

US00D714560S

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

(10) **Patent No.:** **US D714,560 S**
(45) **Date of Patent:** **** Oct. 7, 2014**

(54) **SHEET MATERIAL FOR AN ABSORBENT ARTICLE**

(71) Applicant: **The Procter & Gamble Company,**
Cincinnati, OH (US)

(72) Inventors: **Han Xu,** Cincinnati, OH (US); **Antonius Lambertus Debeer,** Loveland, OH (US); **Olaf Erik Alexander Isele,** West Chester, OH (US); **Dirk Saevecke,** Wiesbaden (DE); **Jiri Kummer,** Dmovice (CZ)

(73) Assignee: **The Procter & Gamble Company,**
Cincinnati, OH (US)

(**) Term: **14 Years**

(21) Appl. No.: **29/432,502**

(22) Filed: **Sep. 17, 2012**

(51) **LOC (10) Cl.** **05-06**

(52) **U.S. Cl.**
USPC **D5/56**

(58) **Field of Classification Search**
USPC D5/4, 7, 41, 43, 47, 53, 55, 56, 57, 58, D5/59, 60, 62, 63, 99, 37; D6/612, 617; D19/1, 5; D25/138; 2/900; 15/208; 112/401, 416, 439; 139/383 B, 383 R; 428/32, 66.5, 85, 151, 152, 187, 542.6; 442/408

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D63,092 S	10/1923	Vandergaw et al.	
D66,160 S	2/1924	Vandergaw et al.	
D81,838 S	8/1930	Maurus	
D96,103 S *	7/1935	Forstmann D5/47
D101,310 S	9/1936	Lehmann	

D102,691 S	1/1937	Levy	
D104,266 S	4/1937	Jaeger	
D117,997 S *	12/1939	Kaplan D5/47
D126,886 S *	4/1941	Gurry, Jr. D5/47
D136,088 S	8/1943	Lion	
D161,106 S *	12/1950	Hirsch D5/47
2,705,687 A	4/1955	Petterson et al.	
3,655,501 A *	4/1972	Tesch 428/136
3,855,045 A	12/1974	Brock	
4,142,334 A *	3/1979	Kirsch et al. 451/539
4,333,979 A *	6/1982	Sciaraffa et al.	
D274,361 S *	6/1984	Whitehead D24/125
4,940,464 A	7/1990	VanGompel et al.	
5,037,416 A	8/1991	Allen et al.	

(Continued)

FOREIGN PATENT DOCUMENTS

JP	2006-034872 A	2/2006
WO	2000-069481 A1	11/2000
WO	00-78883 A1	12/2000
WO	2004-029349 A1	4/2004

OTHER PUBLICATIONS

U.S. Appl. No. 13/428,404, filed Mar. 23, 2012, Han Xu et al.
Unricht drawings (15 sheets, including description page).

(Continued)

