



US00D835768S

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

(10) **Patent No.:** **US D835,768 S**

(45) **Date of Patent:** **** Dec. 11, 2018**

(54) **CATALYST CARRIER FOR EXHAUST GAS PURIFICATION**

(71) Applicant: **NGK Insulators, Ltd.**, Nagoya-Shi (JP)

(72) Inventor: **Takaya Yamaguchi**, Nagoya (JP)

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

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

(21) Appl. No.: **29/596,132**

(22) Filed: **Mar. 6, 2017**

(30) **Foreign Application Priority Data**

Sep. 15, 2016 (JP) 2016-019969
Sep. 15, 2016 (JP) 2016-019970
Sep. 15, 2016 (JP) 2016-019971

(51) **LOC (11) Cl.** **23-04**

(52) **U.S. Cl.**
USPC **D23/365**; D23/355; D15/5

(58) **Field of Classification Search**
USPC D23/209, 341, 354, 355, 364-365,
D23/386-391; D25/114-116, 118-125;
D7/412
CPC F01N 2330/06; F01N 3/0222; B01D
46/2429; B01D 46/2451; B01D 46/247;
B01D 46/2492; B01D 46/2481; F28F
1/40; E04B 2/42; E04B 2/44; E04B 2/50;
E04B 2/52; E04B 2/54
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,767,309 A * 8/1988 Mizuno B28B 3/269
264/177.11
D472,625 S * 4/2003 Sekoguchi D23/355
D715,965 S * 10/2014 Kim D25/115
D744,078 S * 11/2015 Iwasaki D23/365
D749,388 S * 2/2016 Lee D8/29

(Continued)

Primary Examiner — Sheryl Lane

Assistant Examiner — Calvin E Vansant

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

(57) **CLAIM**

The ornamental design for a catalyst carrier for exhaust gas purification, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a catalyst carrier for exhaust gas purification illustrating my new design;

FIG. 2 is a front view thereof; the rear view thereof being a mirror image;

FIG. 3 is a top view thereof, the bottom view thereof being a mirror image;

FIG. 4 is a right view thereof, the left view thereof being a mirror image;

FIG. 5 is an enlarged view delimited by the lines labelled 5 in FIG. 2;

FIG. 6 is a middle omitted cross-sectional view taken through line 6-6 of FIG. 5; and,

FIG. 7 is a middle omitted partial cross-sectional view taken through and delimited by lines 7-7 of FIG. 5.

