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

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(54) **FILTER FOR REMOVING PARTICLE MATTER**

(71) Applicant: **NGK INSULATORS, LTD.**,
Nagoya-Shi (JP)

(72) Inventors: **Kazuya Mori**, Nagoya (JP); **Yukio Miyairi**, Nagoya (JP)

(73) Assignee: **NGK Insulators, Ltd.**, Nagoya (JP)

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

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(30) **Foreign Application Priority Data**

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Feb. 24, 2015 (JP) 2015-003728

(51) **LOC (10) Cl.** **23-04**

(52) **U.S. Cl.**
USPC **D23/365**

(58) **Field of Classification Search**
USPC D23/355-365, 386-388, 314, 325,
D23/333-336; 55/478, 482, 483, 490, 497,
55/498, 520, 521, 529
CPC B01D 46/00; B01D 46/0004; B01D 27/04;
B01D 27/06; B01D 39/00
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D414,281 S * 9/1999 Sassenberg D25/152
D501,566 S * 2/2005 Yang D25/139

(Continued)

FOREIGN PATENT DOCUMENTS

JP 2014-200741 A1 10/2014

OTHER PUBLICATIONS

Japanese Office Action (Application No. 2015-003727) dated Oct. 6, 2015 (with English translation).

(Continued)

Primary Examiner — Sandra Snapp

(74) *Attorney, Agent, or Firm* — Burr & Brown, PLLC

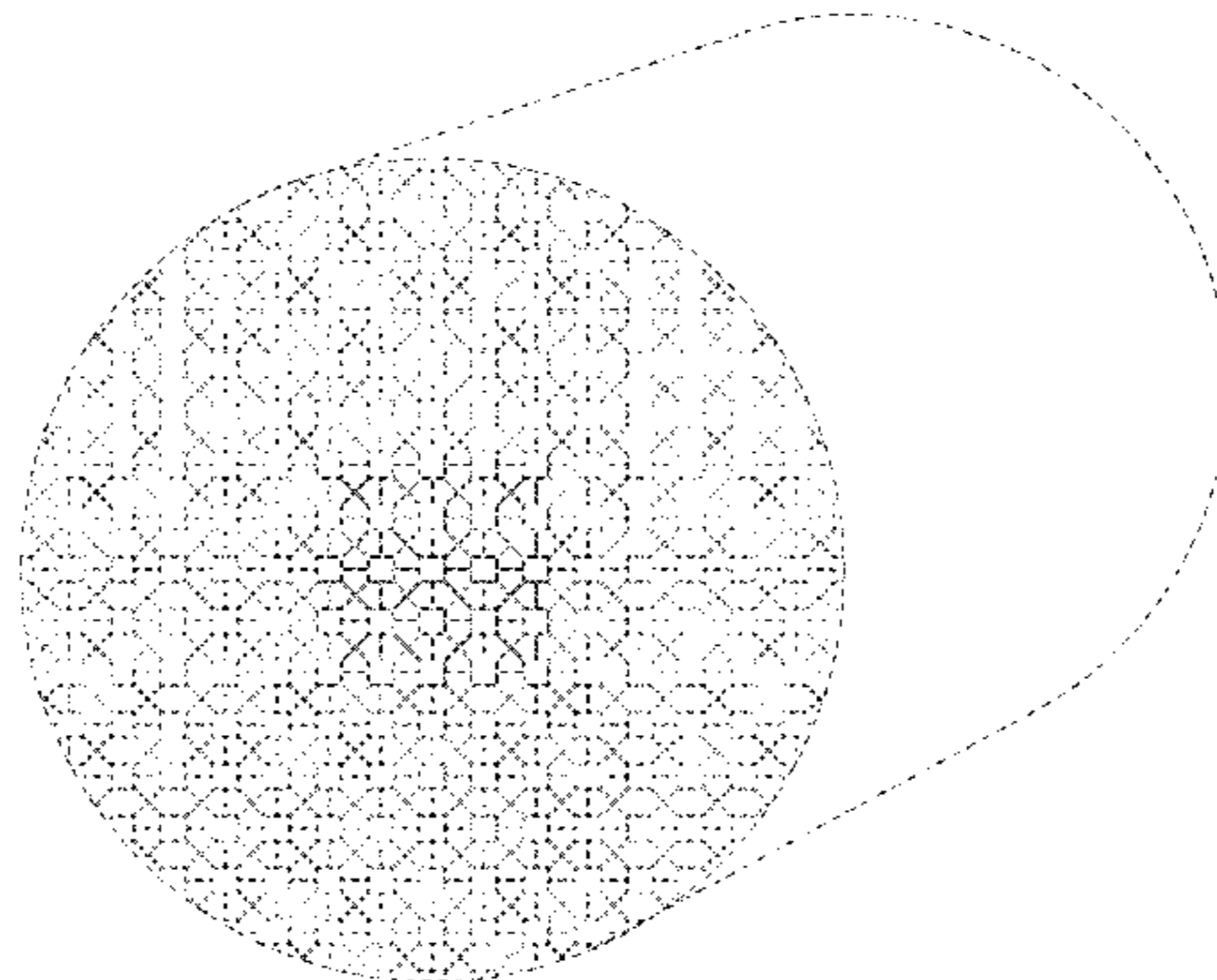
(57) **CLAIM**

The ornamental design for a filter for removing particle matter, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a filter for removing particle matter illustrating our new design;
FIG. 2 is a front view thereof;
FIG. 3 is a rear view thereof;
FIG. 4 is a top view thereof, the bottom view thereof being a mirror image;
FIG. 5 is a right view thereof, the left view thereof being a mirror image;
FIG. 6 is an enlarged view delimited by the four lines labelled 6 in FIG. 2;
FIG. 7 is an end view taken through line 7-7 of FIG. 2;
FIG. 8 is a middle omitted end view taken through line 8-8 of FIG. 6;
FIG. 9 is an enlarged view delimited by the four lines labelled 9 in FIG. 3;
FIG. 10 is a perspective view of a filter for removing particle matter illustrating our new design;
FIG. 11 is a front view thereof,
FIG. 12 is a rear view thereof;
FIG. 13 is a top view thereof, the bottom view thereof being a mirror image;
FIG. 14 is a right view thereof, the left view thereof being a mirror image;
FIG. 15 is an enlarged view delimited by the four lines labelled 15 in FIG. 11;
FIG. 16 is an end view taken through line 16-16 of FIG. 11;
FIG. 17 is a middle omitted end view taken through line 17-17 of FIG. 15; and,
FIG. 18 is an enlarged view delimited by the four lines labelled 18 in FIG. 12.
The broken lines in the drawing depict unclaimed subject matter only and form no part of the claimed design. The break lines in FIGS. 8 & 18 show truncation of length.

1 Claim, 18 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D548,826 S * 8/2007 Katta D23/364
D605,189 S * 12/2009 Kuroda D14/307
D679,792 S * 4/2013 Hollingsworth D23/365
D732,650 S * 6/2015 Yamada D23/365
D733,277 S * 6/2015 Yamada D23/365
D738,998 S * 9/2015 Laver D23/365
D740,405 S * 10/2015 Yamaguchi D23/355
D742,491 S * 11/2015 Yamaguchi D23/355

D744,078 S * 11/2015 Iwasaki D23/365
D748,237 S * 1/2016 Shibata D23/365
D748,625 S * 2/2016 Takahashi D14/345
D749,714 S * 2/2016 Shibata D23/365
2014/0298779 A1 10/2014 Miyairi

OTHER PUBLICATIONS

Japanese Office Action (Application No. 2015-003728) dated Oct. 6, 2015 (with English translation).

