FIG. 1

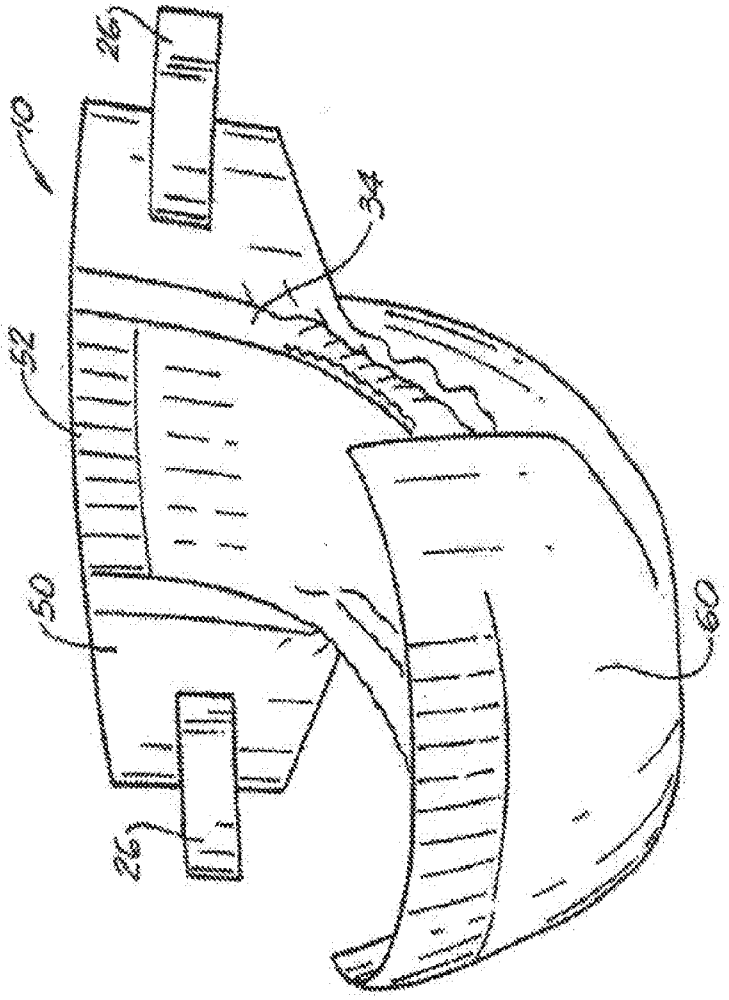


FIG. 3

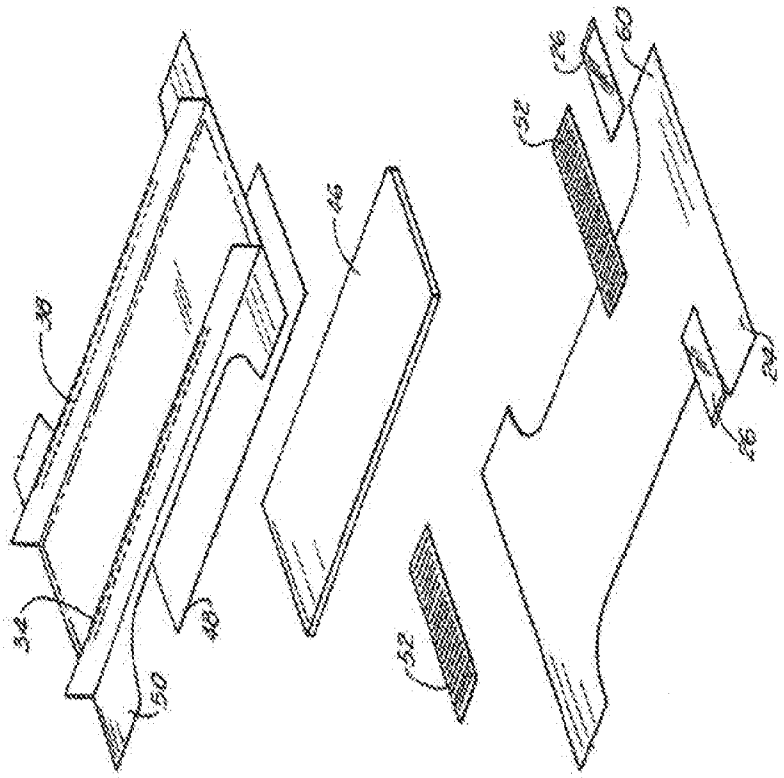
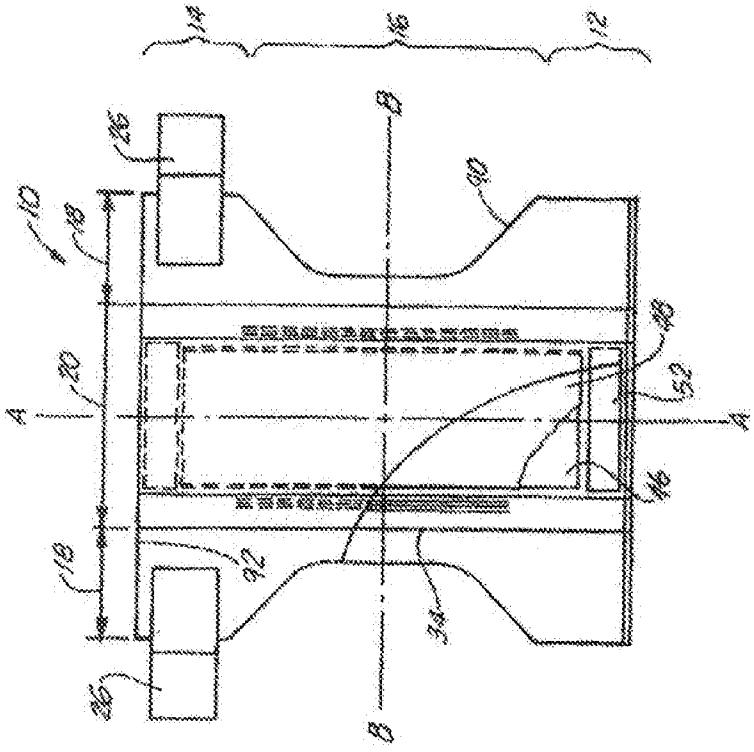

