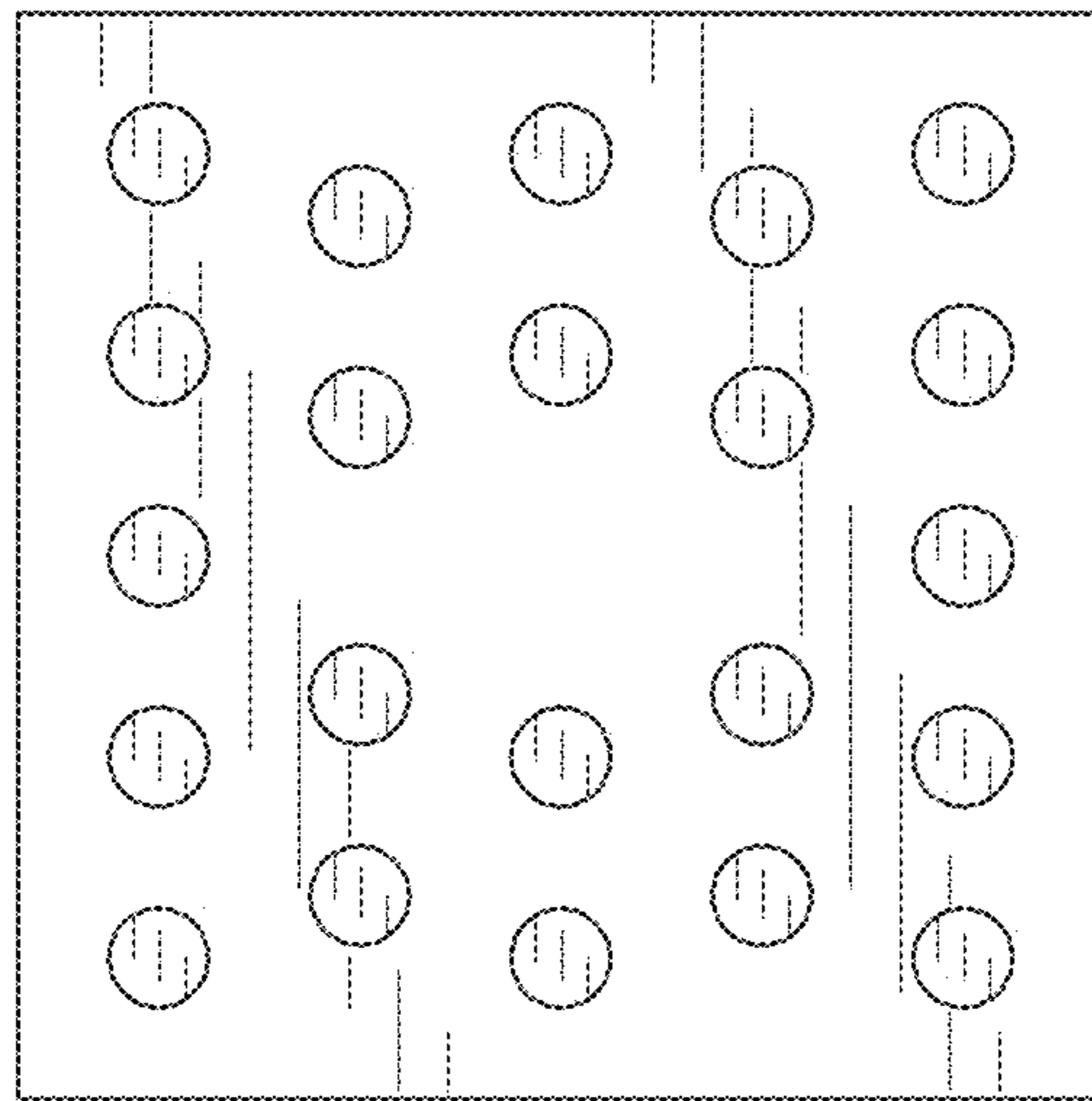


FIG. 3

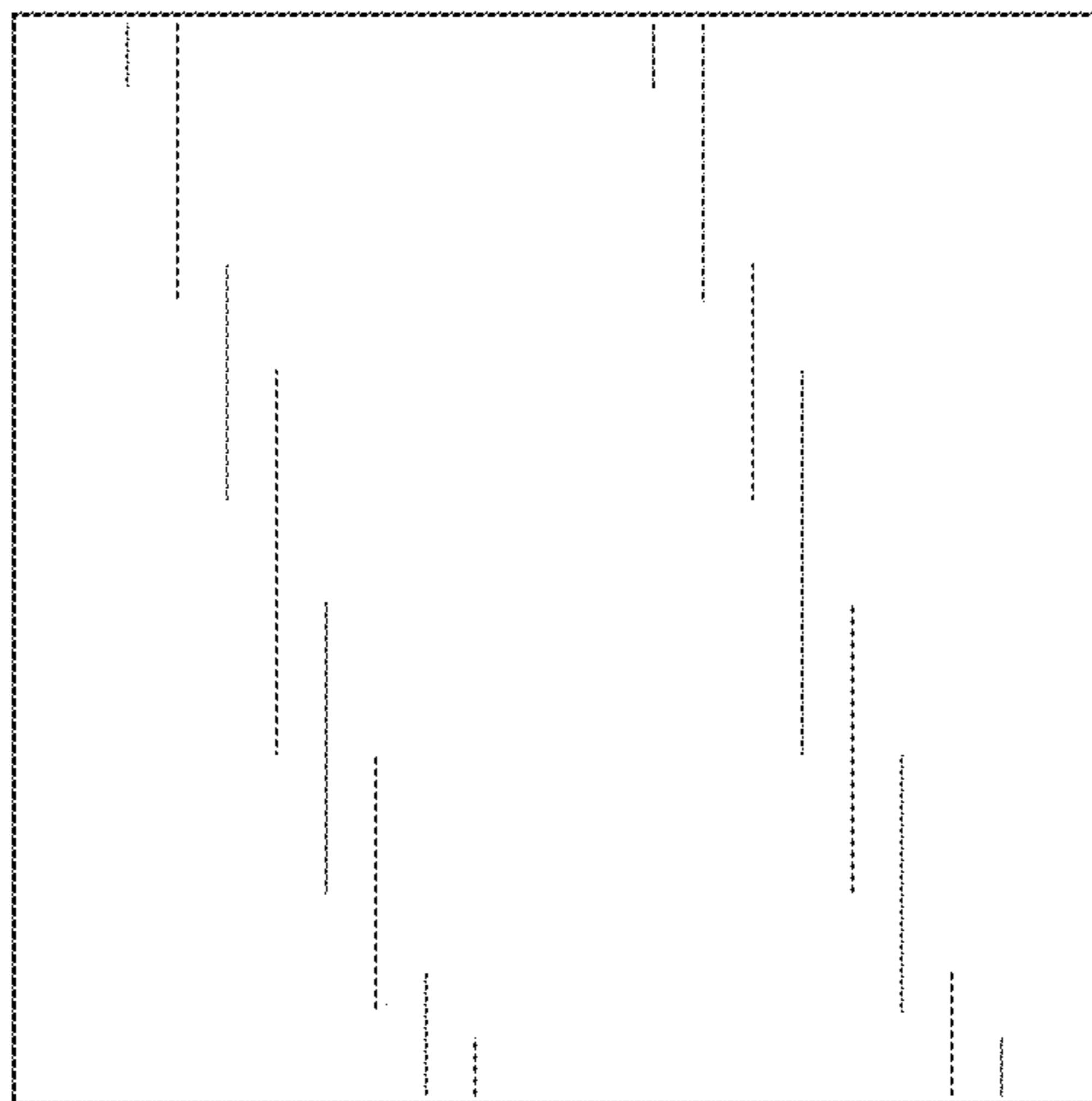


FIG. 4

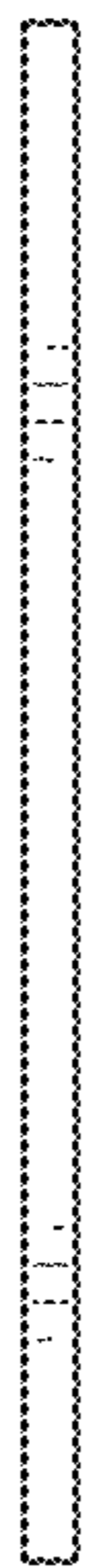


FIG. 5



FIG. 6

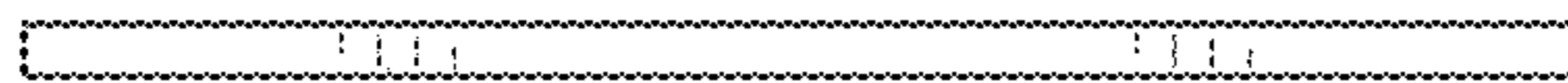


FIG. 7