* cited by examiner

Fig.1

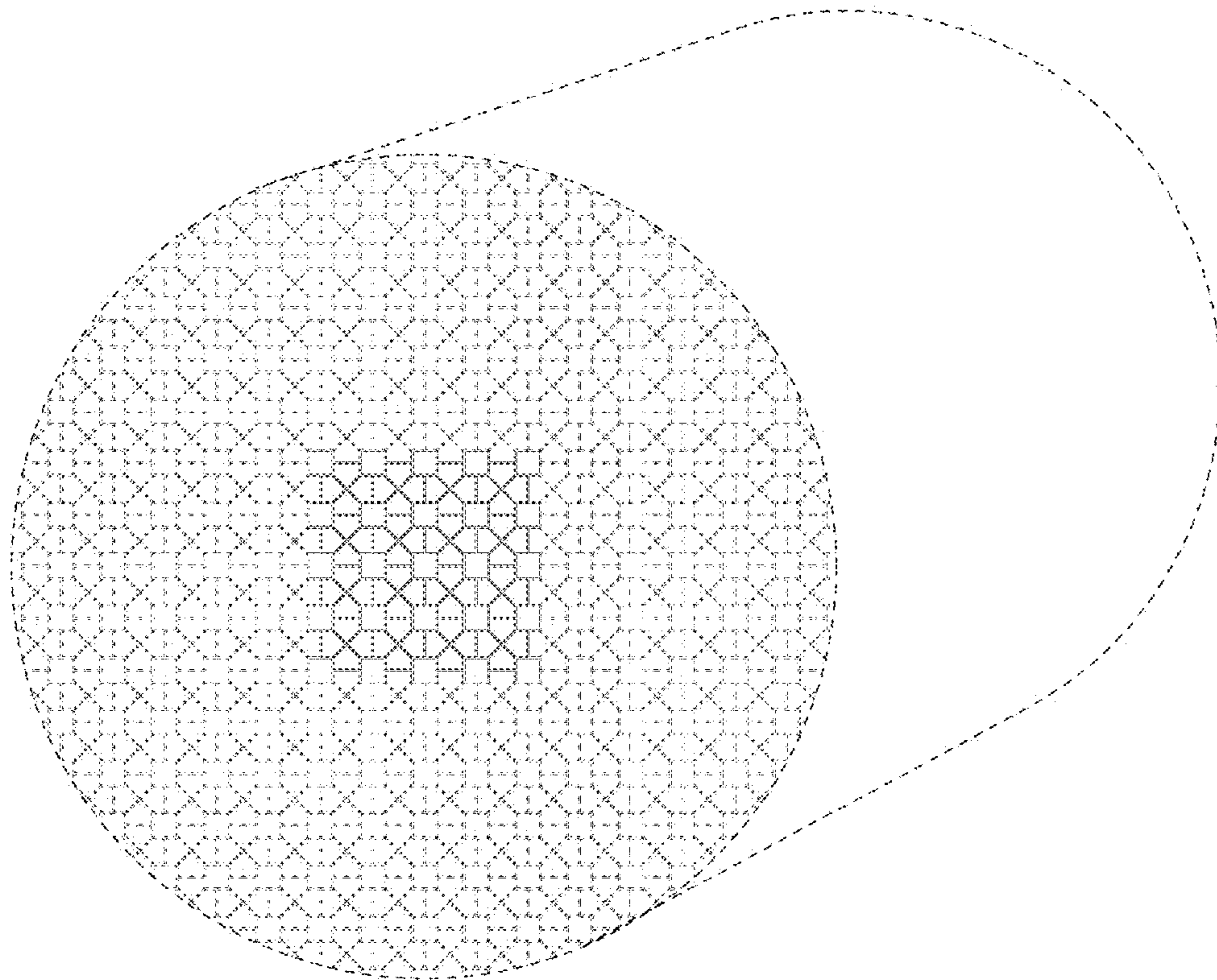


Fig.2

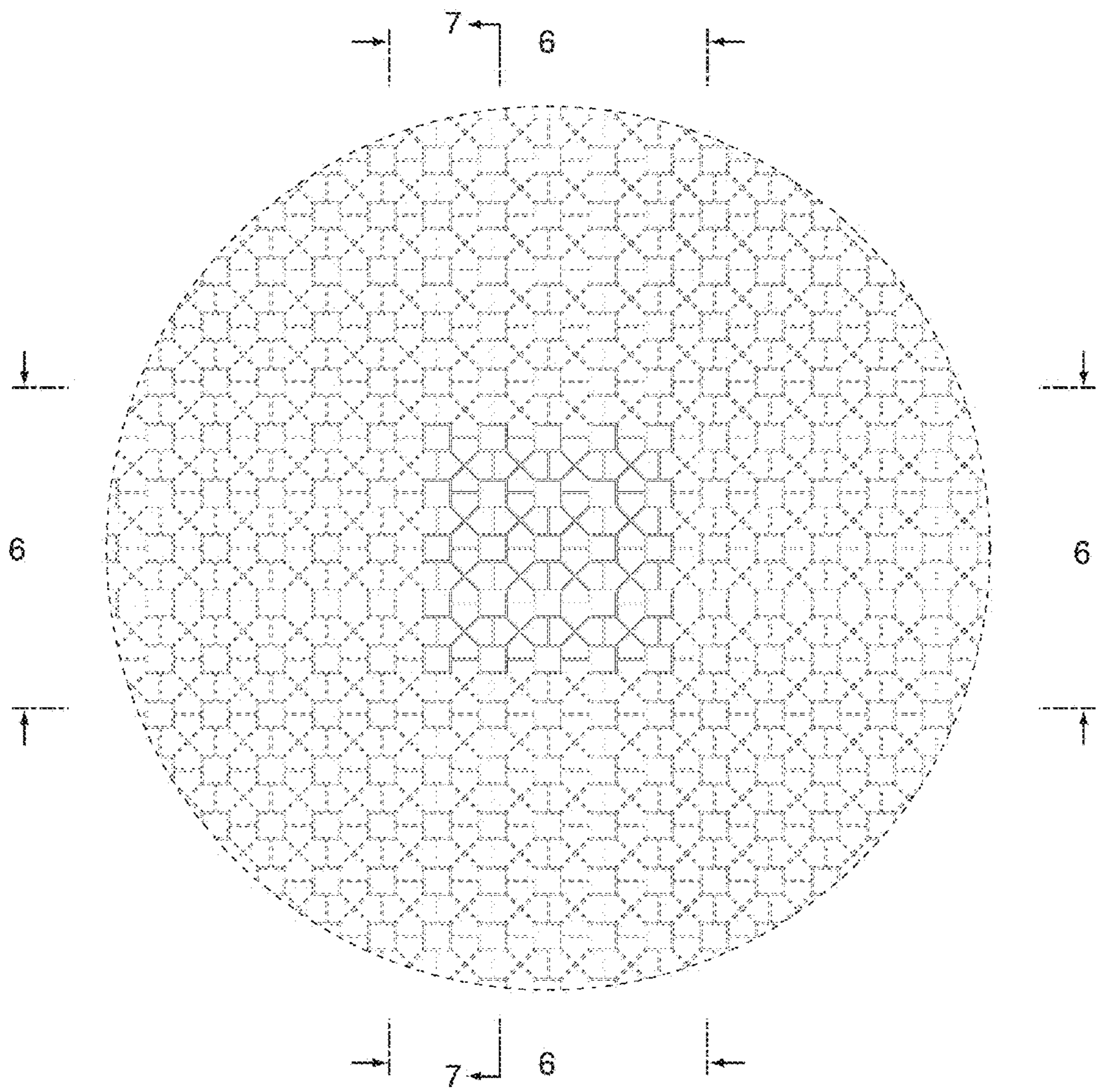