38
34
50
48
46
52
26
60
24
26

FIG. 2


14
16
12
10
18
20
26
90
48
52
46
A
A
B
B
18
92
34
26

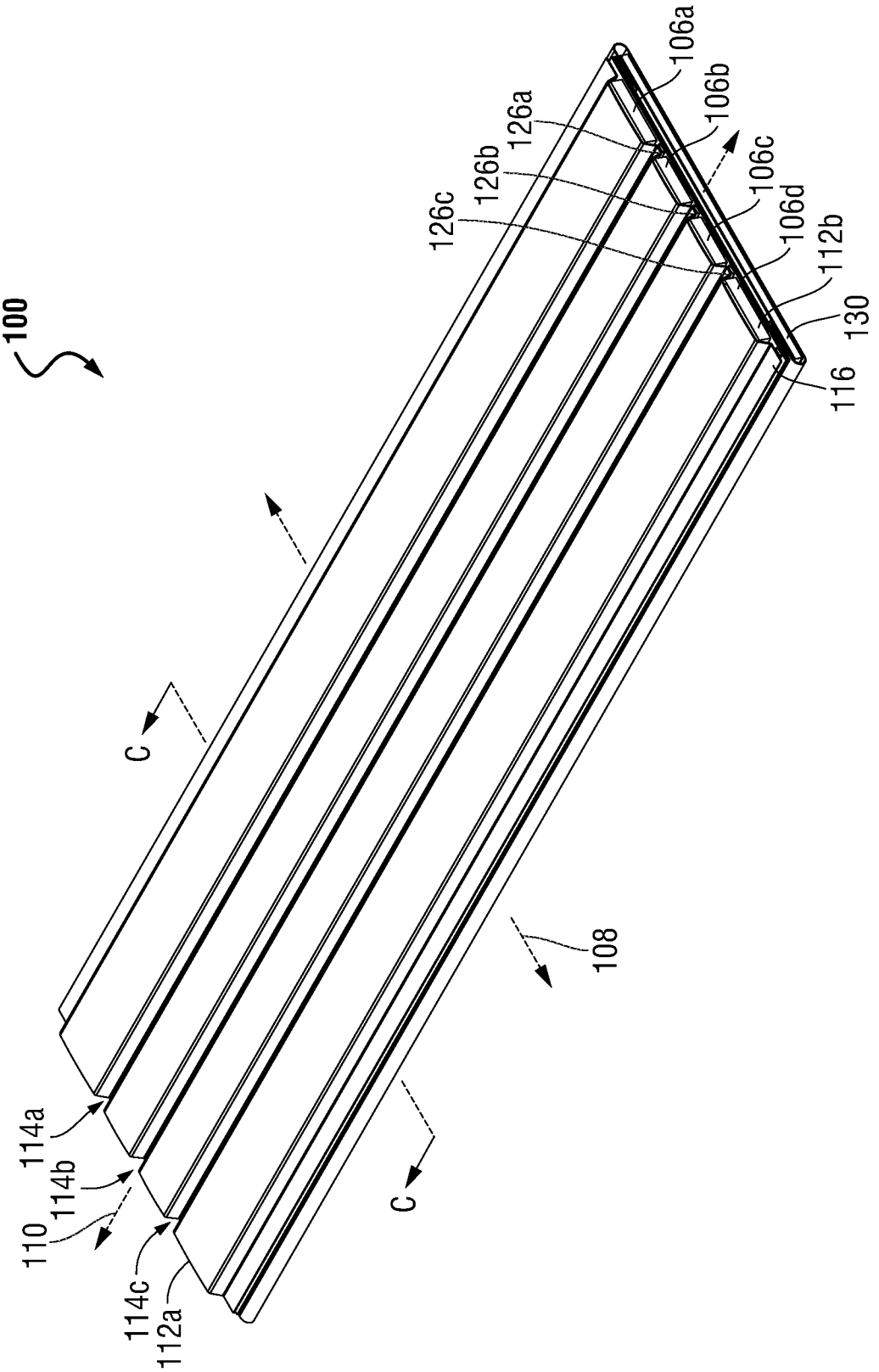

100
106a
106b
106c
106d
126a
126b
126c
112b
130
116
C
C
108
114a
114b
110
114c
112a

FIG. 4A

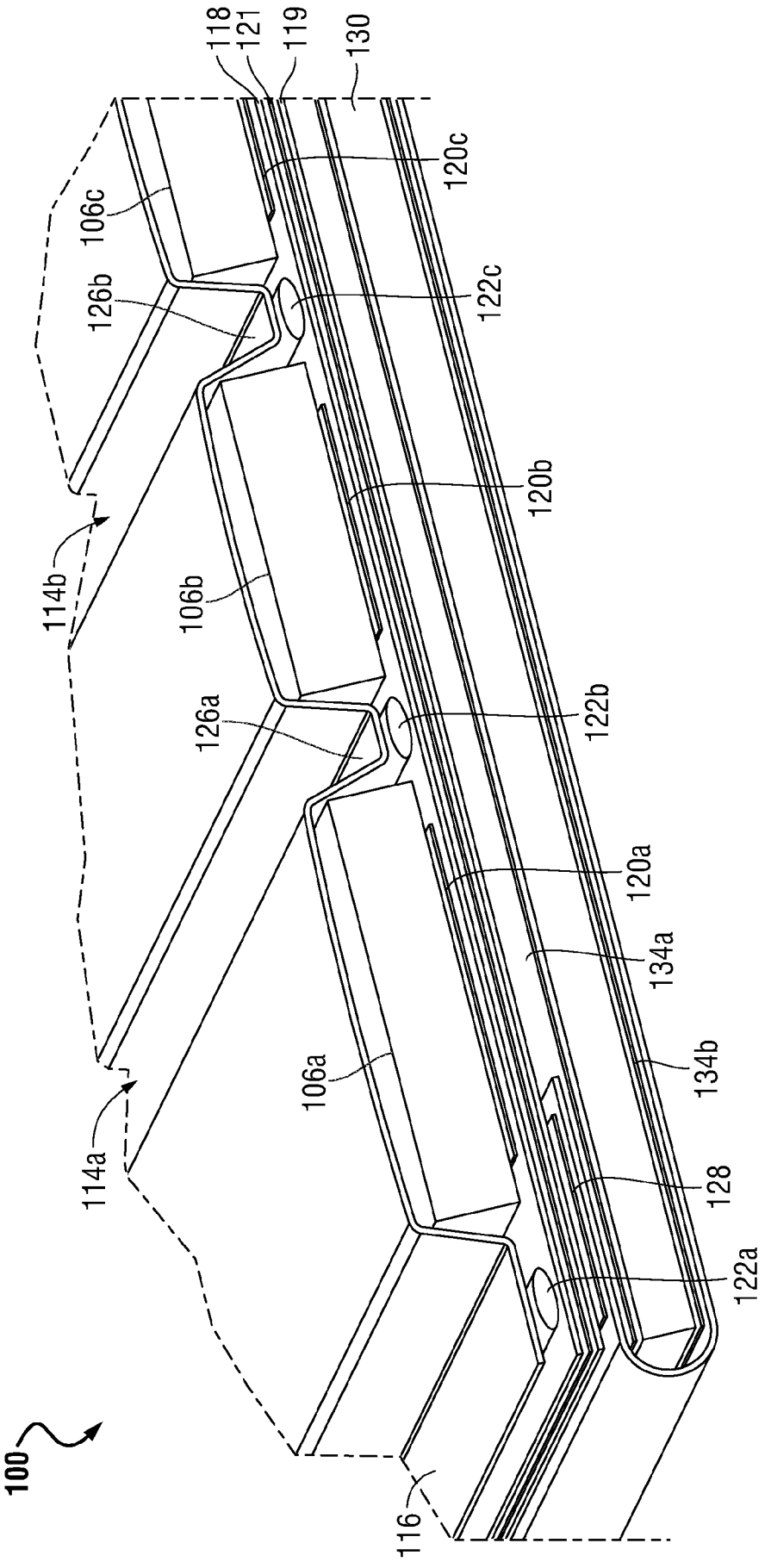

118
121
119
130
120c
106c
126b
122c
120b
114b
106b
126a
122b
120a
134a
106a
134b
114a
128
122a
116
100

FIG. 4B

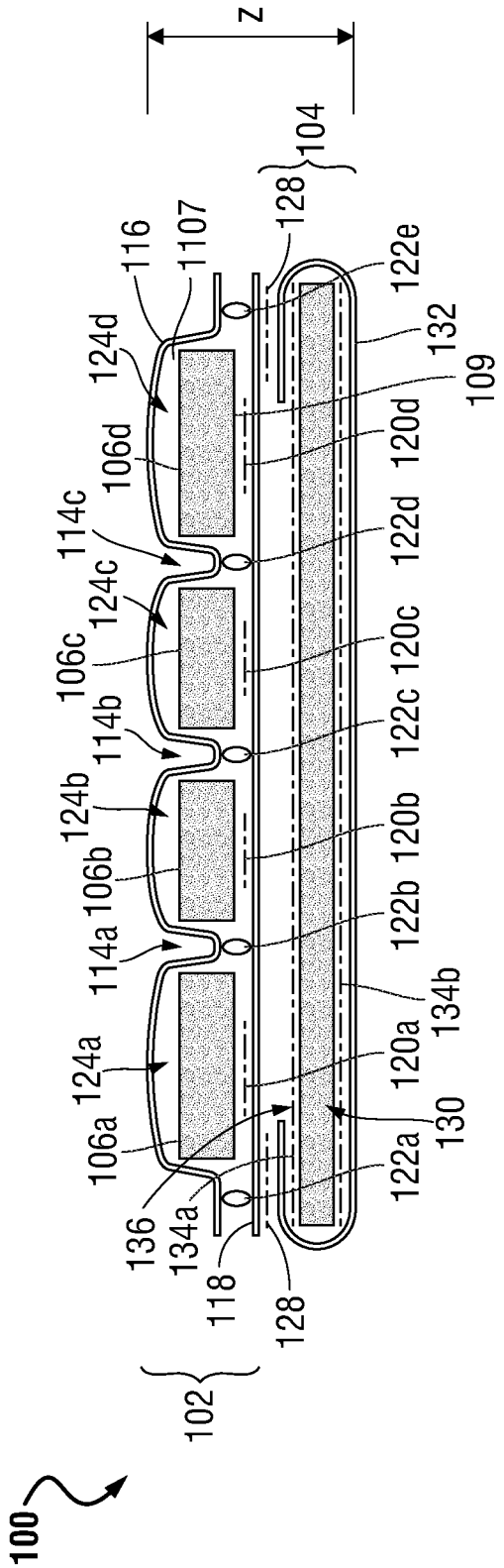

100
102
104
z
106a
106b
106c
106d
107
109
114a
114b
114c
116
118
120a
120b
120c
120d
122a
122b
122c
122d
122e
124a
124b
124c
124d
128
130
132
134a
134b
136