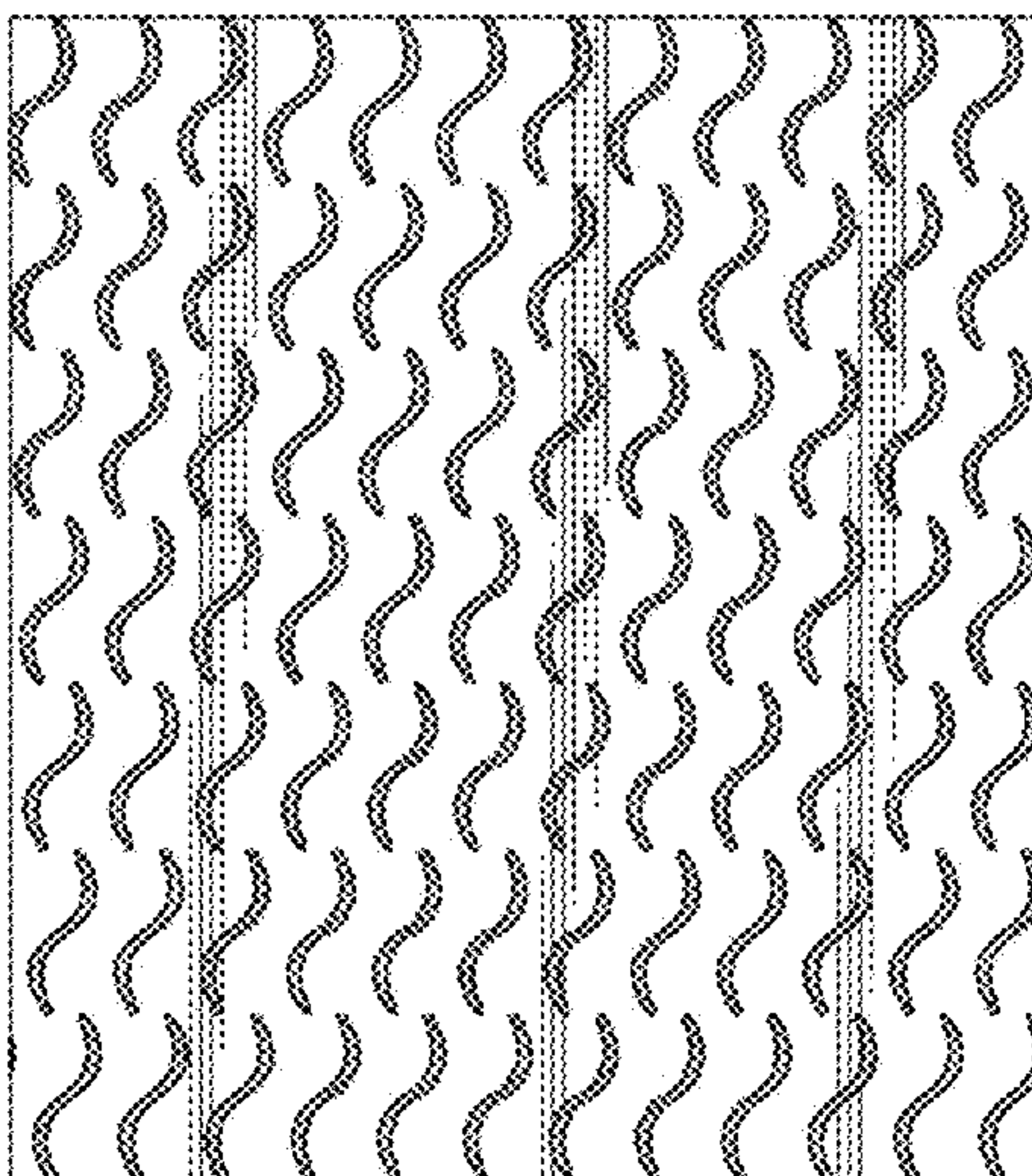
Primary Examiner — Karen S Acker
(74) *Attorney, Agent, or Firm* — William E. Gallagher;
Richard L. Alexander

(57) **CLAIM**
The ornamental design for sheet material for an absorbent article, as shown and described.

DESCRIPTION

FIG. 1 is a front view of sheet material for an absorbent article, embodying our new design; and, FIG. 2 is a front view of the second embodiment of sheet material for an absorbent article, embodying our new design.