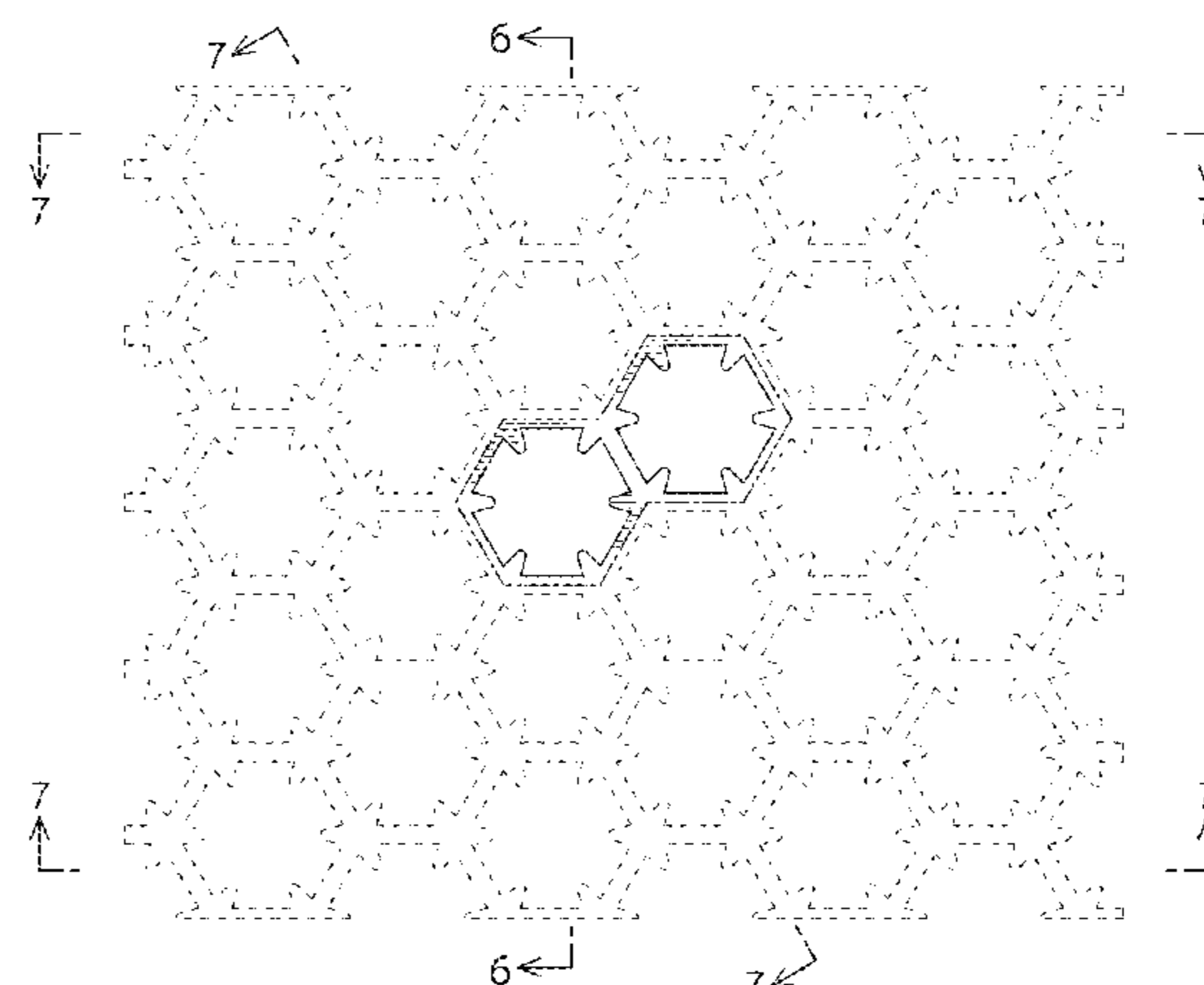
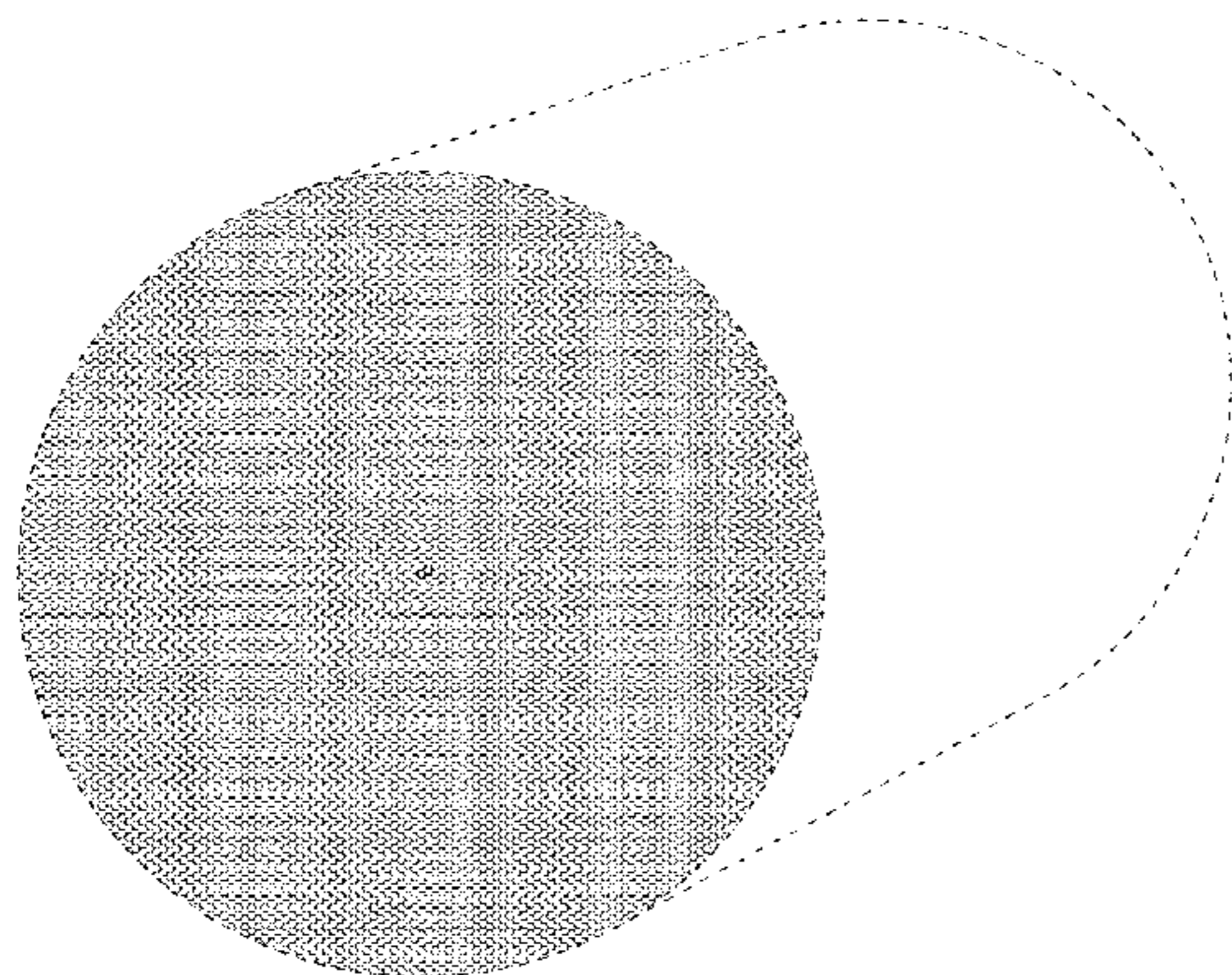
The catalyst carrier is used for removing toxic substances contained in exhaust fumes emitted from automobile engines and the like. The catalyst carrier has fins in each of its cells. The fin is provided in the same sectional shape over the whole length of the cells.