FIG. 5

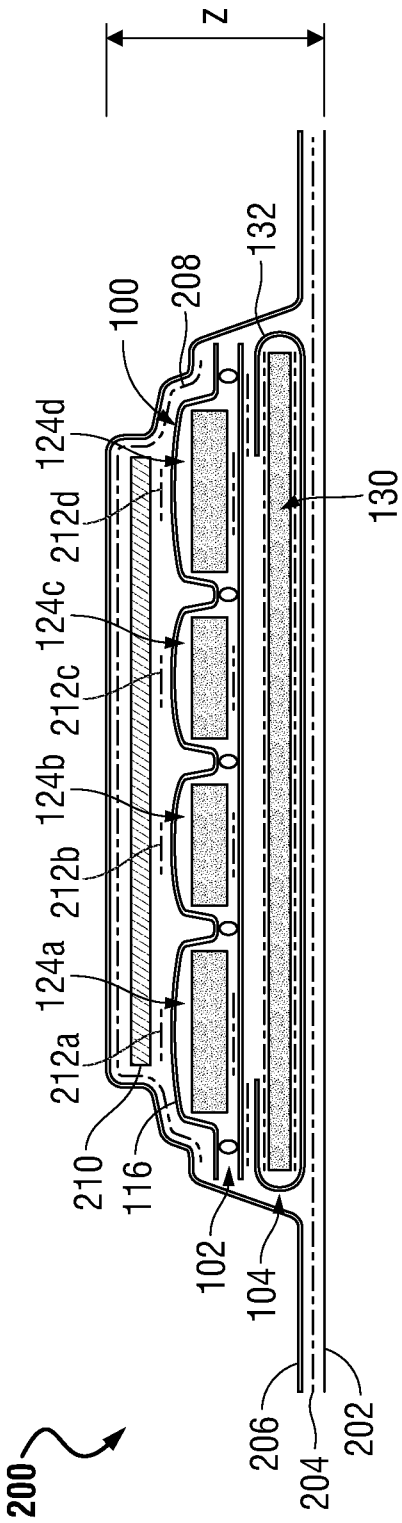

200
202
204
206
208
210
212a
212b
212c
212d
z
100
102
104
116
124a
124b
124c
124d
130
132

FIG. 6

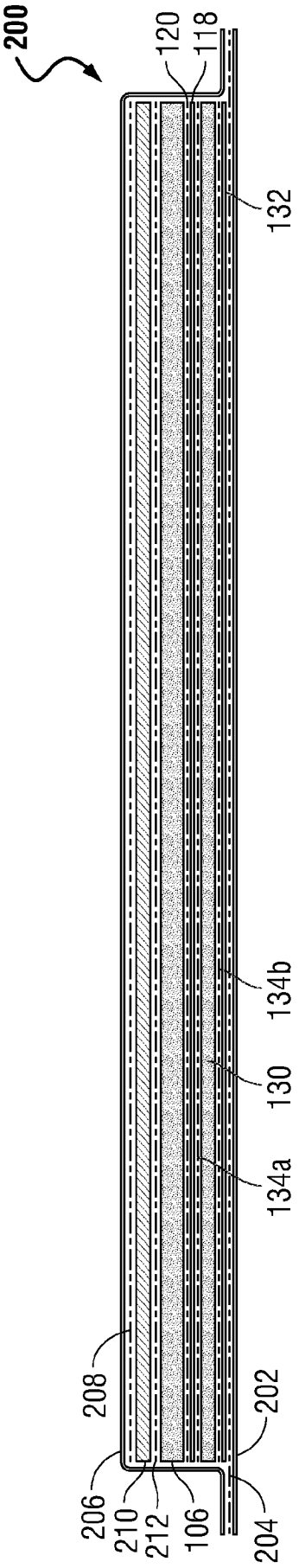


FIG. 7

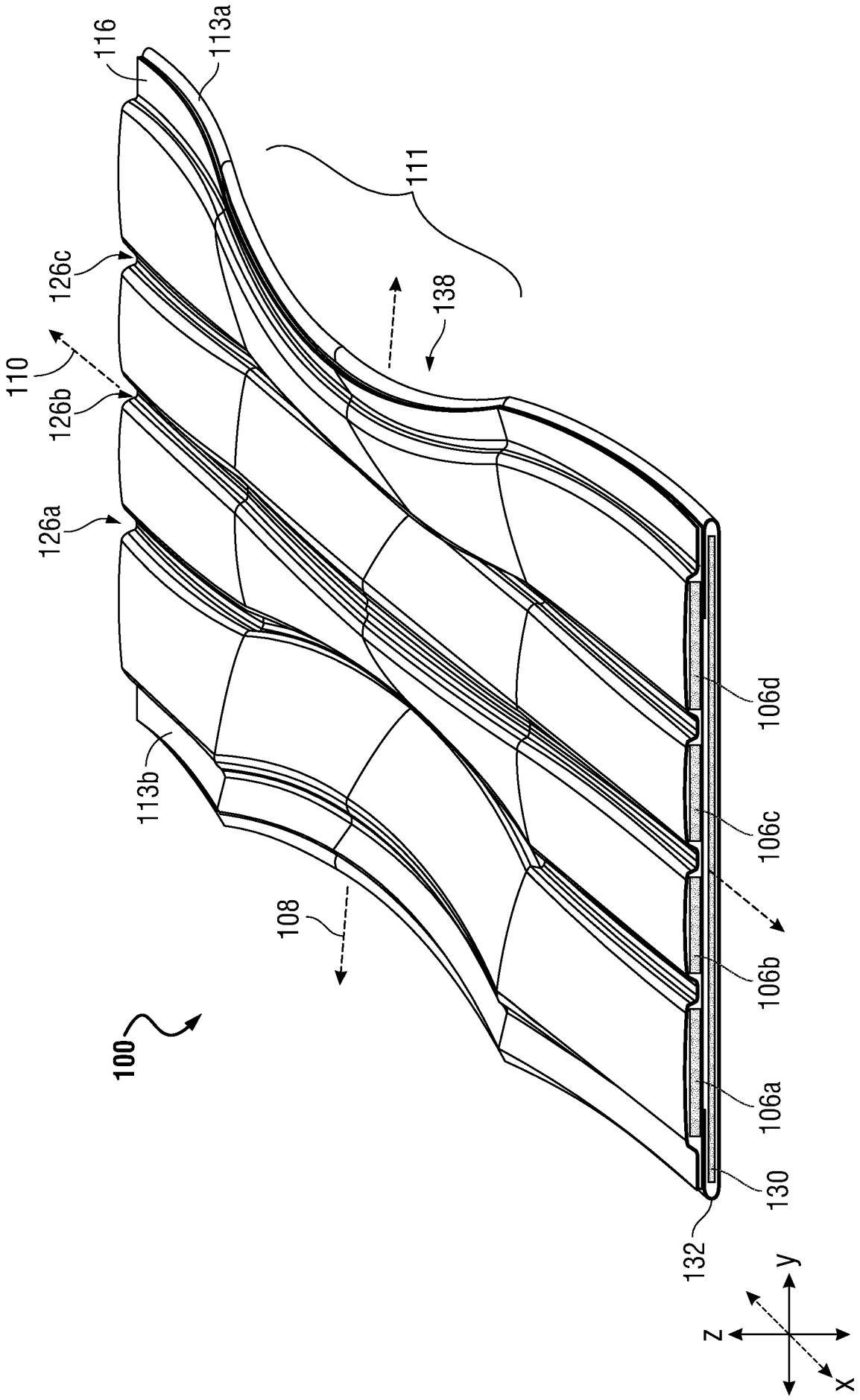

116
113a
111
126c
138
110
126b
126a
113b
108
100
106d
106c
106b
106a
130
132
y
z
x