Fig.3

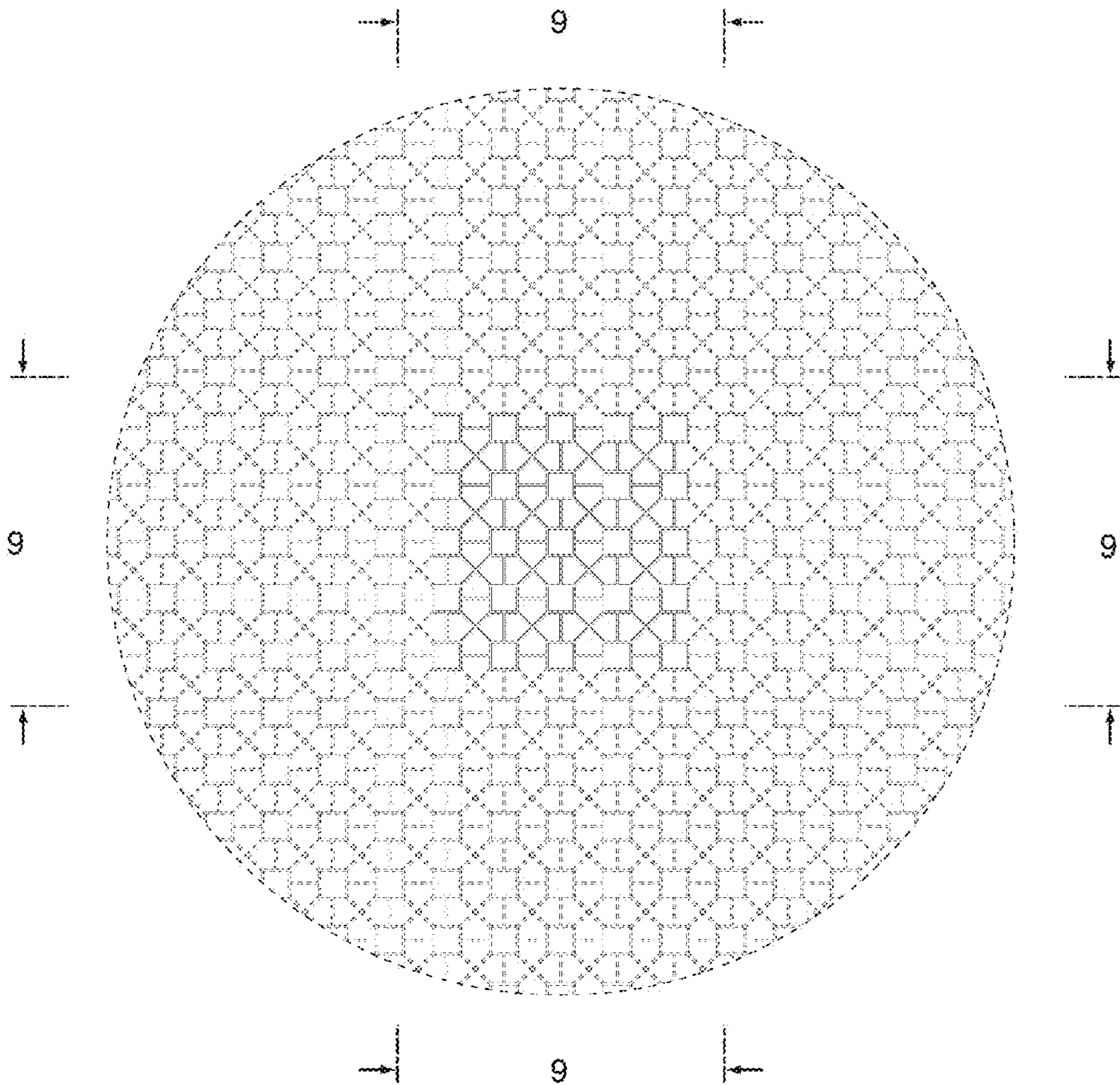


Fig.4



Fig.5



Fig.6

