



US00D840162S

(12) **United States Design Patent** (10) **Patent No.:** **US D840,162 S**
Schumacher et al. (45) **Date of Patent:** **** Feb. 12, 2019**

(54) **ABRASIVE MATERIAL**

(56) **References Cited**

(71) Applicant: **KWH MIRKA LTD.**, Jeppo (FI)

U.S. PATENT DOCUMENTS

(72) Inventors: **Nicolas Schumacher**, Inga (FI); **Jan Gron**, Vora (FI); **Niina Kyynarainen**, Salo (FI); **Hans Hede**, Vora (FI); **Mats Sundell**, Hirvlax (FI)

2,984,052 A 5/1961 Mueller, Jr.
3,861,892 A 1/1975 Wisdom, Jr. et al.
(Continued)

(73) Assignee: **MIRKA OY**, Jeppo (FI)

FOREIGN PATENT DOCUMENTS

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

EP 0779851 6/1997
EP 1522386 4/2005
(Continued)

(21) Appl. No.: **29/608,860**

Primary Examiner — Randall H Gholson

(22) Filed: **Jun. 26, 2017**

(74) *Attorney, Agent, or Firm* — Knobbe, Martens, Olson & Bear, LLP

Related U.S. Application Data

(62) Division of application No. 29/545,052, filed on Nov. 9, 2015, now Pat. No. Des. 807,045.

(57) **CLAIM**

The ornamental design for an abrasive material, as shown and described.