1 Claim, 4 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

5,057,357 A 10/1991 Winebarger
 5,092,861 A 3/1992 Nomura et al.
 5,246,433 A 9/1993 Hasse et al.
 5,266,392 A 11/1993 Land et al.
 5,269,775 A 12/1993 Freeland et al.
 5,370,764 A 12/1994 Alikhan
 5,554,145 A 9/1996 Roe et al.
 5,569,234 A 10/1996 Buell et al.
 5,571,096 A 11/1996 Dobrin et al.
 5,607,760 A 3/1997 Roe
 5,635,191 A 6/1997 Roe et al.
 5,643,588 A 7/1997 Roe et al.
 D390,708 S 2/1998 Brown
 5,817,394 A 10/1998 Alikhan et al.
 5,897,545 A 4/1999 Kline et al.
 5,957,908 A 9/1999 Kline et al.
 5,964,742 A 10/1999 McCormack et al.
 6,004,306 A 12/1999 Robles et al.
 6,015,605 A 1/2000 Tsujiyama et al.
 6,120,487 A 9/2000 Ashton
 6,120,489 A 9/2000 Johnson et al.
 6,156,024 A 12/2000 Schulte et al.
 D442,698 S 5/2001 Sawdon
 D444,876 S 7/2001 Oberstadt
 D444,877 S 7/2001 Oberstadt
 D445,897 S 7/2001 Oberstadt
 D445,898 S 7/2001 Malchow et al.
 D446,302 S 8/2001 Blenke et al.
 D450,190 S 11/2001 Monroe et al.
 6,395,211 B1 5/2002 Dettmer et al.
 6,620,490 B1 9/2003 Malchow et al.
 6,632,385 B2 10/2003 Kauschke et al.
 6,645,569 B2 11/2003 Cramer et al.
 6,713,159 B1 3/2004 Blenke et al.
 6,717,028 B1 4/2004 Oberstadt
 D489,904 S 5/2004 Lee et al.
 D490,988 S 6/2004 Delaney et al.
 6,752,947 B1 6/2004 Lanigan et al.
 6,803,103 B2 10/2004 Kauschke et al.
 6,837,961 B2 1/2005 Malchow et al.
 6,861,571 B1 3/2005 Roe et al.
 6,863,933 B2 3/2005 Cramer et al.
 7,005,557 B2 2/2006 Klofta et al.
 D524,552 S * 7/2006 Delaney et al. D5/53

7,112,621 B2 9/2006 Rohrbaugh et al.
 D584,062 S 1/2009 Bracey
 7,527,851 B2 5/2009 Schuh et al.
 7,544,628 B2 6/2009 Stupperich et al.
 D599,559 S * 9/2009 Boehm D5/56
 7,740,928 B2 * 6/2010 Mehta et al. 428/40.1
 7,744,576 B2 6/2010 Busam et al.
 D619,375 S 7/2010 Newhouse
 7,750,203 B2 7/2010 Becker et al.
 D623,421 S 9/2010 Newhouse
 D626,813 S 11/2010 Stirm
 D629,213 S 12/2010 Carrier et al.
 7,854,813 B2 12/2010 Sommer et al.
 7,858,544 B2 12/2010 Turi et al.
 7,914,723 B2 3/2011 Kim et al.
 D636,607 S * 4/2011 Withers D5/56
 7,927,540 B2 4/2011 Smithies et al.
 2002/0143304 A1 10/2002 Elder et al.
 2002/0144384 A1 10/2002 Maugans
 2003/0032355 A1 2/2003 Guckert et al.
 2003/0148684 A1 8/2003 Cramer et al.
 2003/0233082 A1 12/2003 Kline et al.
 2004/0158212 A1 8/2004 Ponomarenko et al.
 2004/0175343 A1 9/2004 Osborne et al.
 2005/0008839 A1 1/2005 Cramer et al.
 2005/0159720 A1 7/2005 Gentilcore
 2005/0287340 A1 * 12/2005 Morelli et al. 428/156
 2007/0082184 A1 * 4/2007 Hansson 428/211.1
 2007/0134478 A1 6/2007 Haberer et al.
 2008/0057308 A1 3/2008 Polato et al.
 2008/0306463 A1 12/2008 Dent et al.
 2008/0312617 A1 12/2008 Hundorf et al.
 2009/0118689 A1 5/2009 Lawson et al.
 2010/0305543 A1 12/2010 Klaska
 2011/0282313 A1 11/2011 Lu et al.