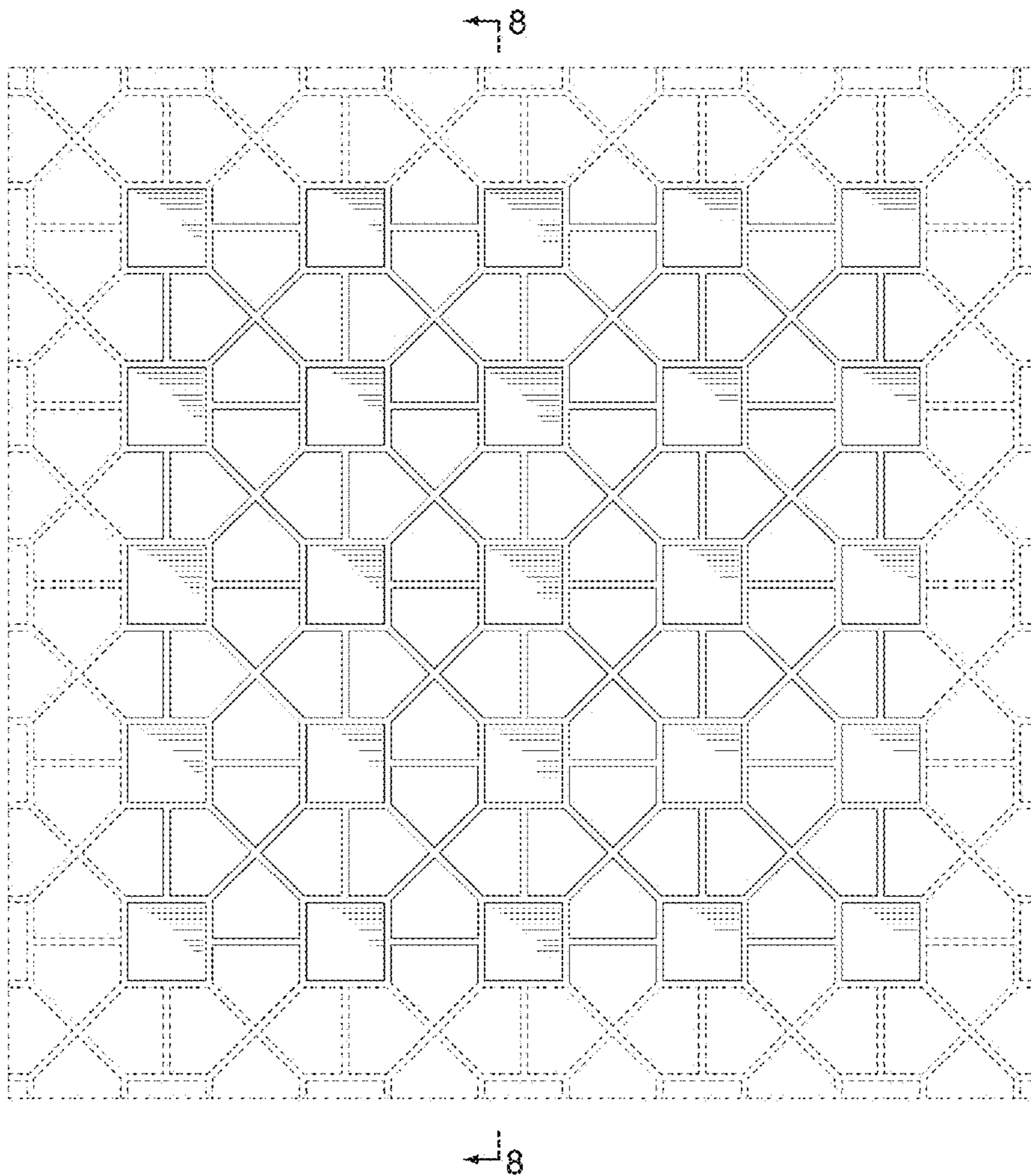


Fig. 7

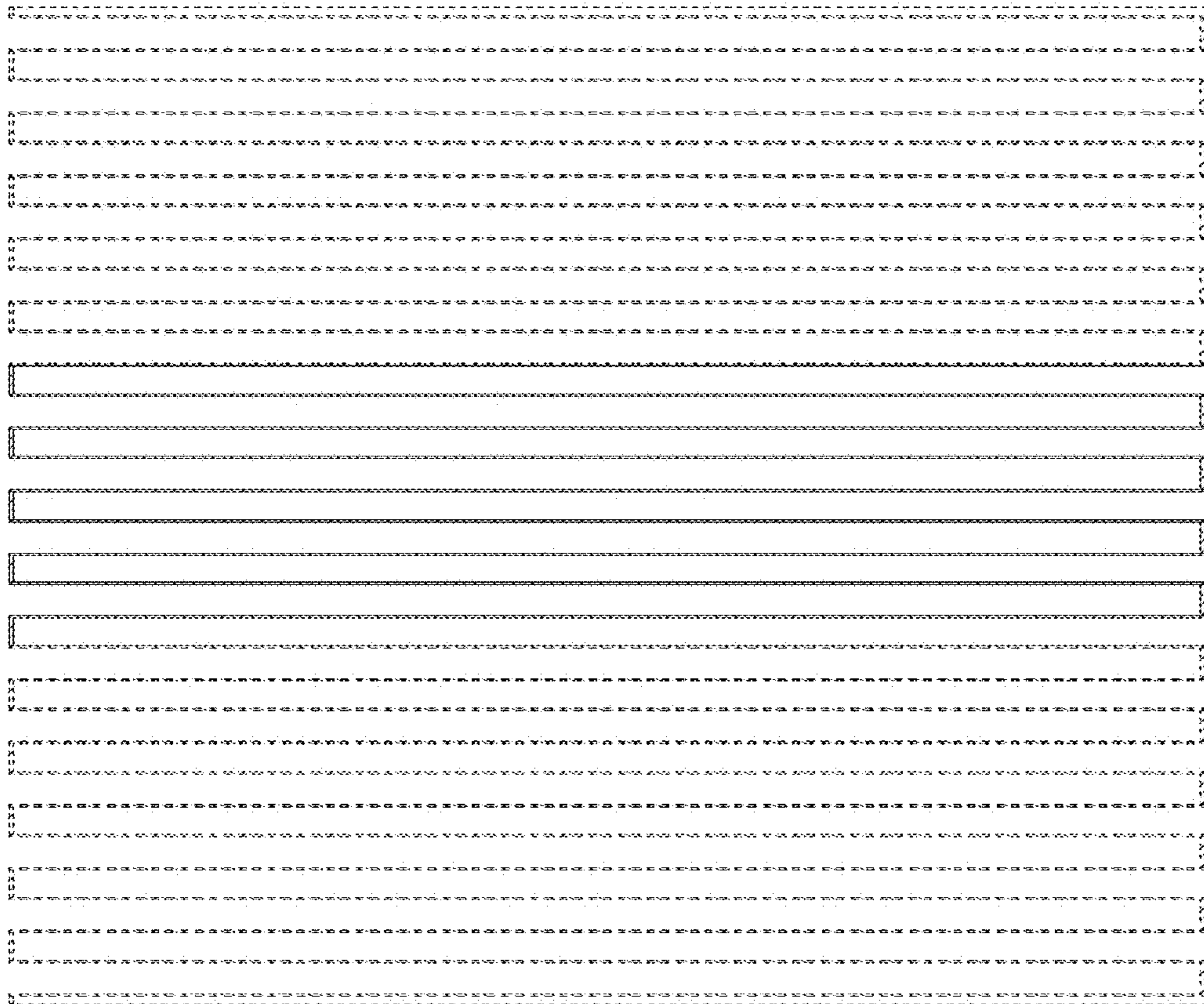


Fig.8