Foreign Application Priority Data

(30) May 8, 2015 (EM) 002697409-0001
May 8, 2015 (EM) 002697409-0002

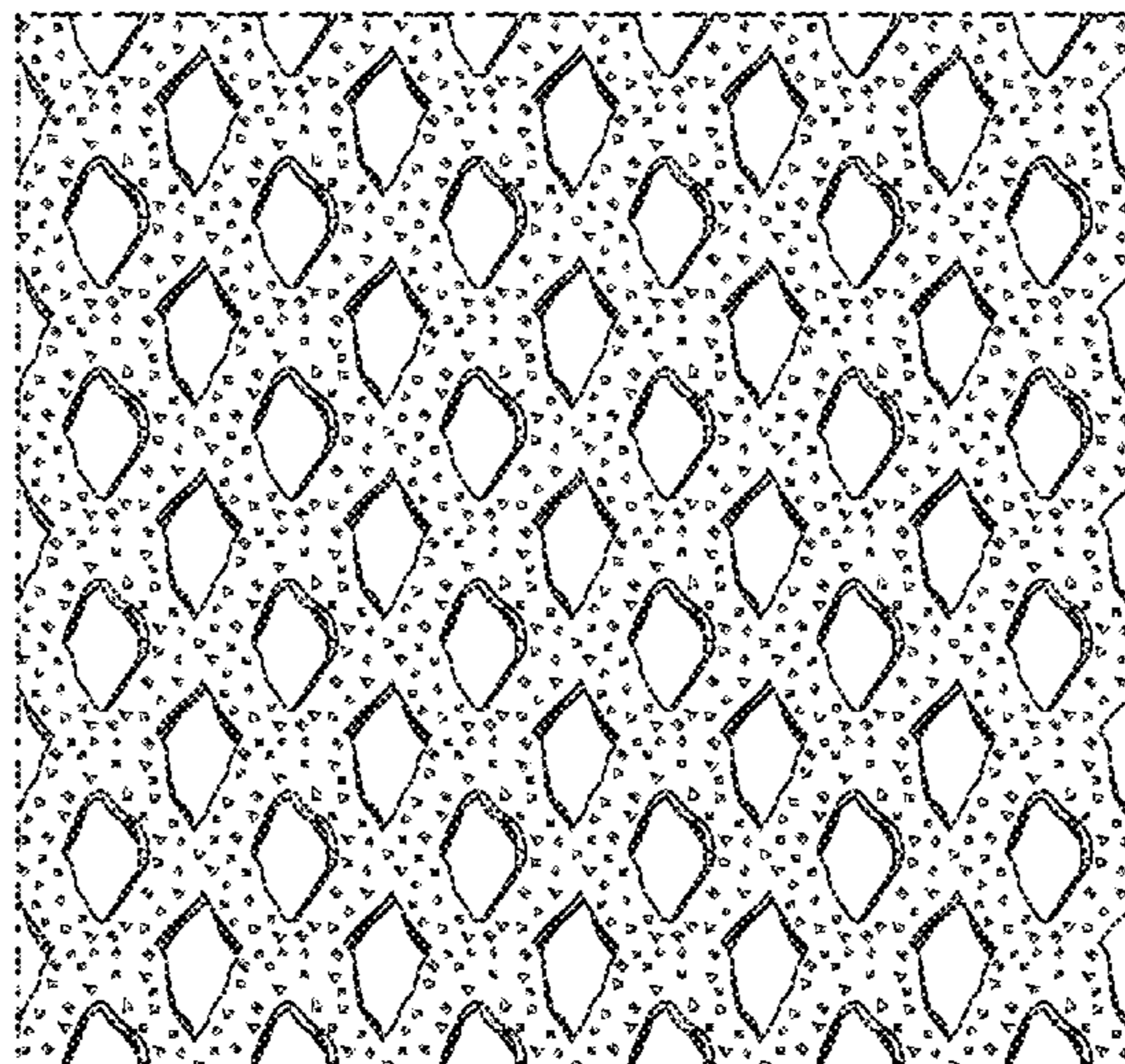
DESCRIPTION

(51) **LOC (11) Cl.** **05-02**
(52) **U.S. Cl.**
USPC **D5/58; D5/62**

(58) **Field of Classification Search**
USPC D5/30, 43, 44, 53, 55-57, 59-63, 99;
D6/602, 612, 613, 617; D19/1;
D25/139, 149-151, 163; D8/70, 71, 90,
D8/98; D15/124, 126, 138; 30/307, 346,
30/347, 355, 388, 389, 390; 51/296;
83/478, 589, 663, 665, 676, 821, 835,
83/839, 848, 852, 854, 855; 125/15, 18,
125/230, 231; 451/41, 47, 56, 259, 324,
(Continued)

FIG. 1 is a top plan view of a first embodiment of an abrasive material, showing one repeat unit of our new design with granules. The design can be repeated in any direction. FIG. 2 is a right side elevational view thereof. The left side elevational view is a mirror image thereof. FIG. 3 is a front elevational view thereof. The rear elevational view is identical thereto. FIG. 4 is a bottom plan view thereof. FIG. 5 is a top perspective view thereof. FIG. 6 is a bottom perspective view thereof; and, FIG. 7 is a perspective view, showing the repeat unit as part of a larger piece of abrasive material. The broken dot-dash lines in the views define the peripheral boundaries of one repeat unit of the claimed design and are not part of the claimed design. The evenly broken dash-dash lines are used to depict environmental features for illustrative purposes only and form no part of the claimed design.

1 Claim, 5 Drawing Sheets



(58) **Field of Classification Search**
 USPC 451/359, 420, 443, 490, 510, 523, 533,
 451/540, 541, 542, 544, 545, 547,
 451/548-551
 CPC .. A47K 10/16; A47G 23/0303; A47G 11/003;
 B31F 1/07; B32B 5/024; B44F 3/00;
 B44F 5/00; B44F 7/00; B44F 9/02; B44F
 11/02; B44F 11/04; C11D 17/049; D03D
 1/00; D10B 2503/04; D21H 27/02
 See application file for complete search history.

5,674,122 A	10/1997	Krech	
5,700,188 A	12/1997	Uhlmann et al.	
D428,267 S	7/2000	Romano, III	
D428,710 S	8/2000	Romano, III	
6,923,840 B2	8/2005	Schutz et al.	
D572,068 S	7/2008	Lin	
7,410,413 B2	8/2008	Woo	
D633,673 S	3/2011	McKnight	
D692,673 S	11/2013	Rhodes, III	
D702,047 S	4/2014	Rhodes, III	
D725,915 S	4/2015	Haverfield	
D725,916 S	4/2015	Haverfield	
D761,572 S *	7/2016	Hoglund	D5/62
2005/0020190 A1	1/2005	Schutz et al.	