The broken lines in the drawings depict unclaimed subject matter only and form no part of the claimed design.

The chain lines in the drawings depict a boundary between the claimed design and the unclaimed subject matter and form no part of the claimed design.

The catalyst carrier for exhaust gas purification is shown with a symbolic break in its length. The appearance of any portion of the article between the break lines forms no part of the claimed design.

1 Claim, 7 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D751,363 S * 3/2016 Chang D8/29
D796,344 S * 9/2017 Paulick D25/115
2009/0011181 A1* 1/2009 Mizuno B01D 46/2429
428/118
2016/0243785 A1* 8/2016 Kondo B32B 3/12
2016/0305687 A1* 10/2016 Neidenberger F24H 1/145
2017/0065919 A1* 3/2017 Yamanishi B01D 46/247

* cited by examiner

Fig. 1

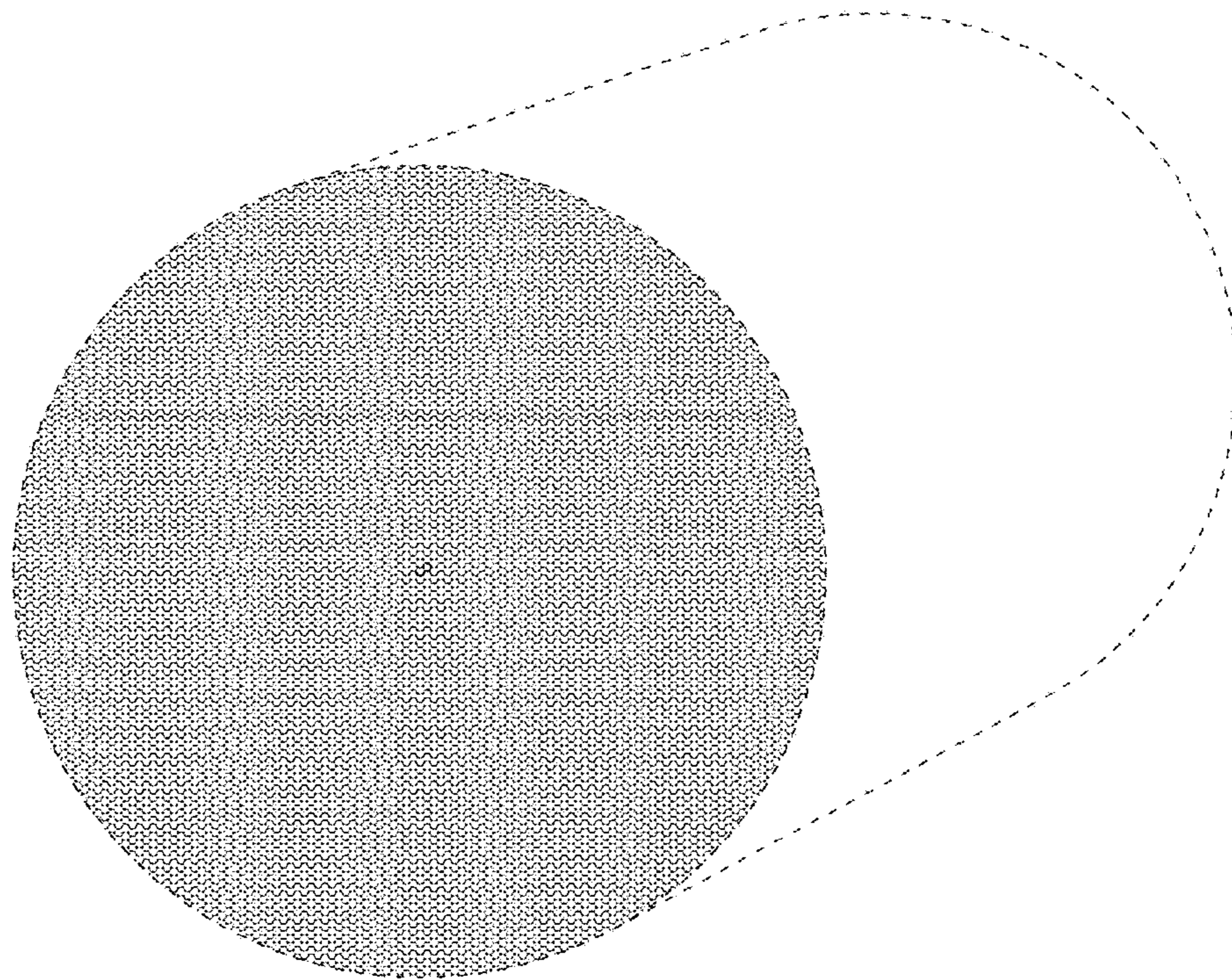