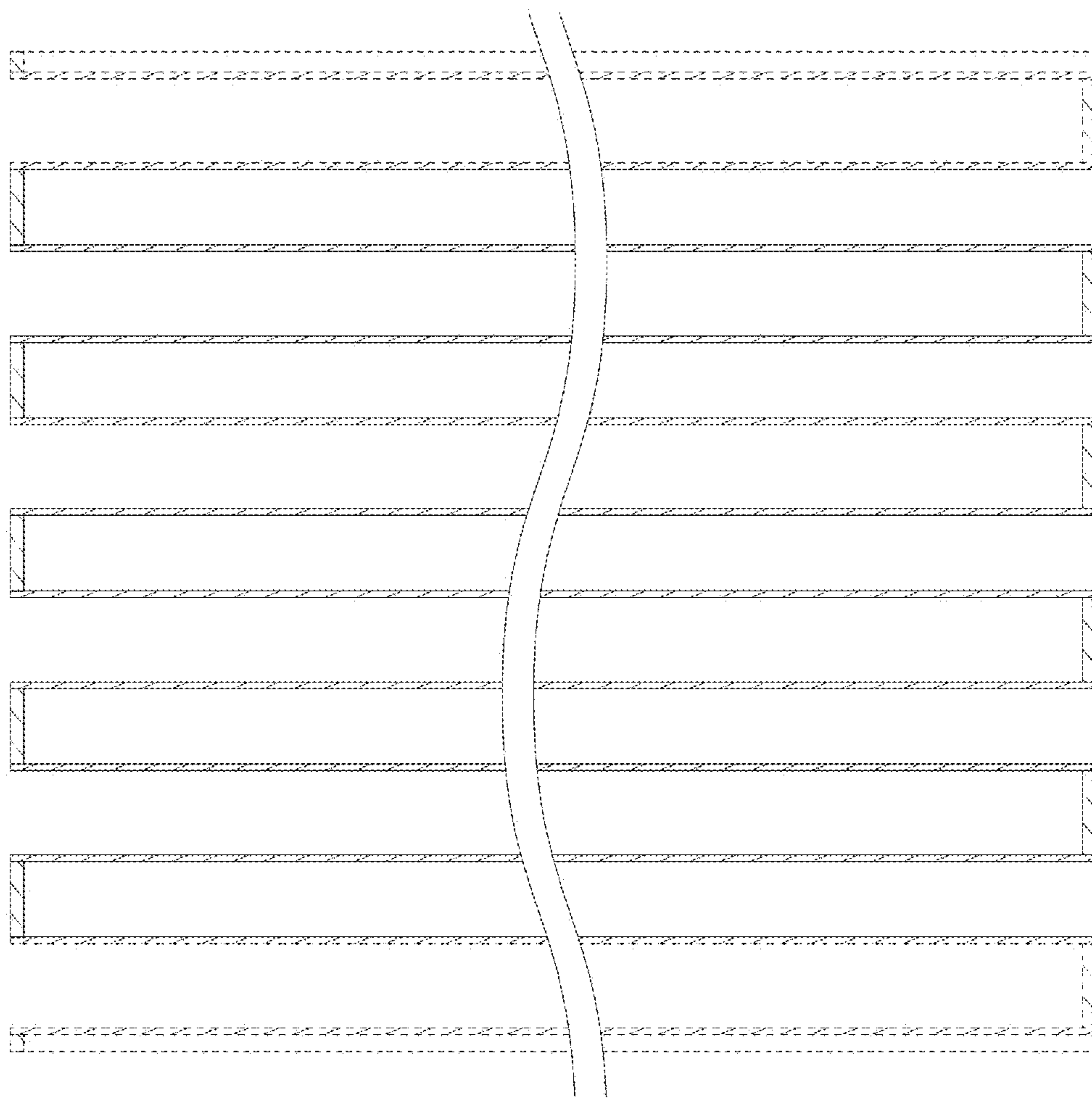


Fig.9

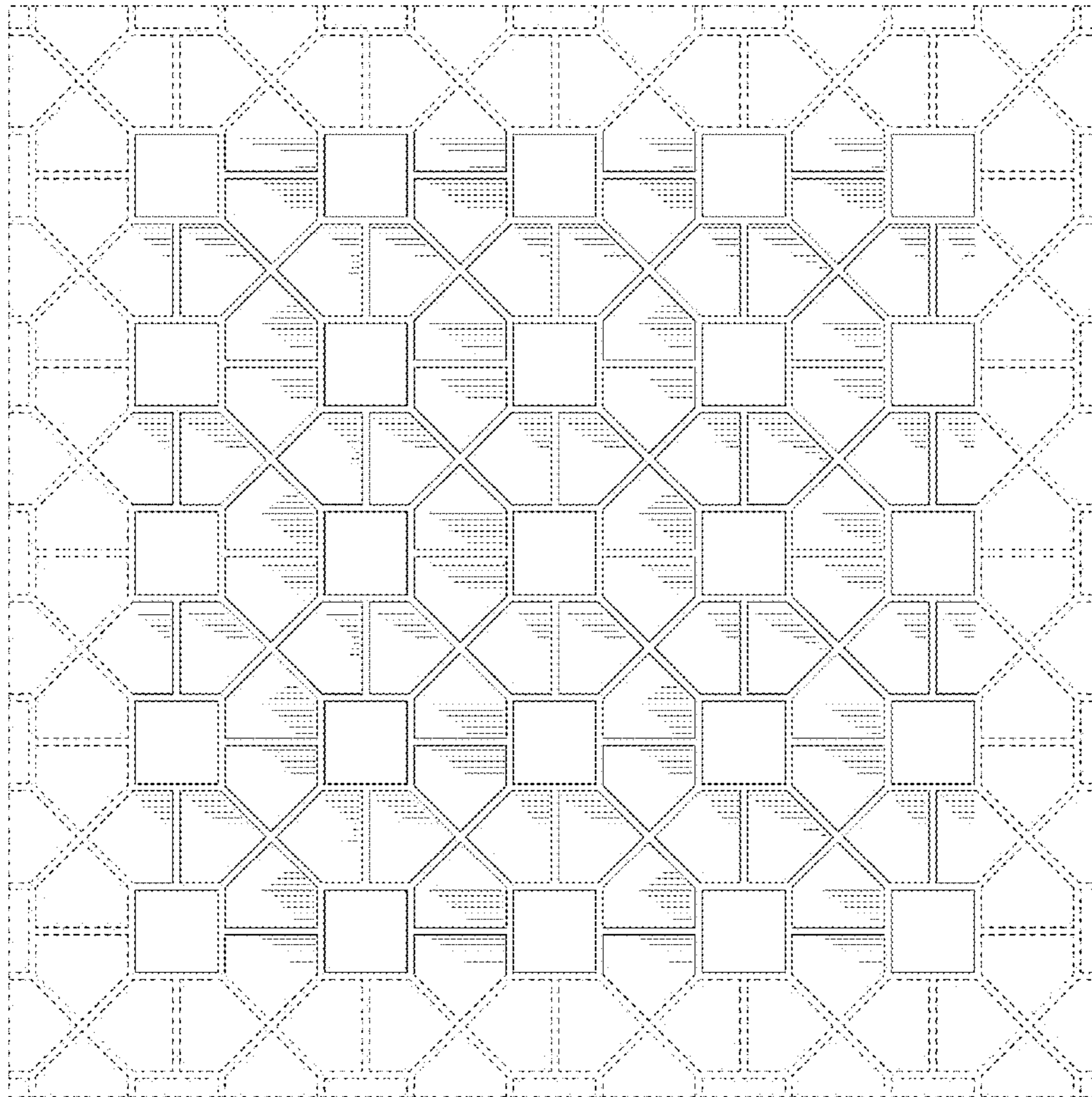


Fig.10