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,386,943 A	6/1983	Gumbel et al.	
4,962,562 A *	10/1990	Englund	B24D 9/085 15/230
D311,997 S	11/1990	Legare	
5,049,165 A *	9/1991	Tselesin	B24D 3/06 51/295
5,390,449 A *	2/1995	Hilton	B24D 9/08 451/490

FOREIGN PATENT DOCUMENTS

EP	1733844	12/2006
EP	2390056	11/2011
GB	2017485	10/1979
WO	WO 2014/037034	3/2014

* cited by examiner

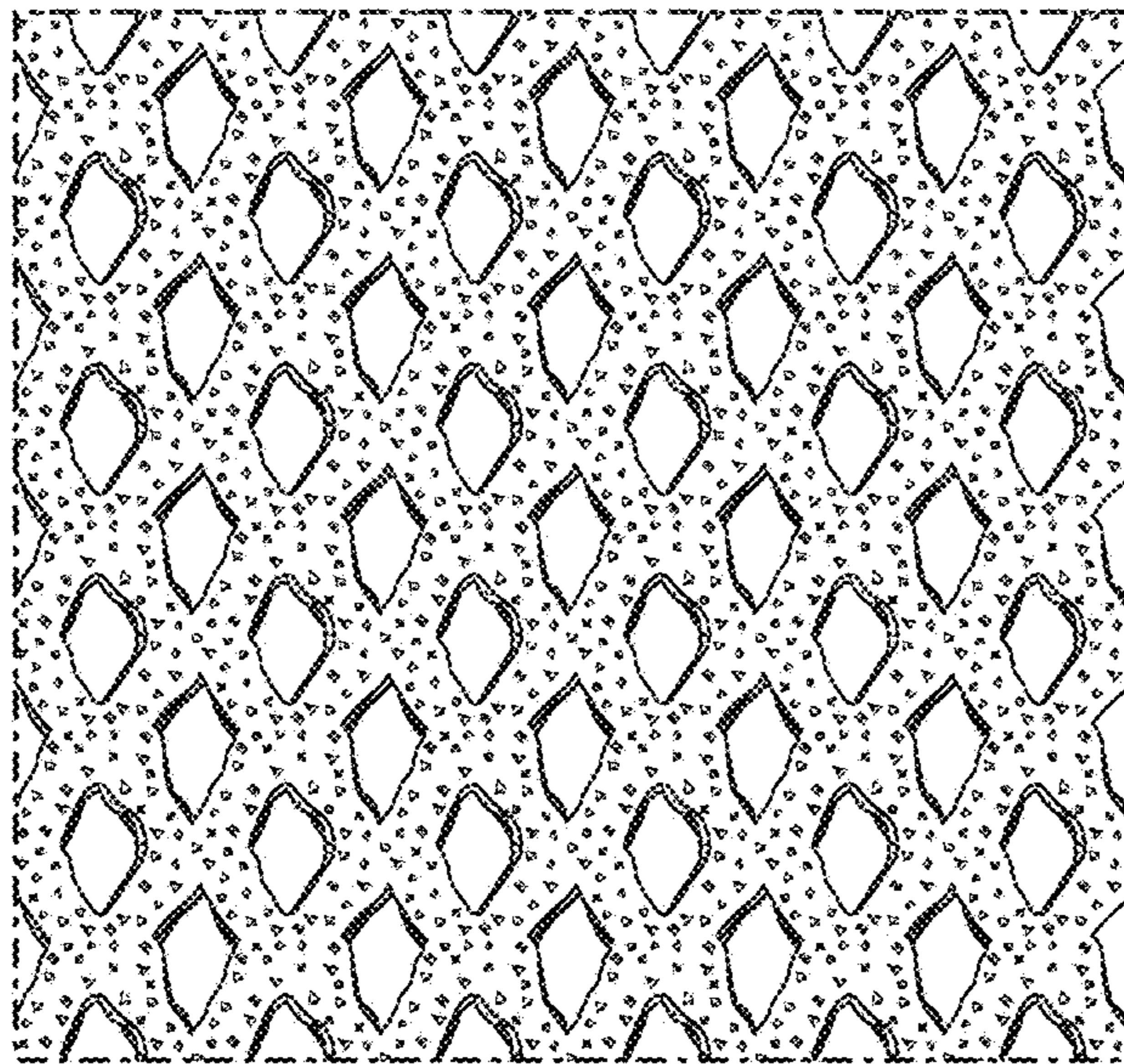


FIG. 1



FIG. 2



FIG. 3

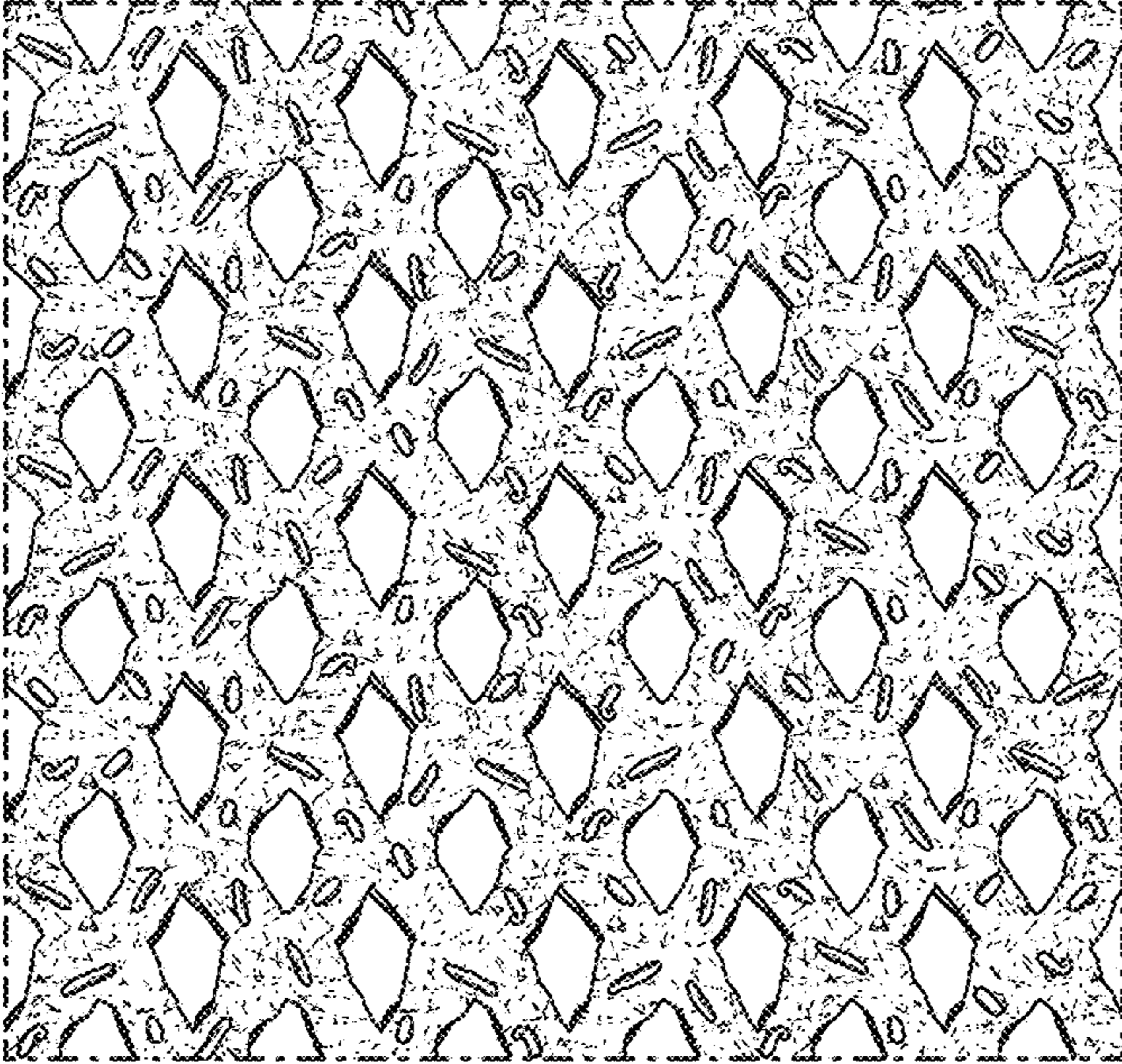


FIG. 4