FIG. 8

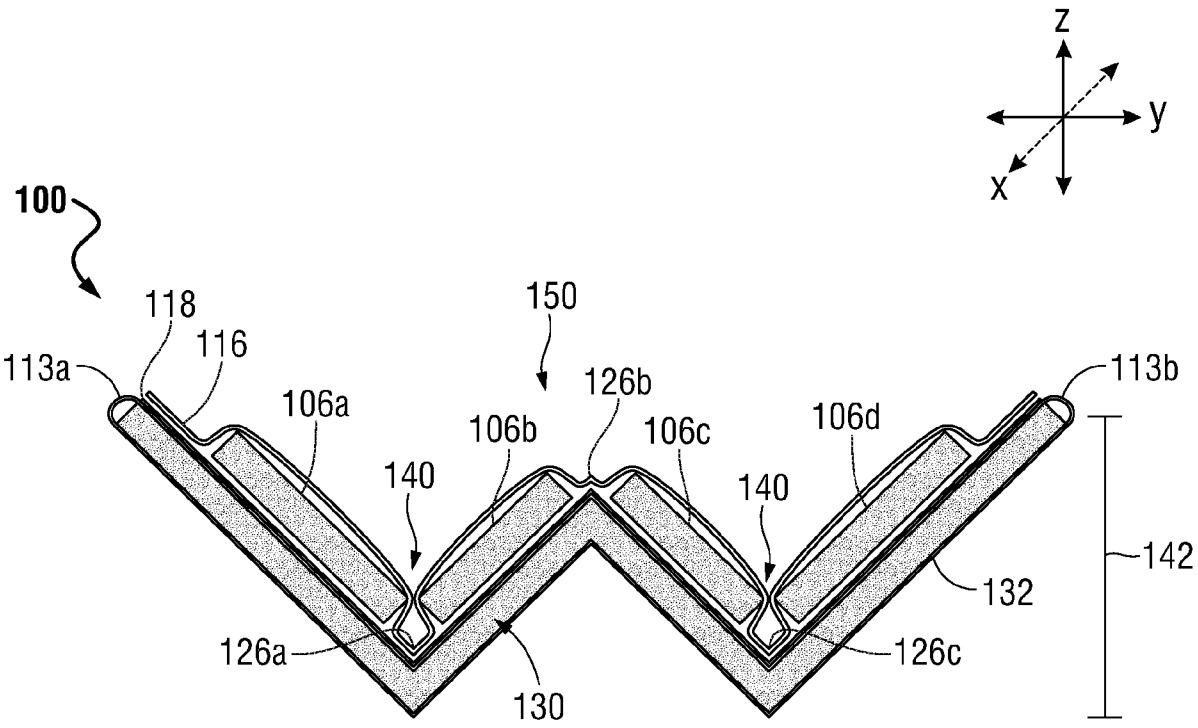

z
y
x
100
118
116
113a
150
106a
106b
126b
106c
106d
113b
140
140
142
132
126a
126c
130

FIG. 9A

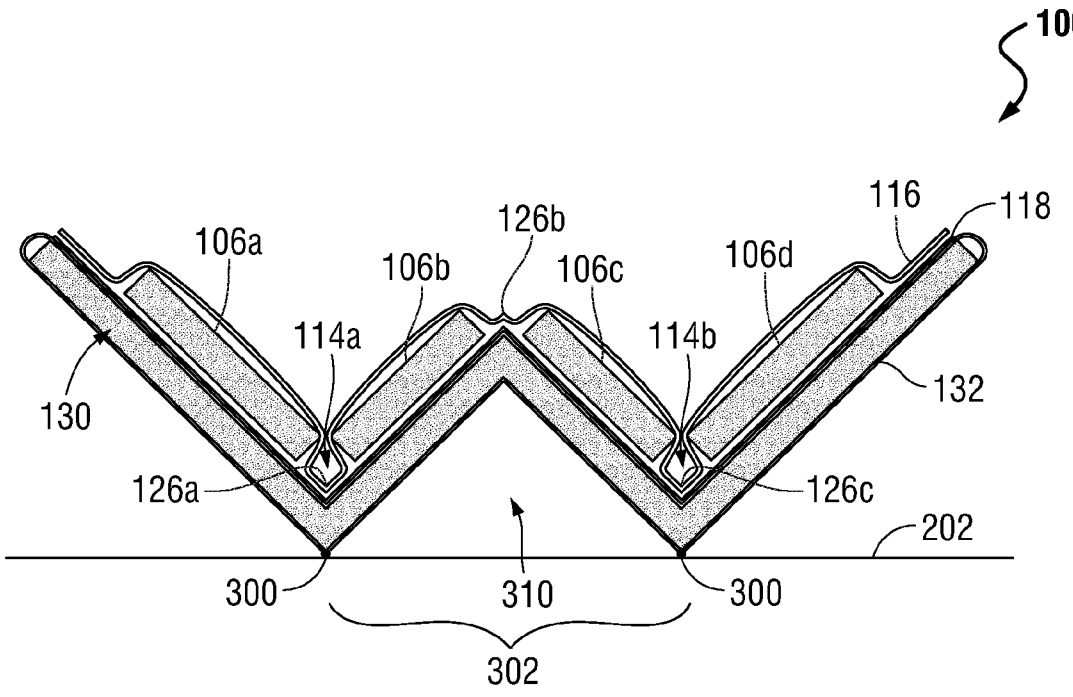

100
116
118
106a
126b
106b
106c
106d
114a
114b
132
130
126a
126c
202
300
310
300
302