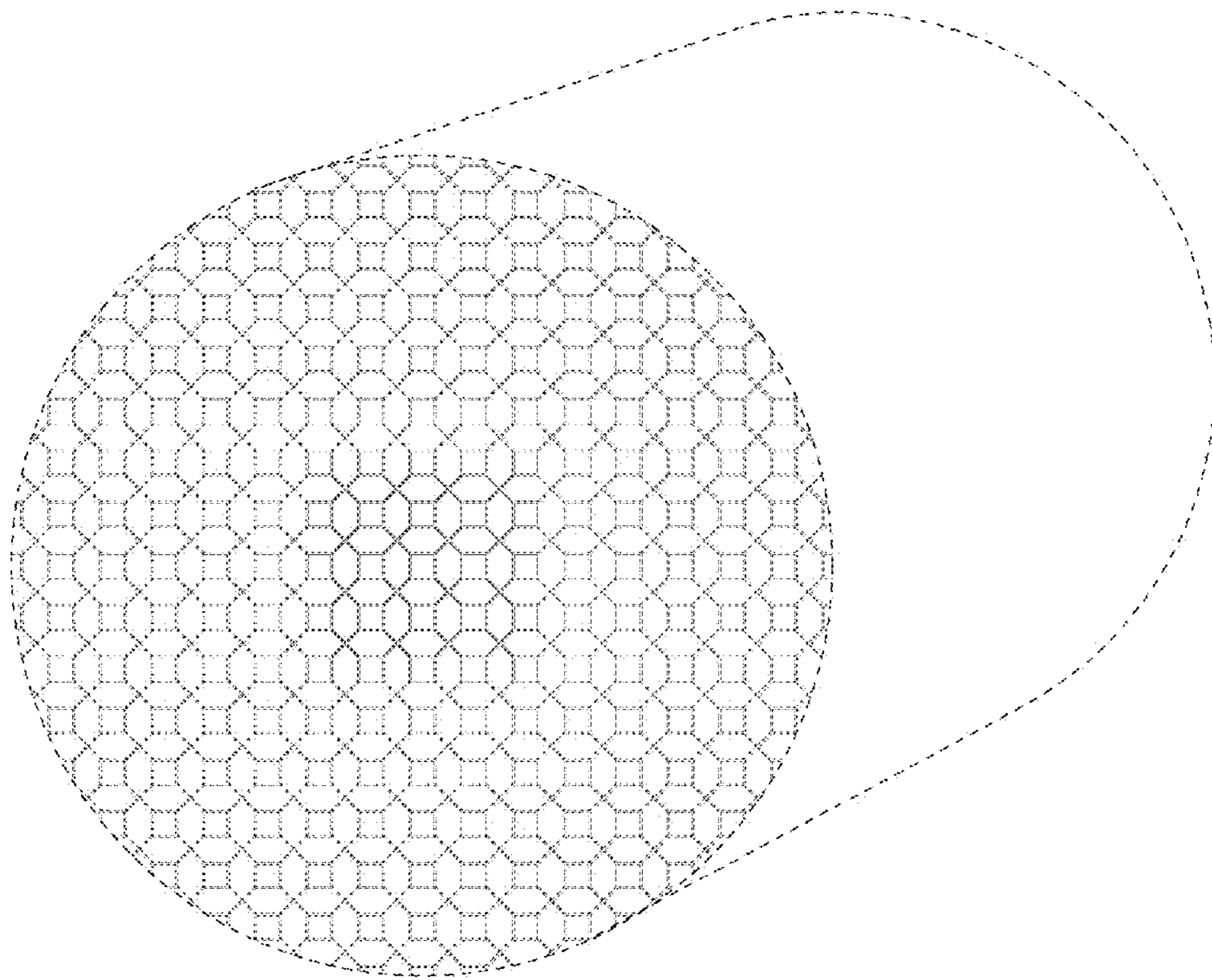


Fig.11

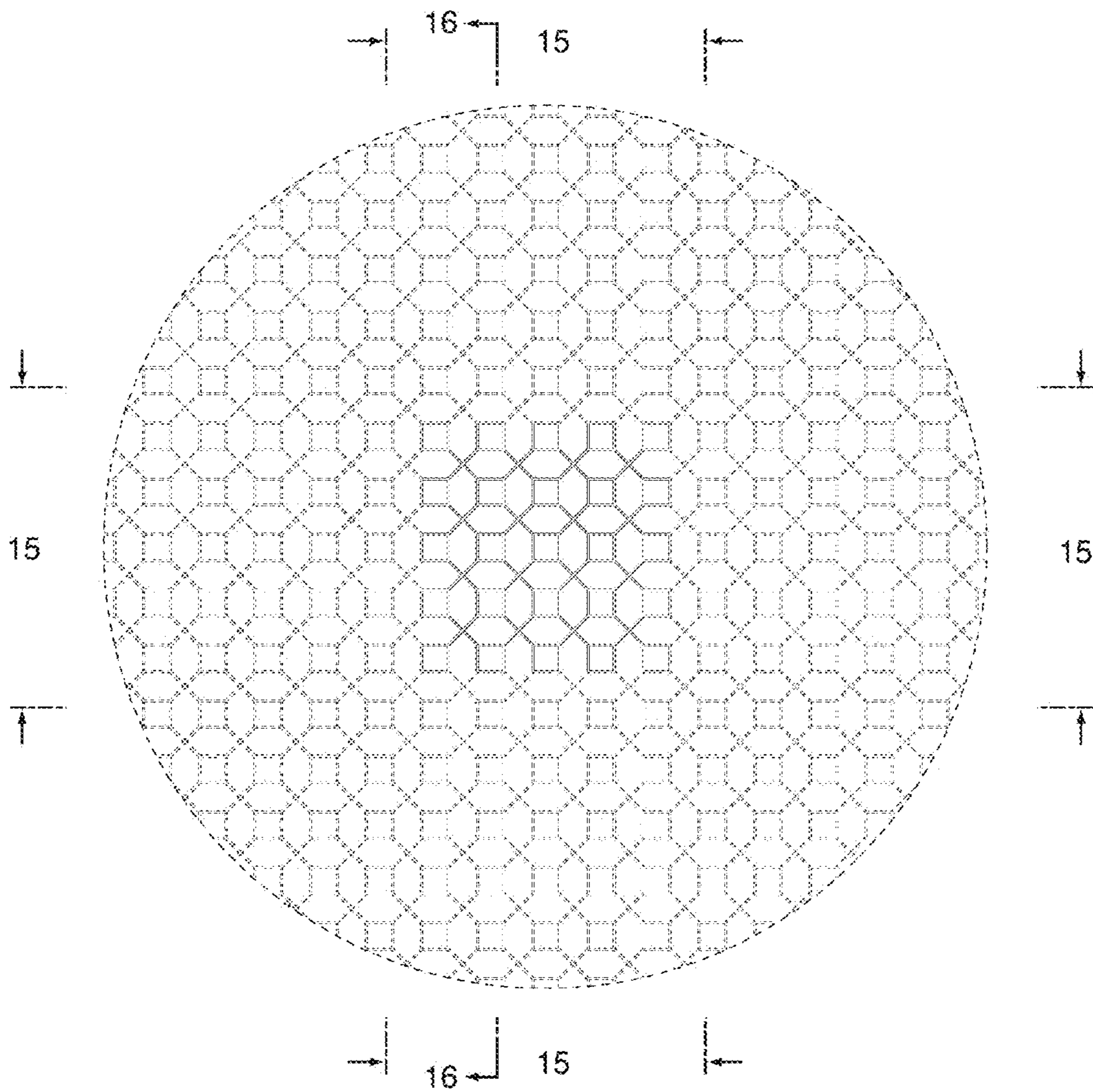


Fig.12