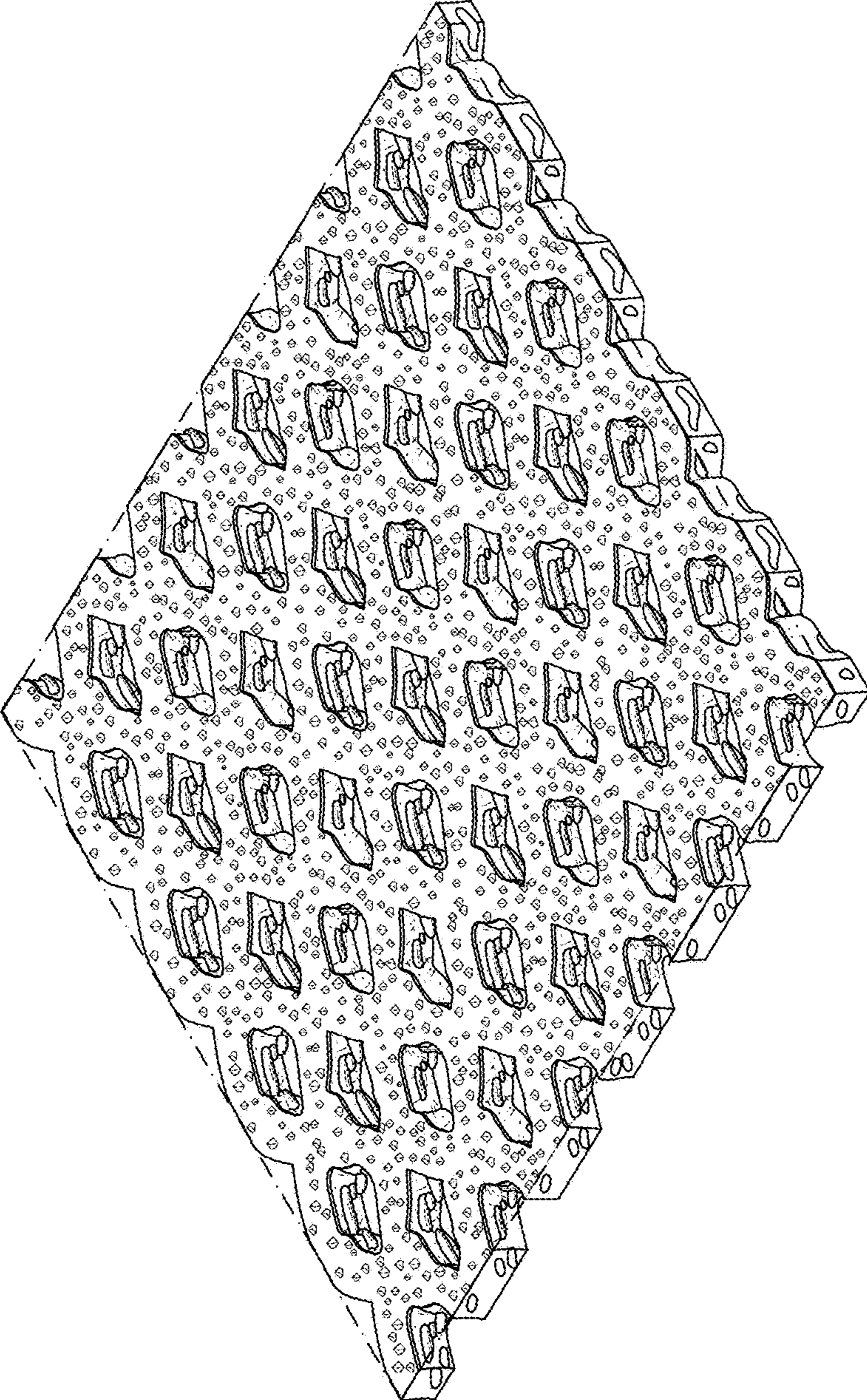


FIG. 5

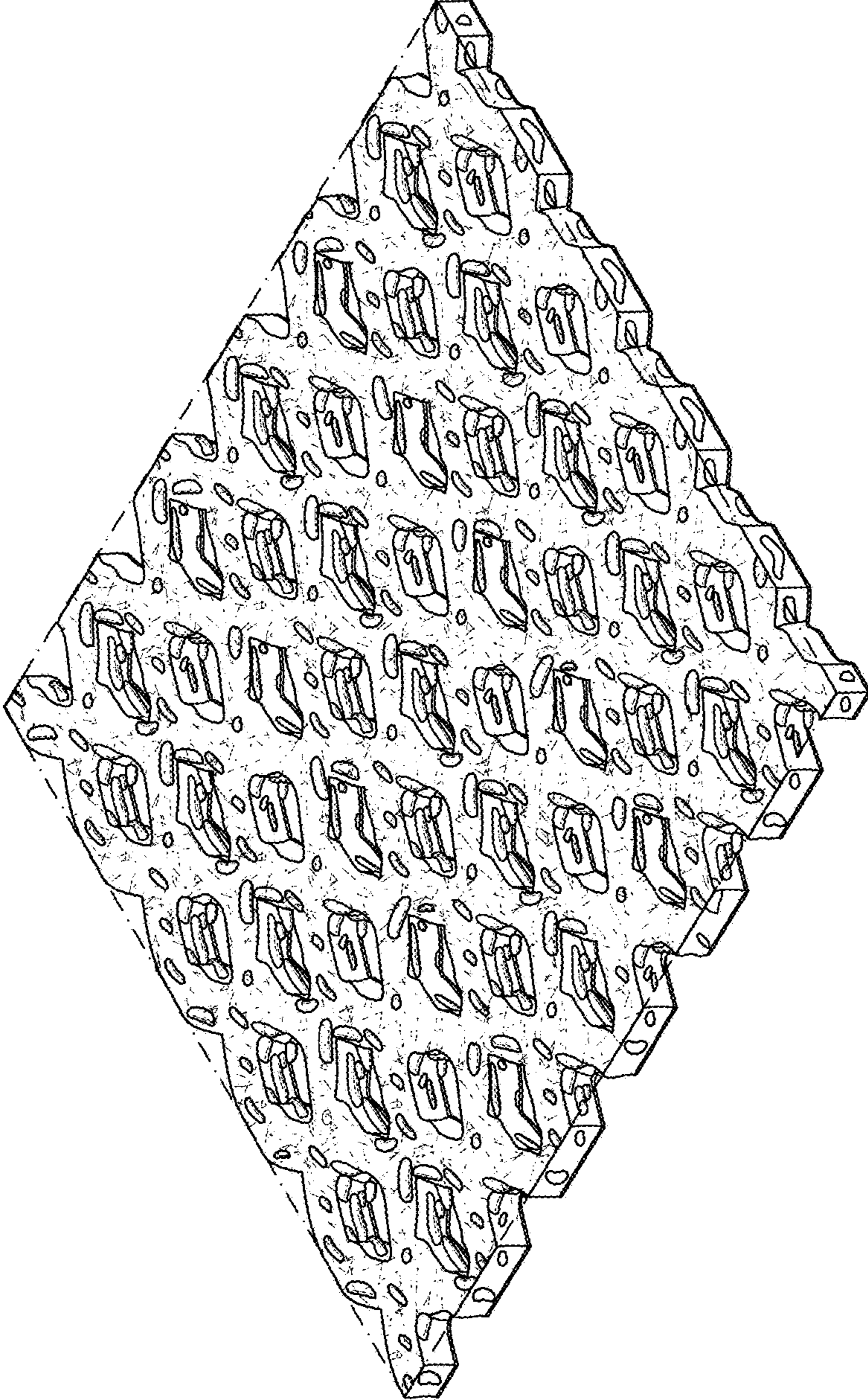


FIG. 6

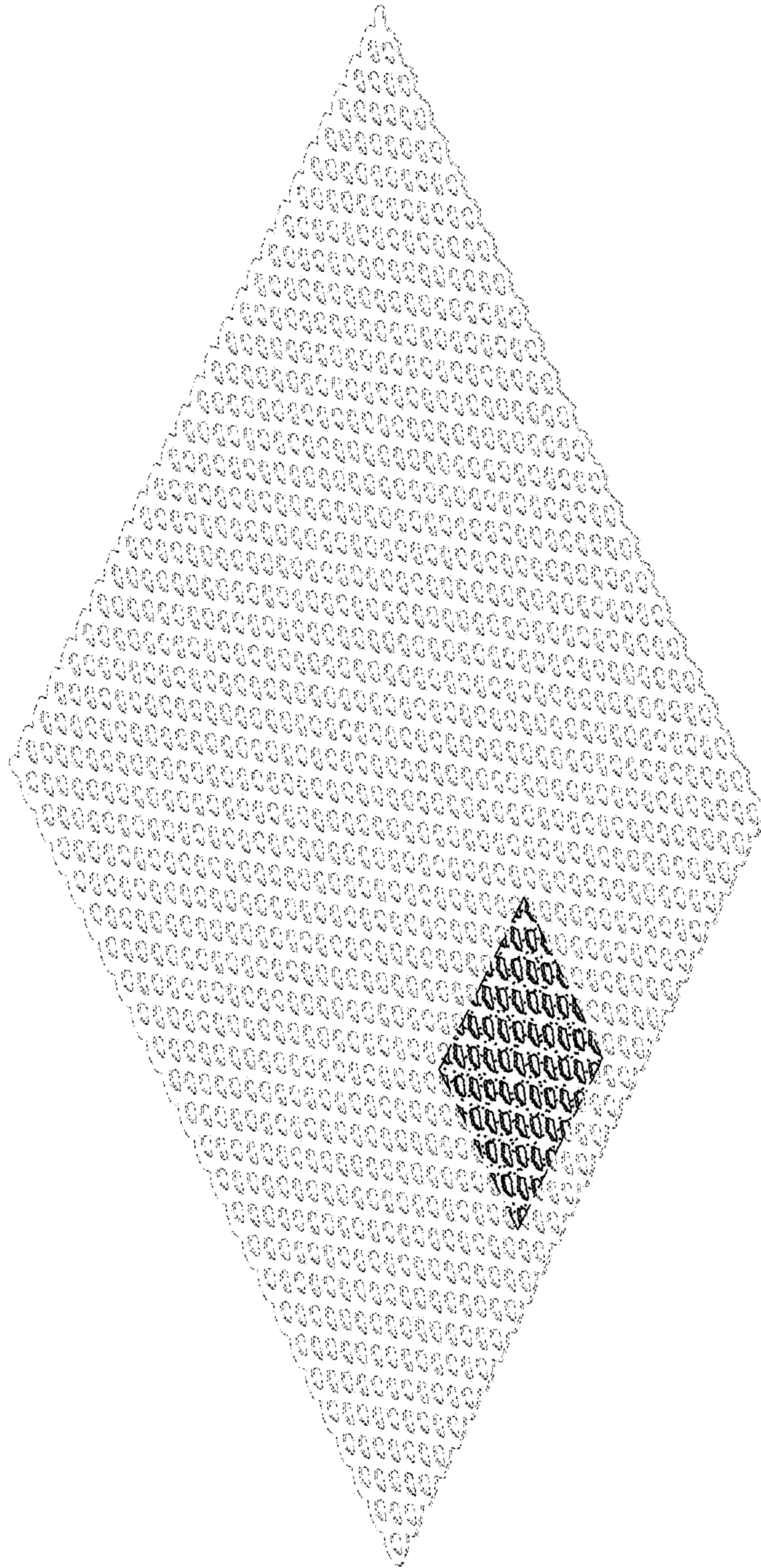


FIG. 7