FIG. 9B

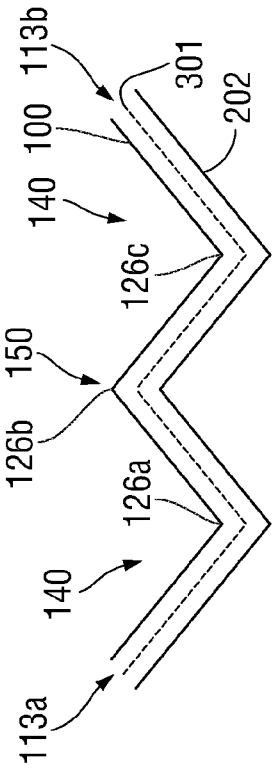


FIG. 9D

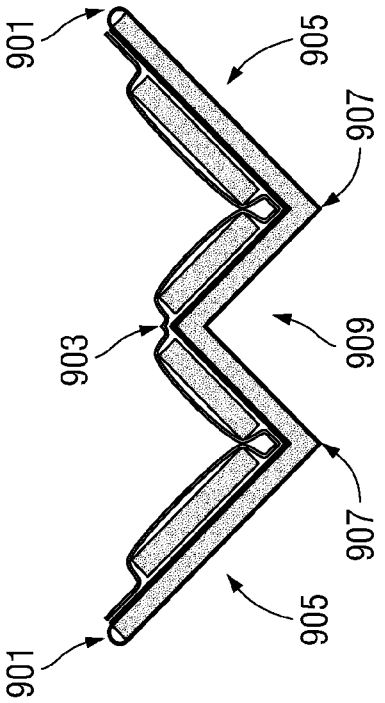


FIG. 9F

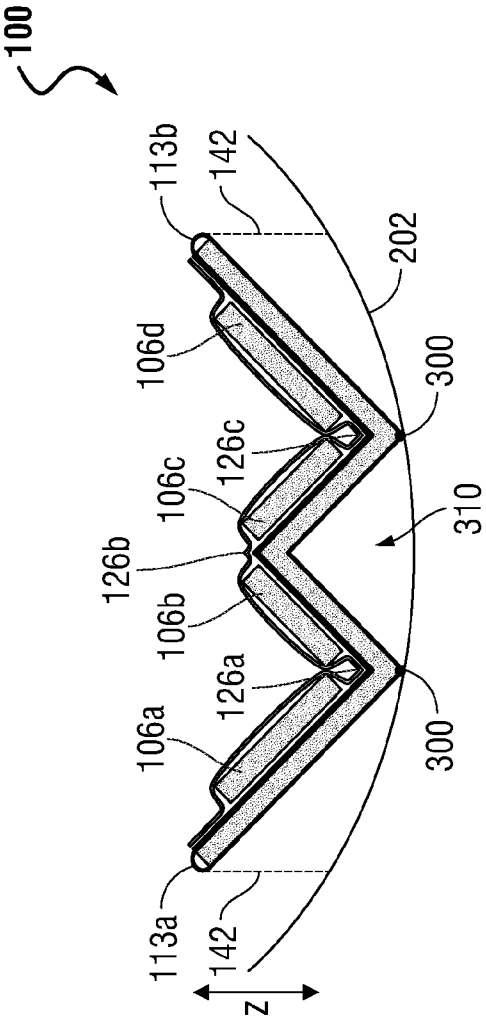


FIG. 9C

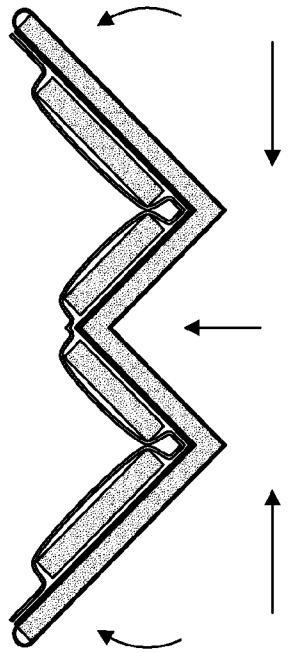


FIG. 9E

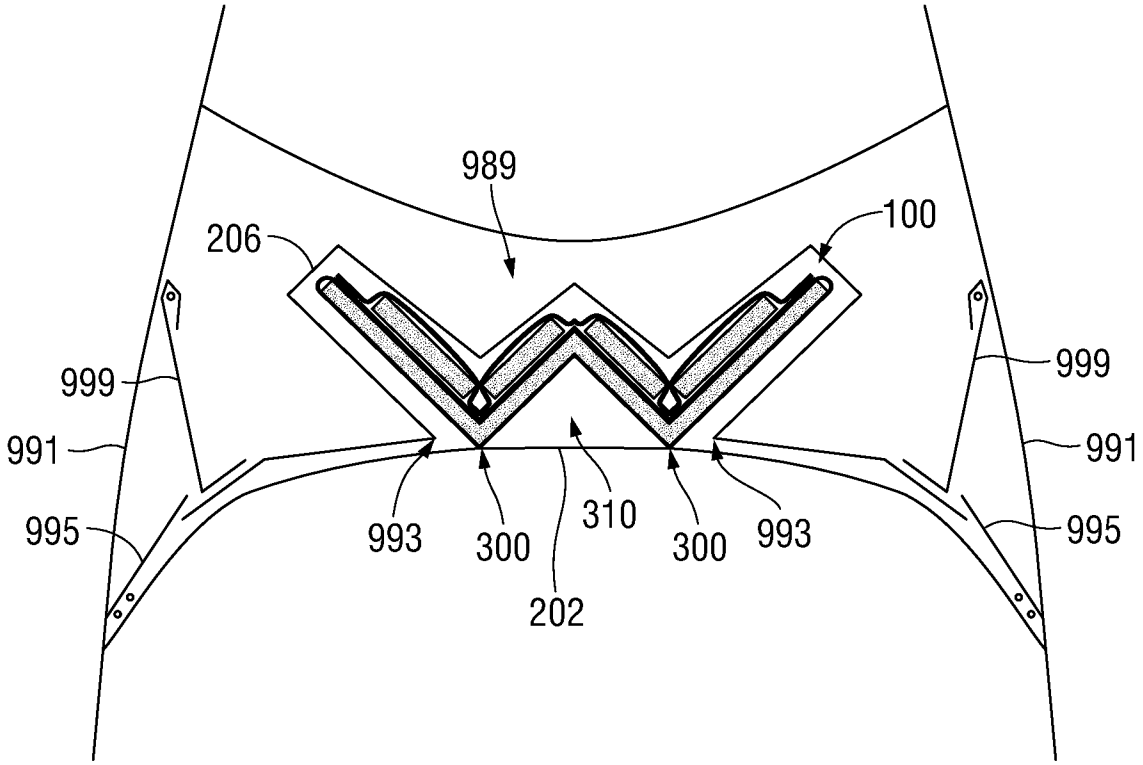