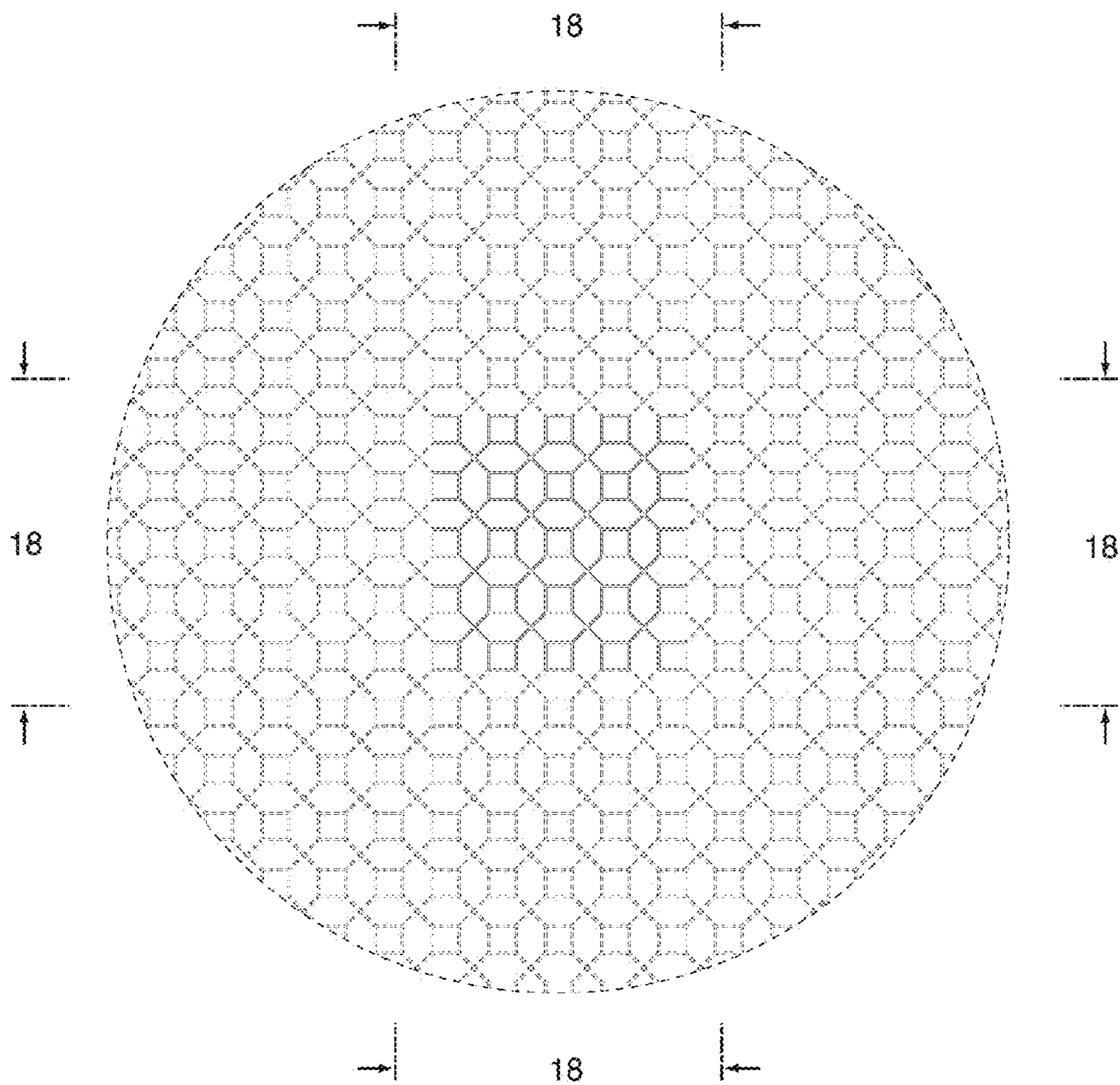


Fig. 13



Fig.14



Fig. 15

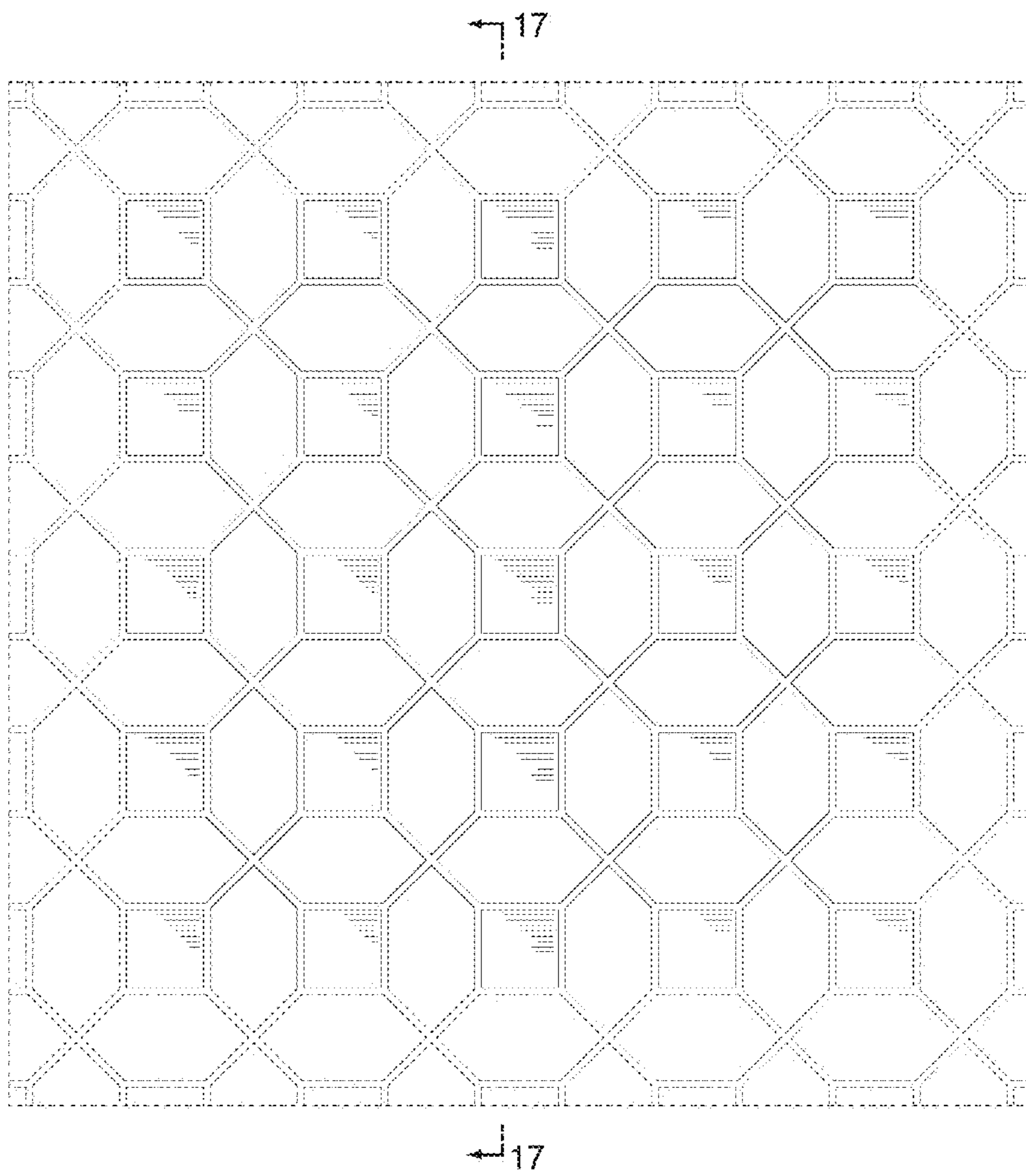


Fig. 16