Fig.2

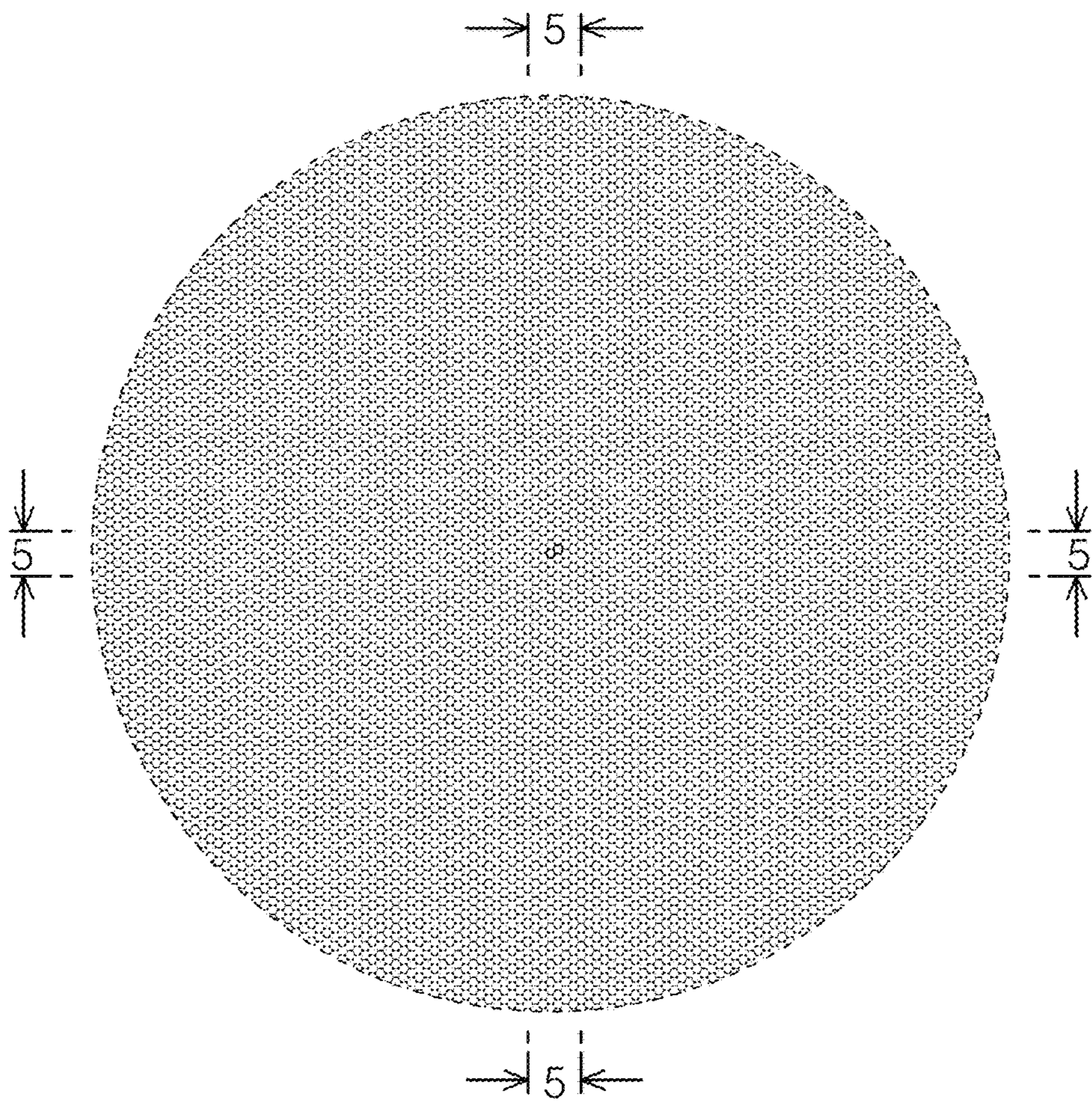


Fig. 3



Fig. 4



Fig. 5

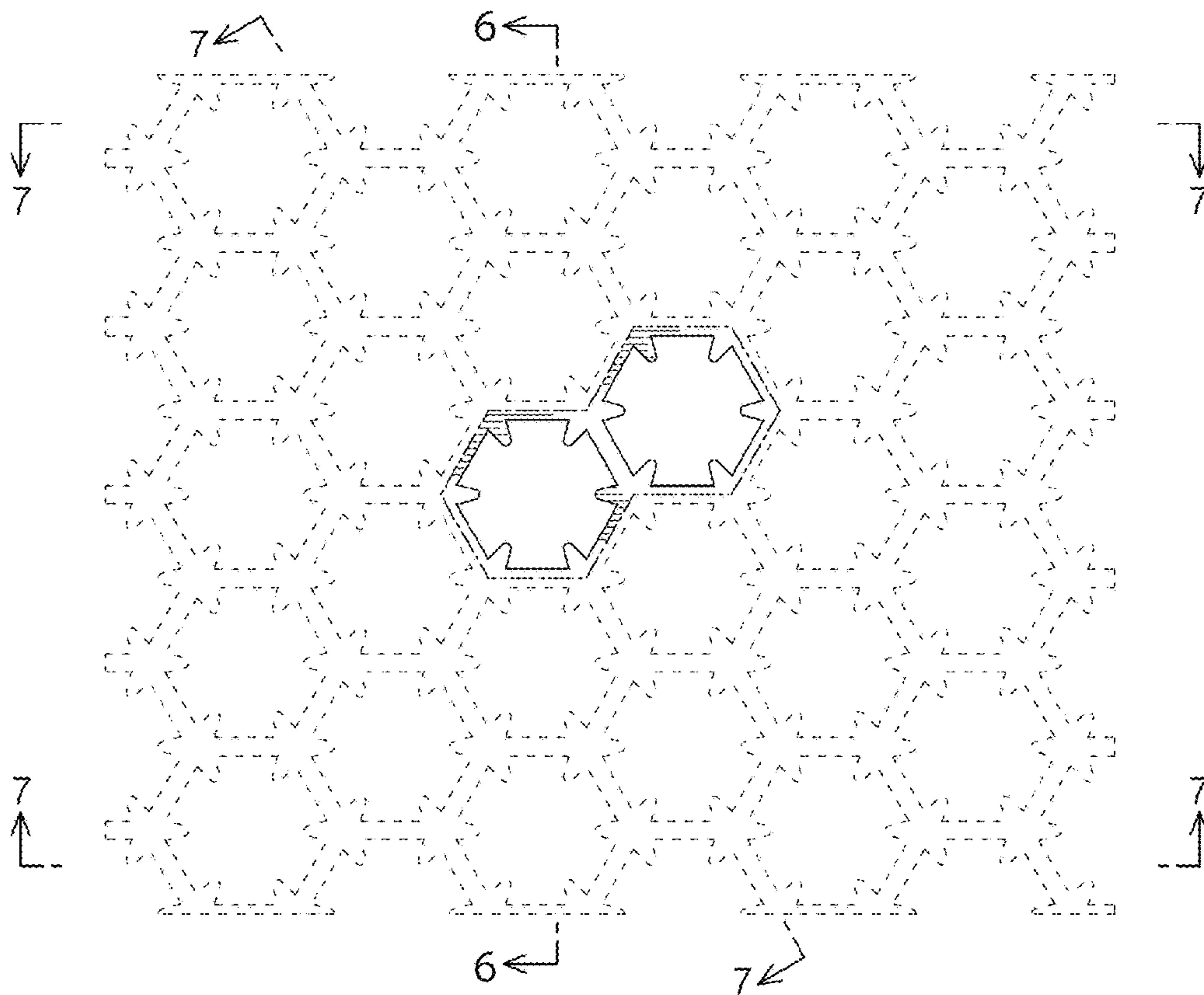


Fig. 6

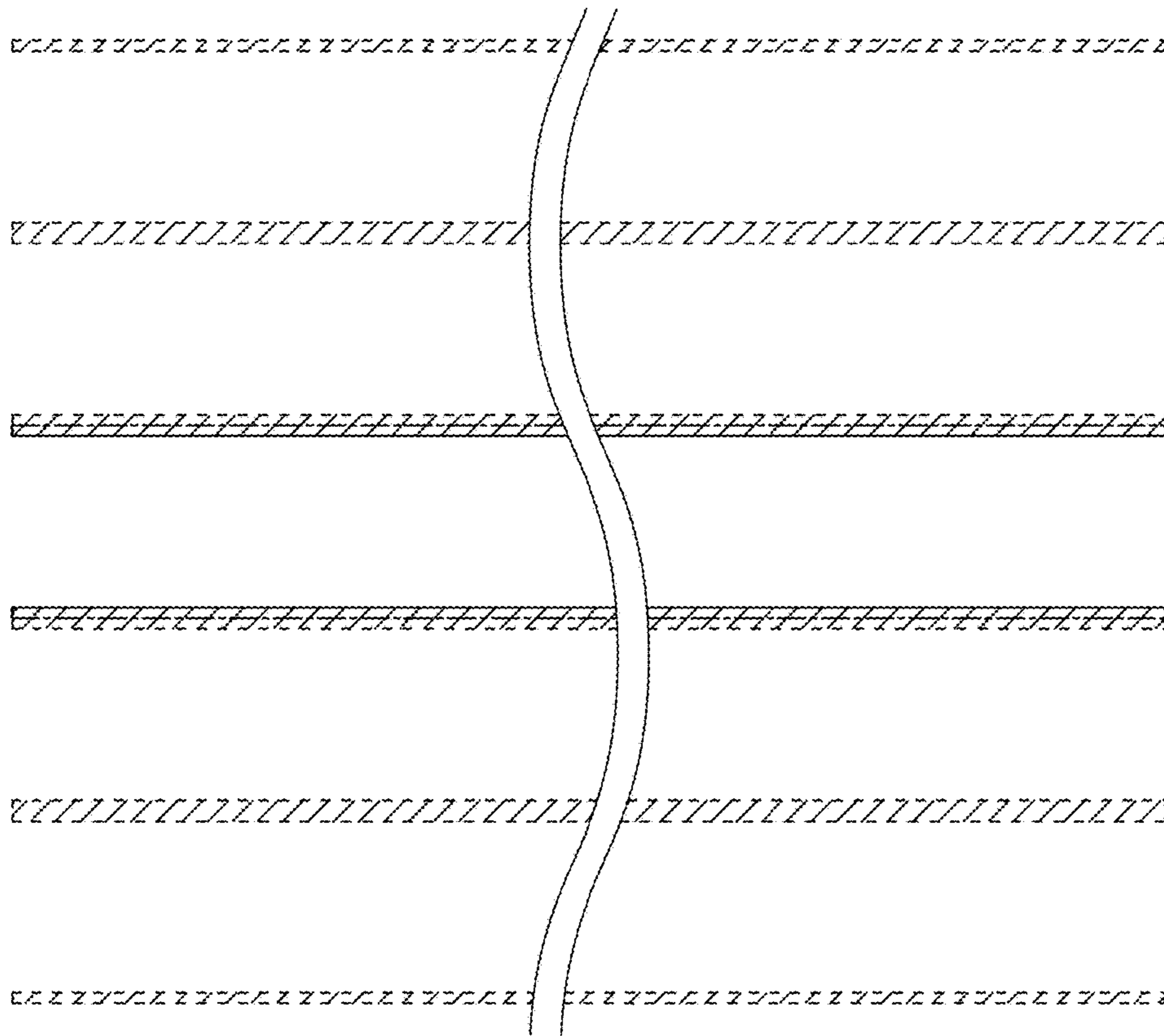
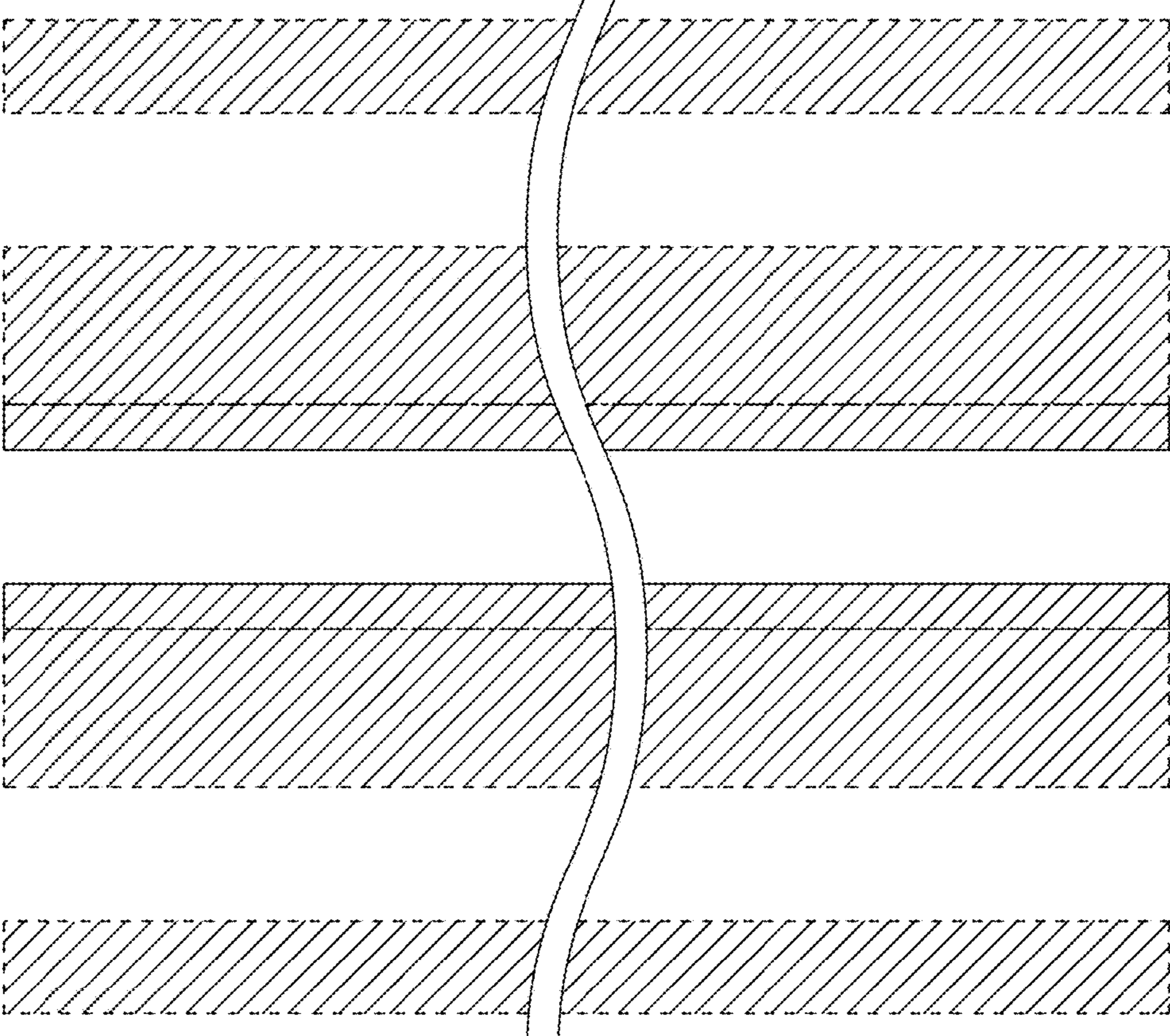