OTHER PUBLICATIONS

“Processes of ‘Spunbond’”, Process of Fiber Formation (Zbigniew K. Walczak) Elsevier Science, Ltd., (2002) pp. 346-374.
 “Flow Past Two Rotating Cylinders”, Physics of Fluids 23,014102 (2011) (Gonzalez and Probst), American Institute of Physics, pp. 1-14).
 “Air Entrainment on a Moving Continuous Web”, Chemical Engineering Science 59 (Arzate and Tanguy), Elsevier Science, Ltd. (2004) pp. 3527-3536.

* cited by examiner

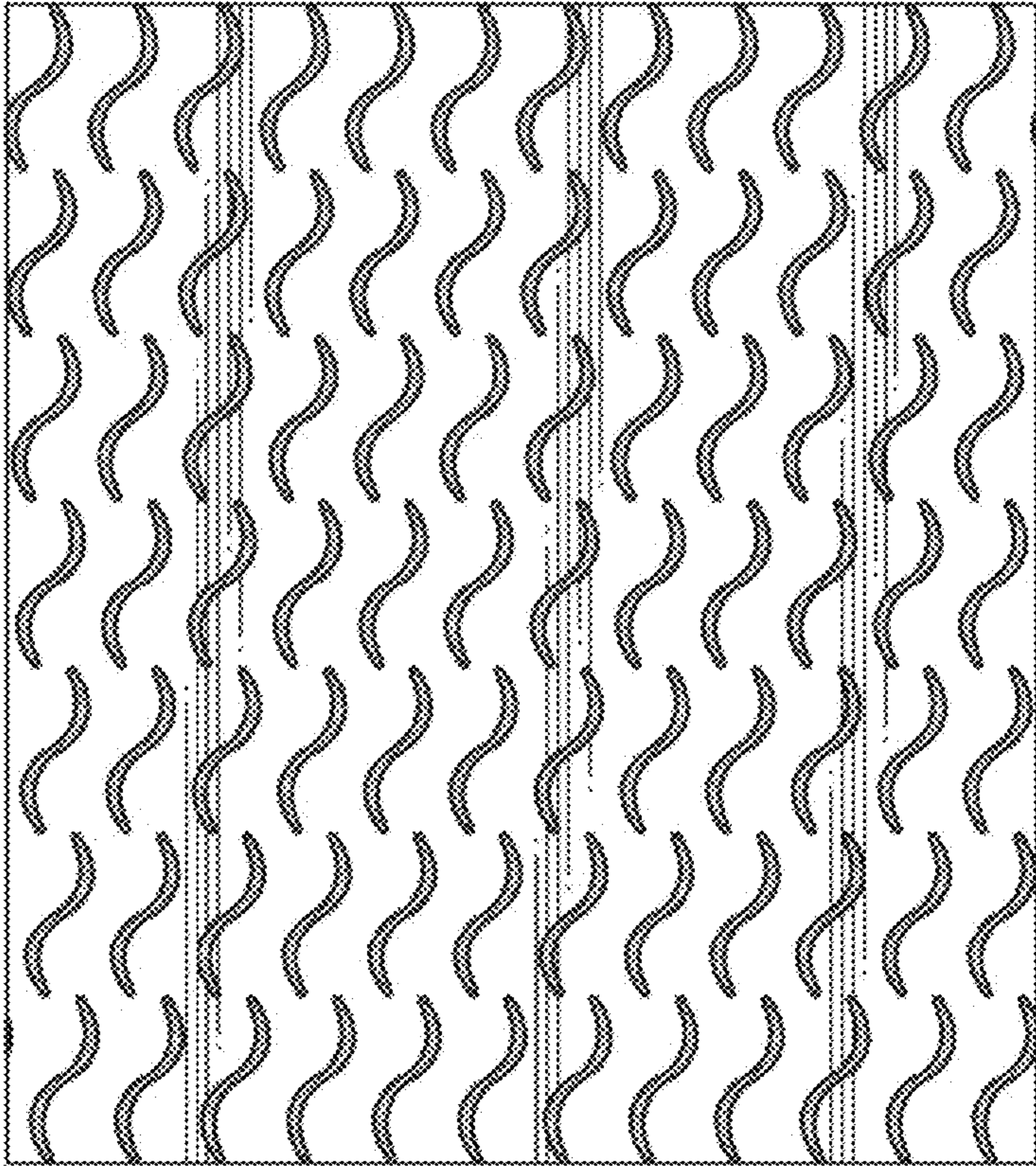