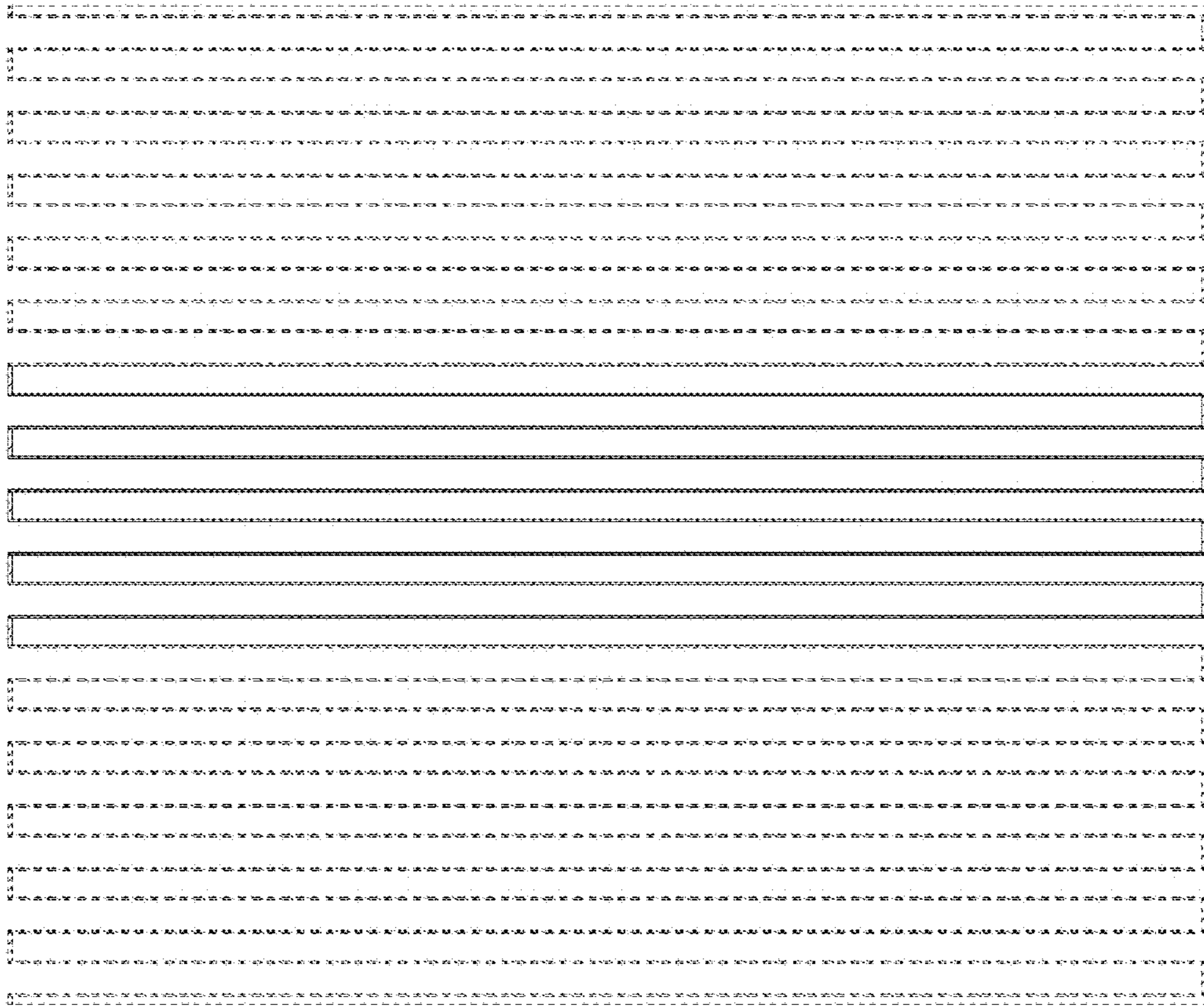


Fig.17

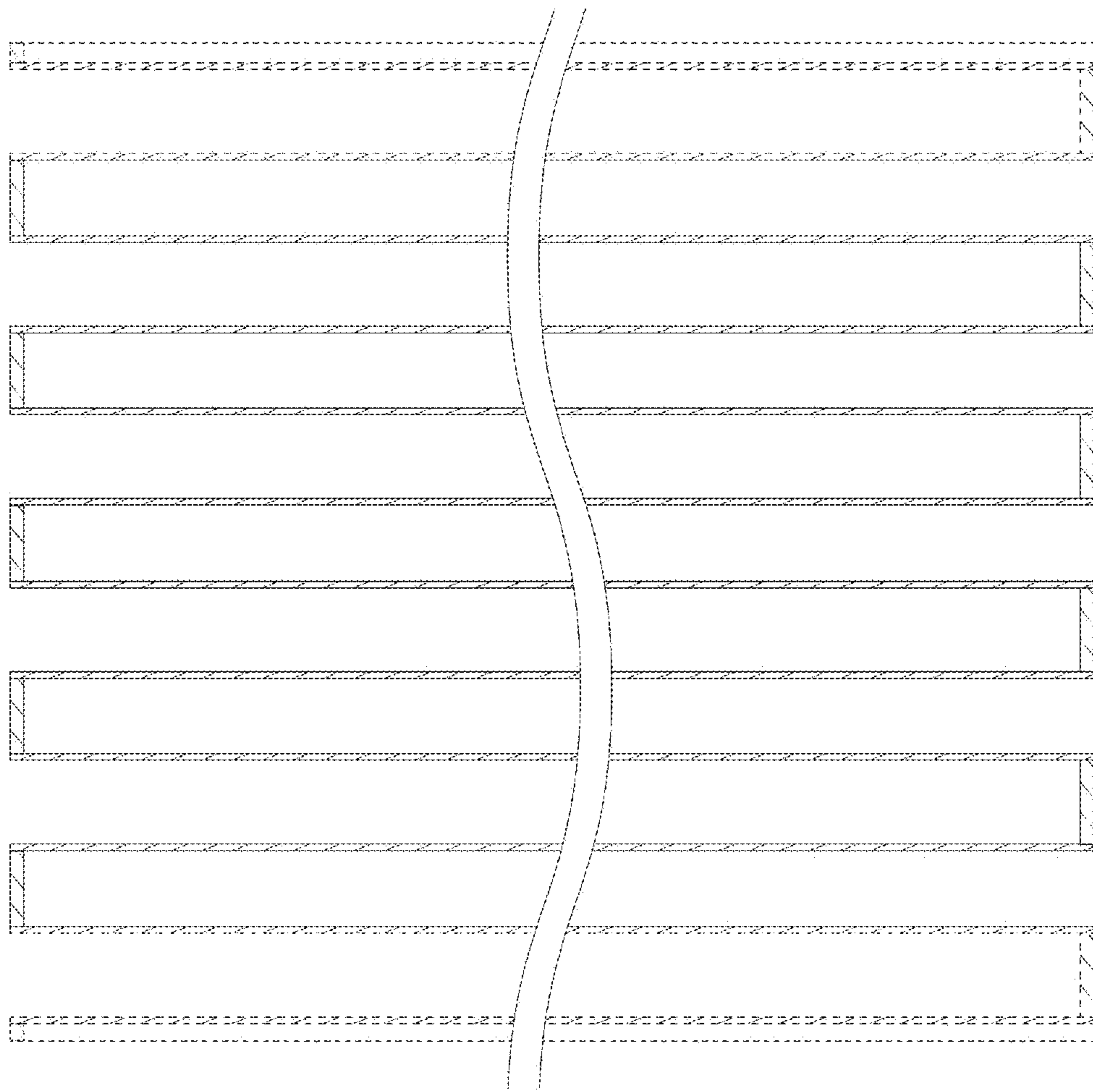


Fig.18