Fig. 7



UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : D835,768 S
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INVENTOR(S) : Takaya Yamaguchi

Page 1 of 1

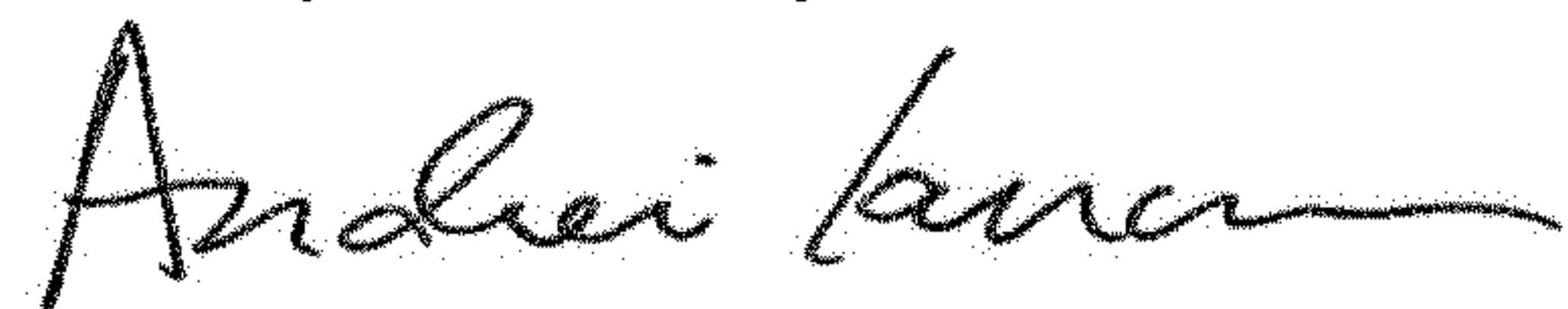
It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

On the Title Page

Description, Lines 7-8:

Change: "FIG. 4 is a right view thereof, the left view thereof being a minor image;" to -- FIG. 4 is a right view thereof, the left view thereof being a mirror image; --

Signed and Sealed this
Twenty-sixth Day of March, 2019



Andrei Iancu
Director of the United States Patent and Trademark Office