FIG. 9G

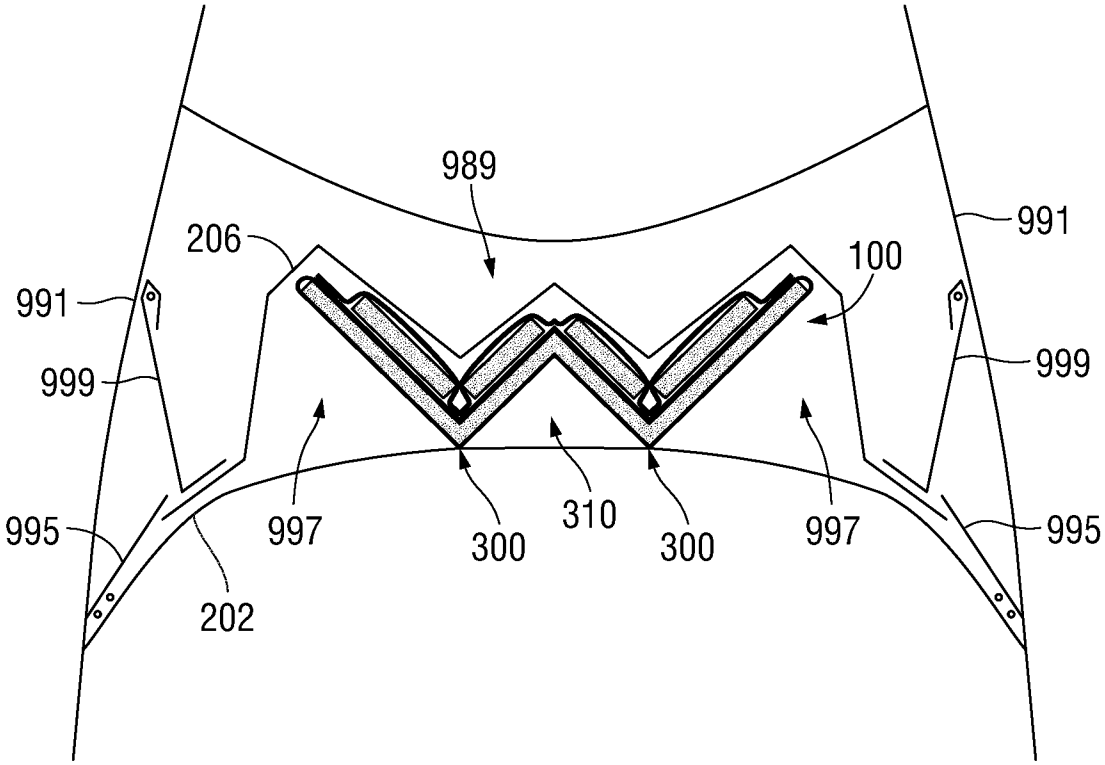


FIG. 9H

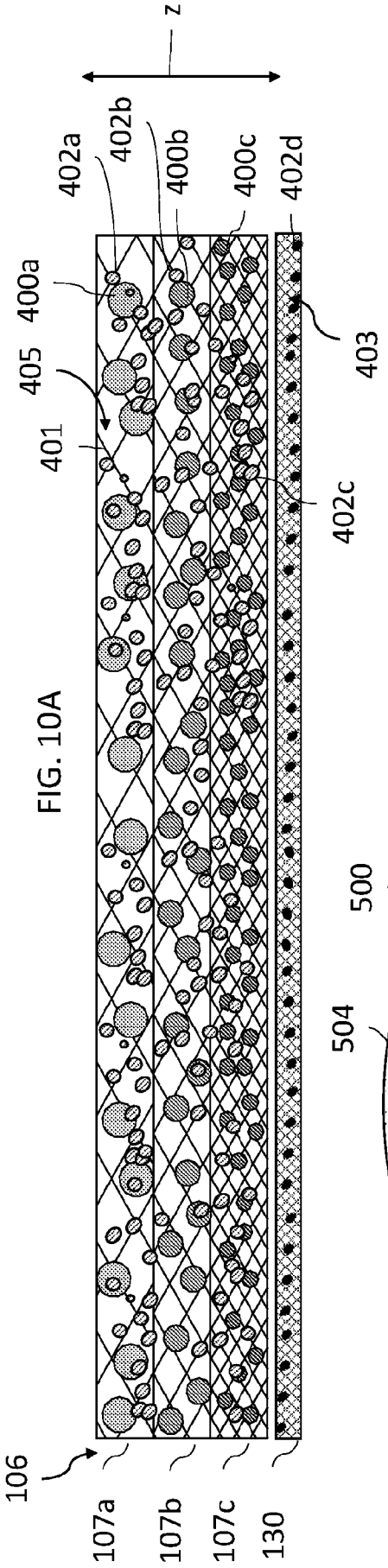


FIG. 10A

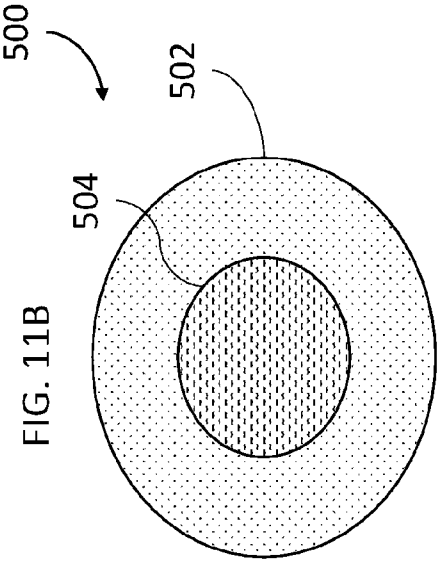


FIG. 11B

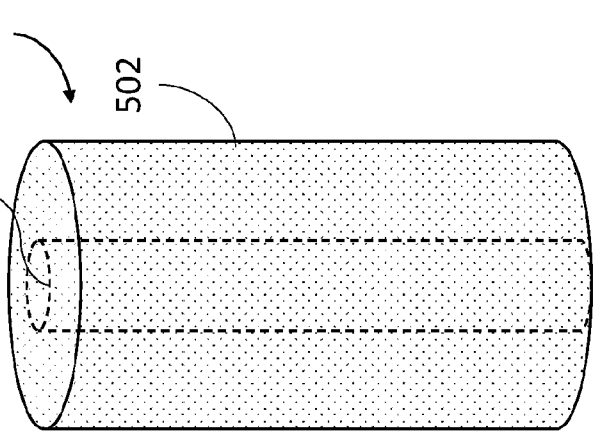


FIG. 11A

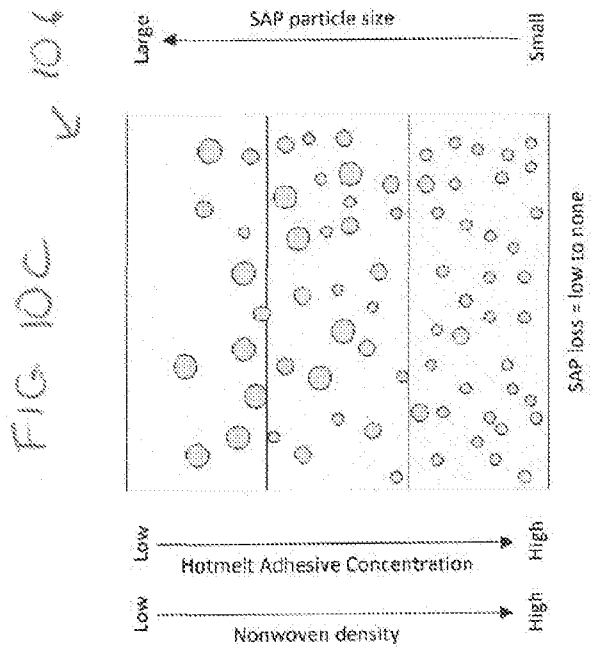