Fig. 1

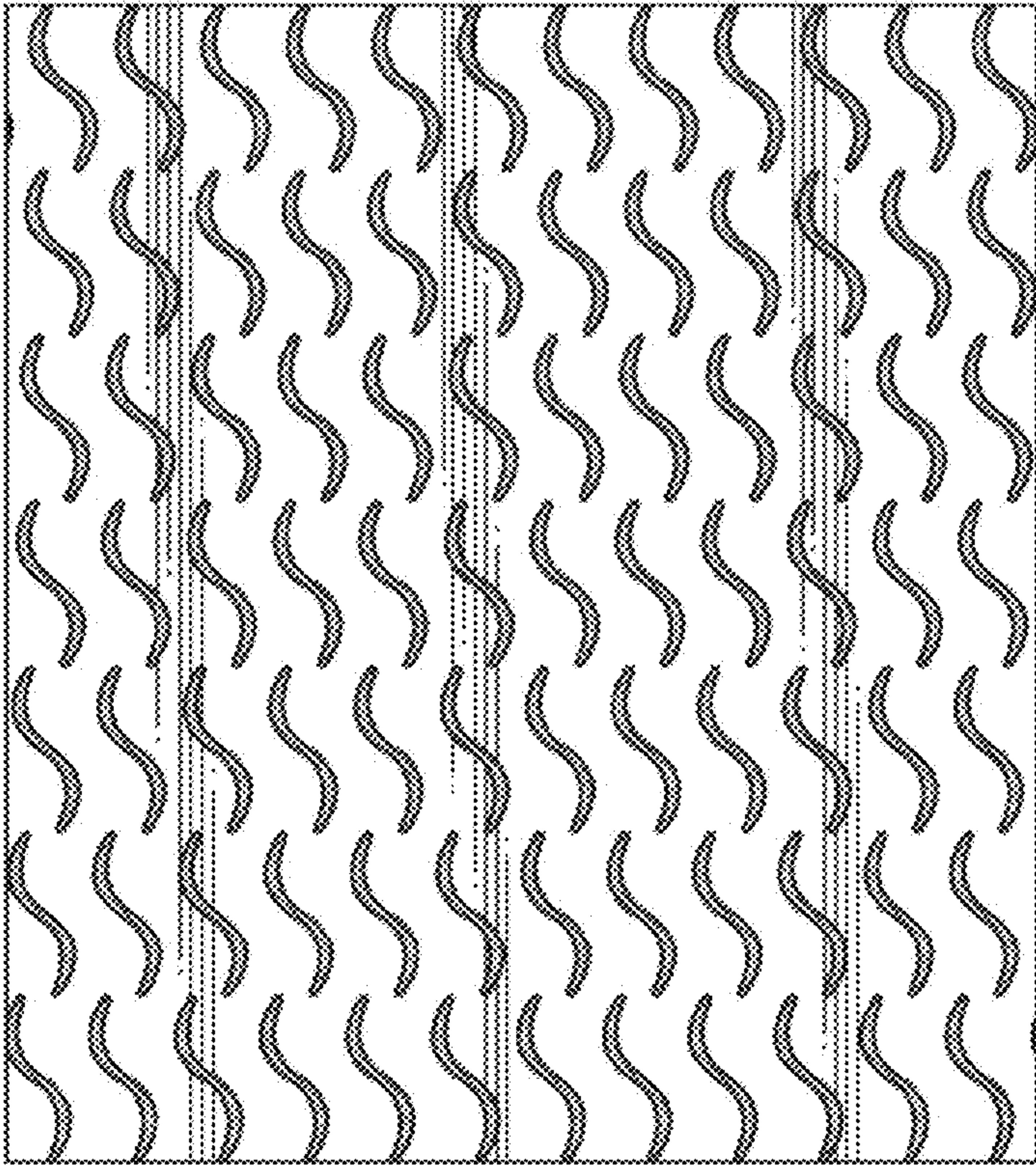


Fig. 2

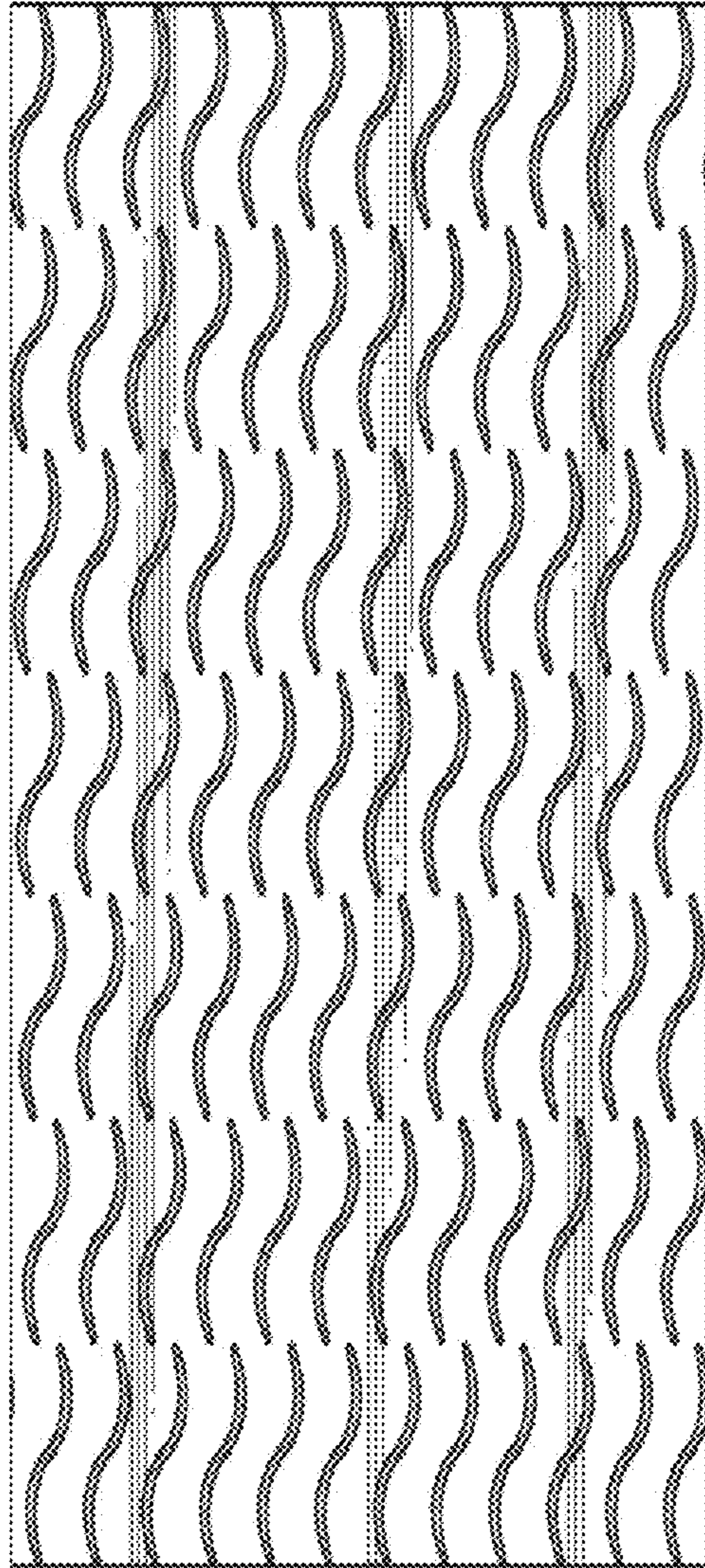


Fig. 3

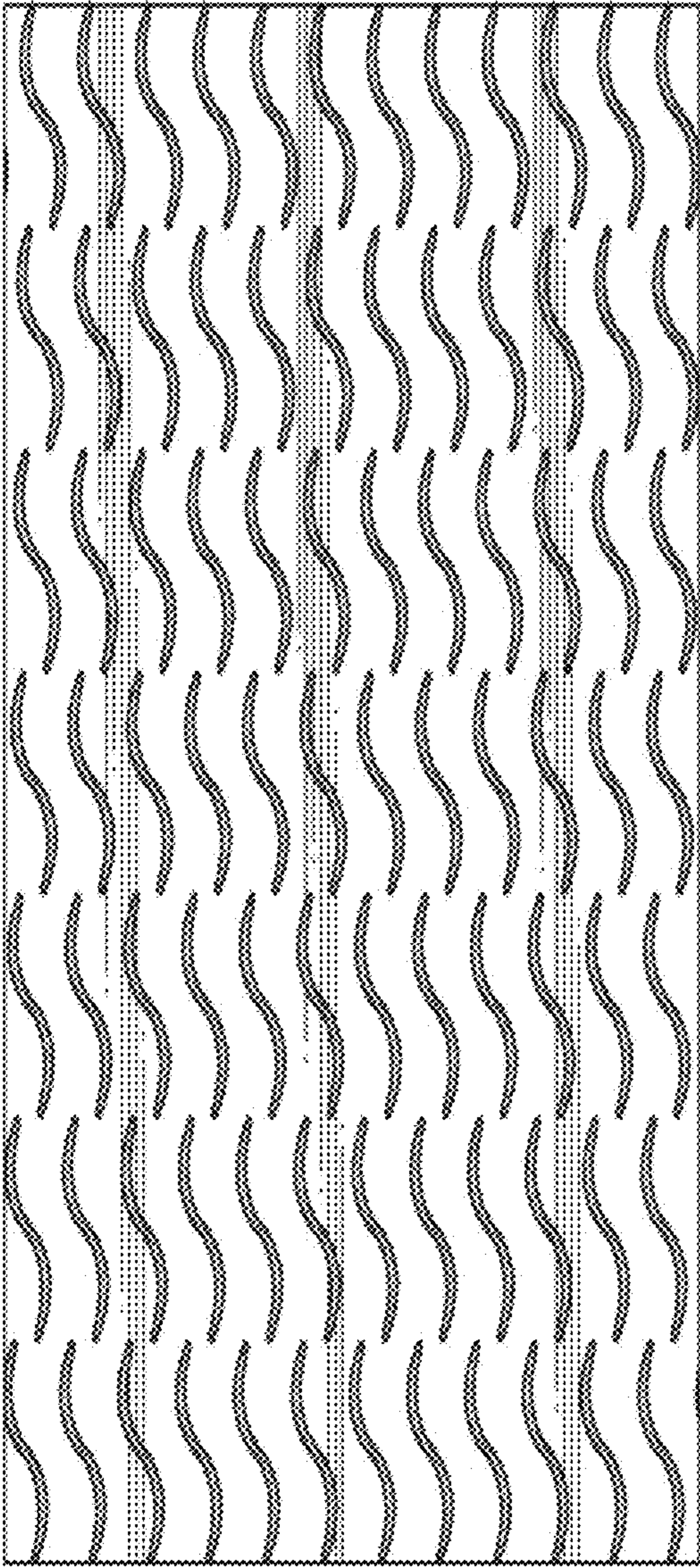


Fig. 4