FIG. 10C

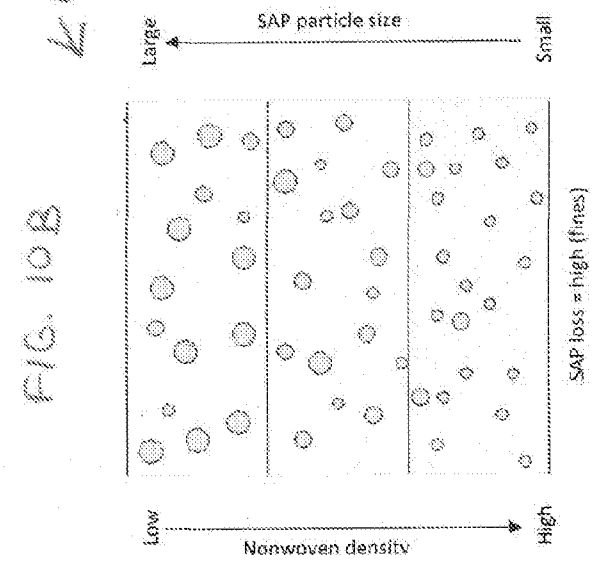


FIG. 10B

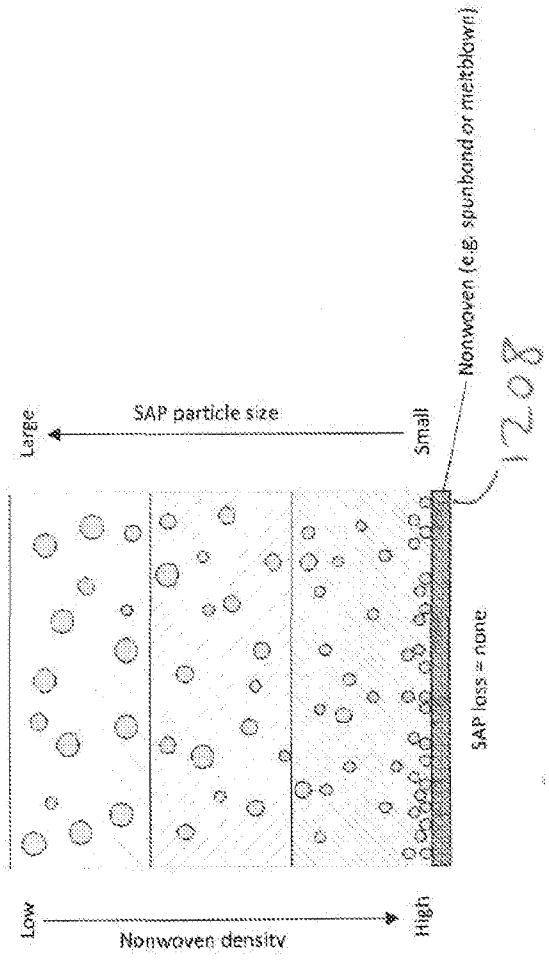


FIG. 10D

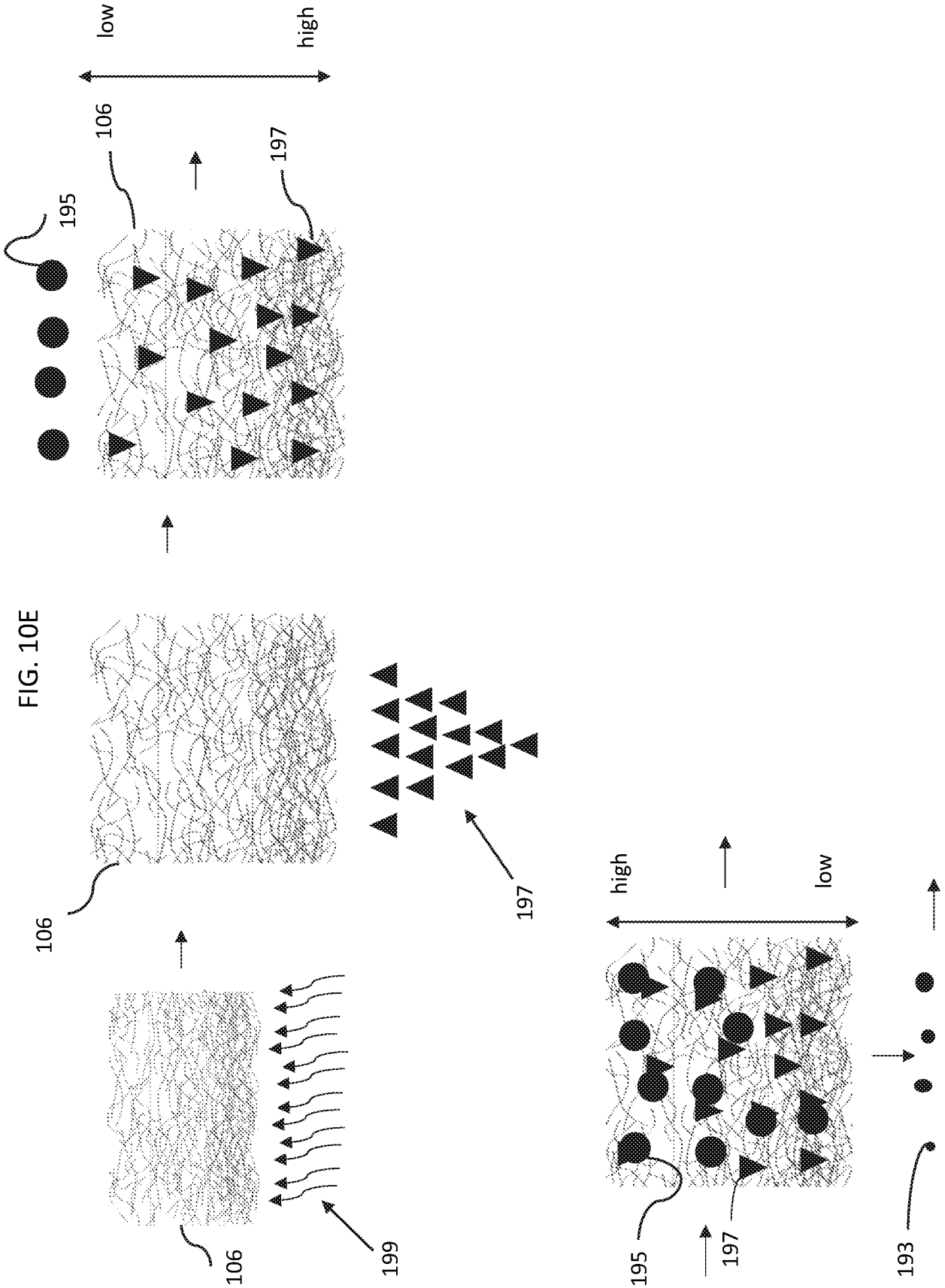


FIG. 10E

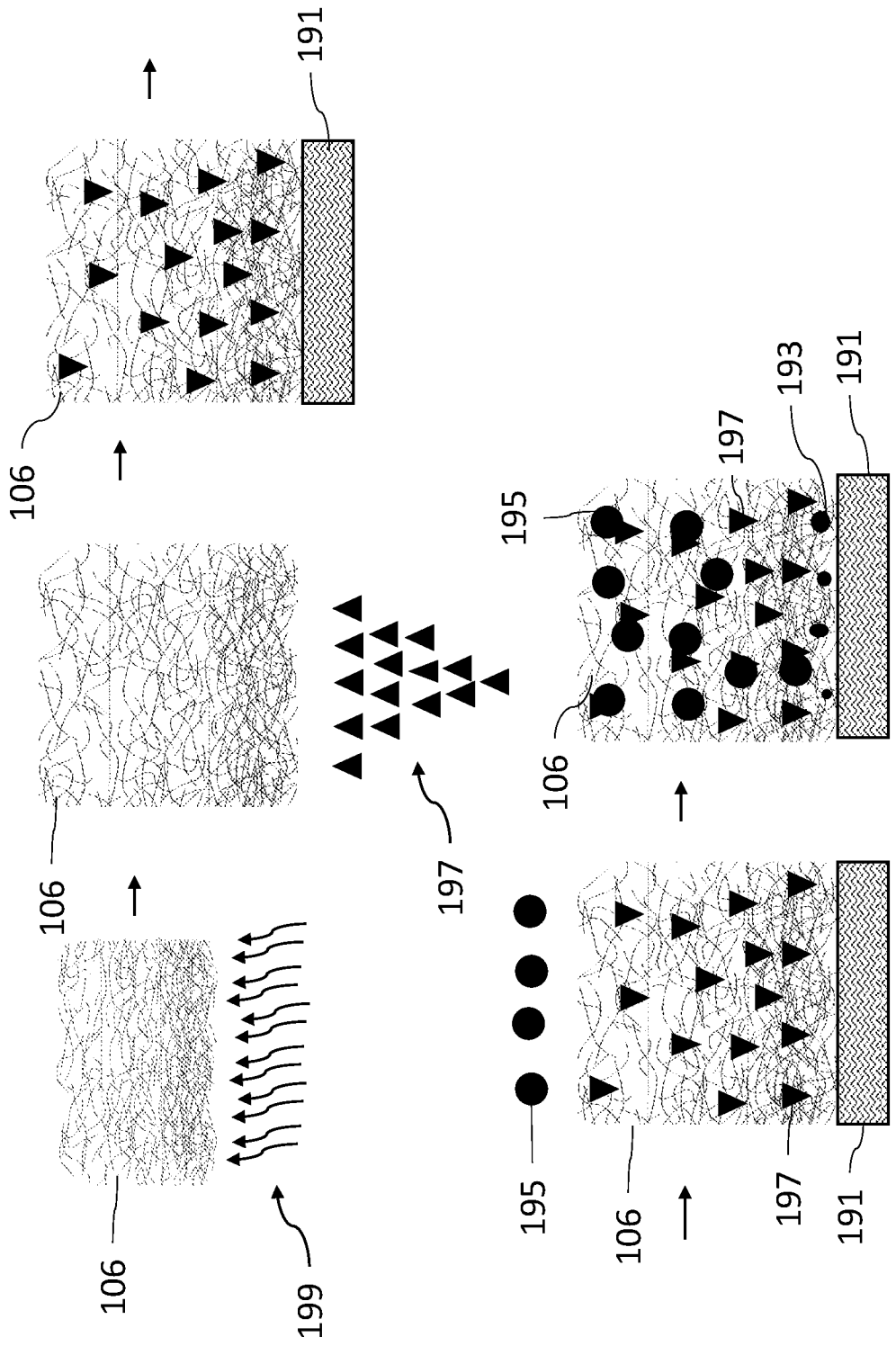


FIG. 10F

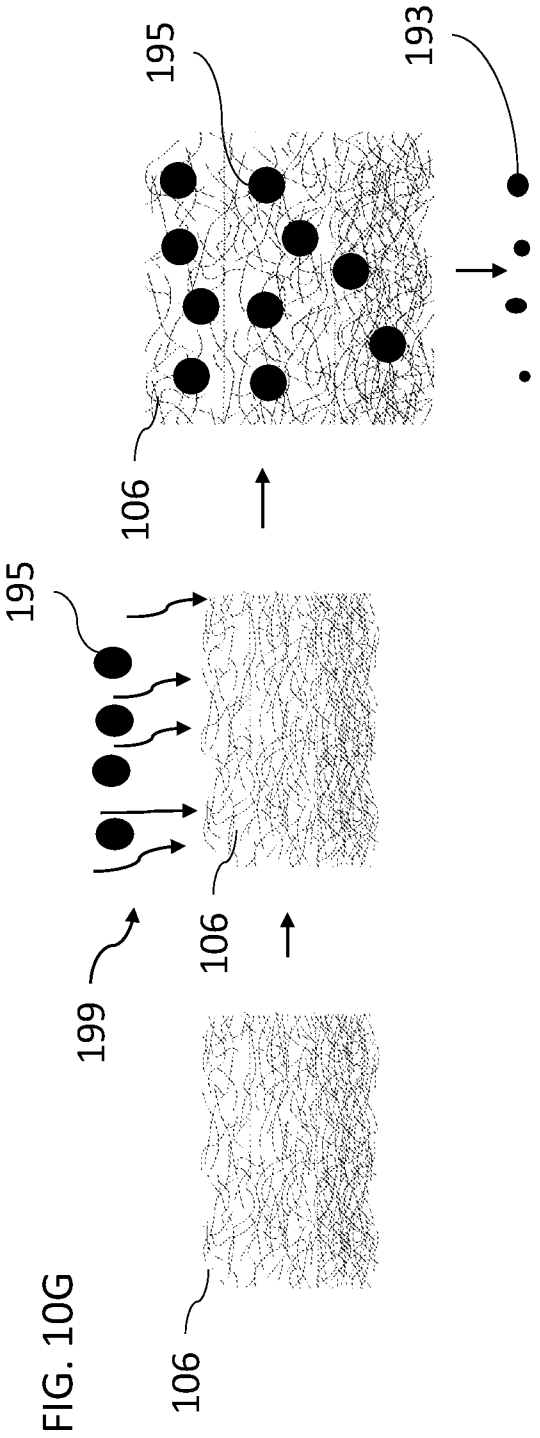


FIG. 10G

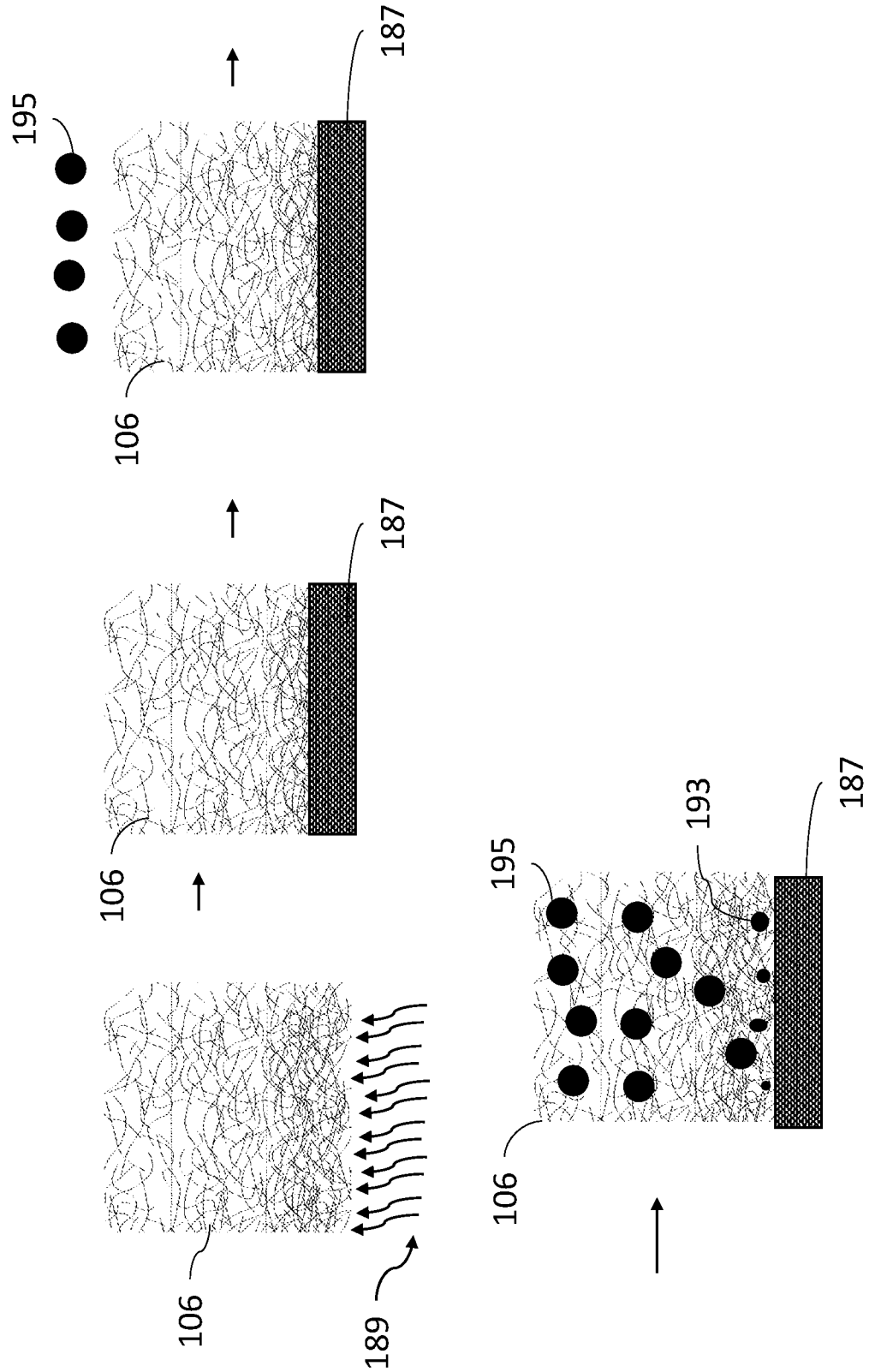


FIG. 10H

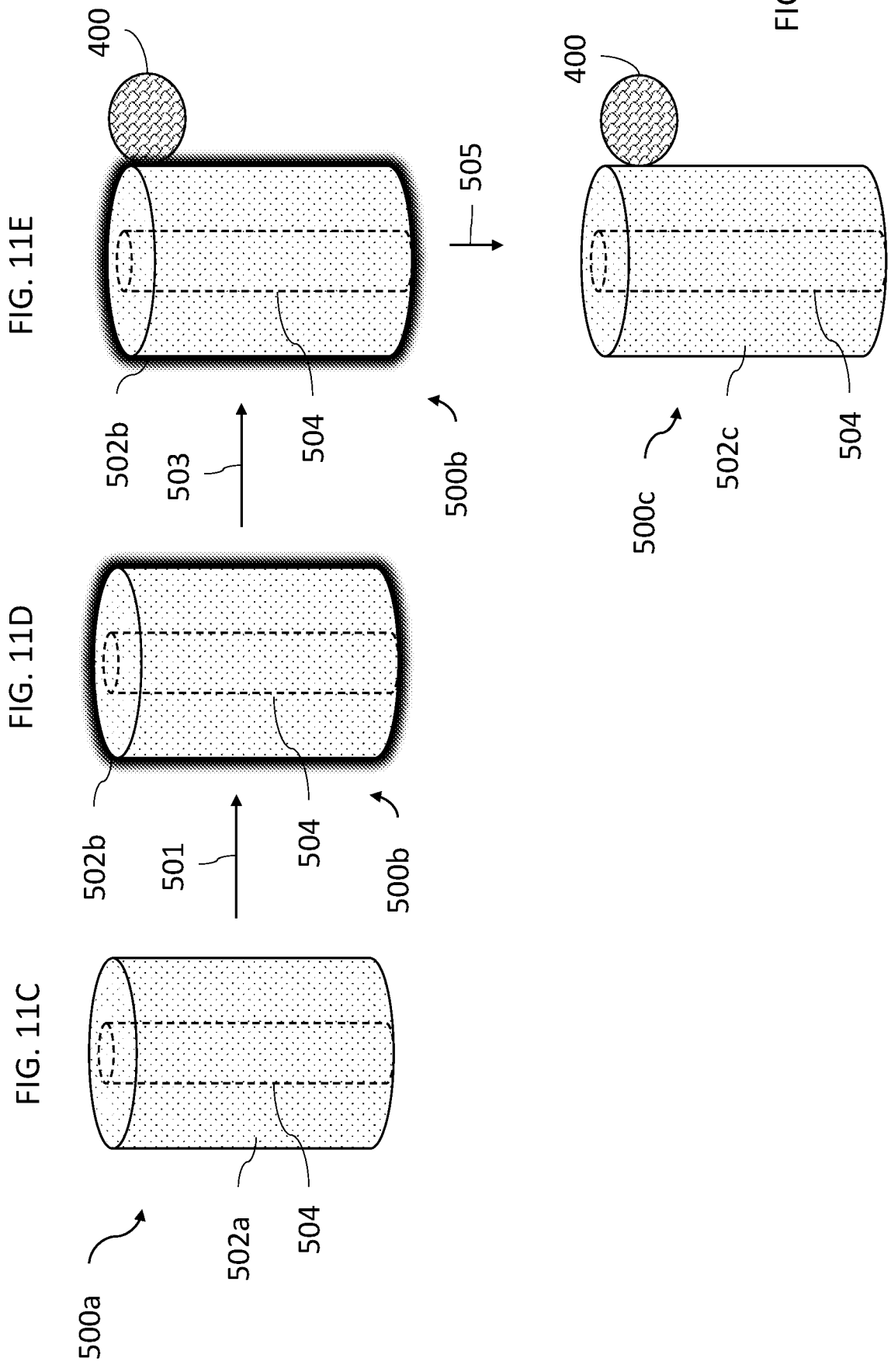


FIG. 11C
500a
502a
504
FIG. 11D
502b
501
504
500b
FIG. 11E
400
502b
503
504
500b
505
FIG. 11F
400
500c
502c
504

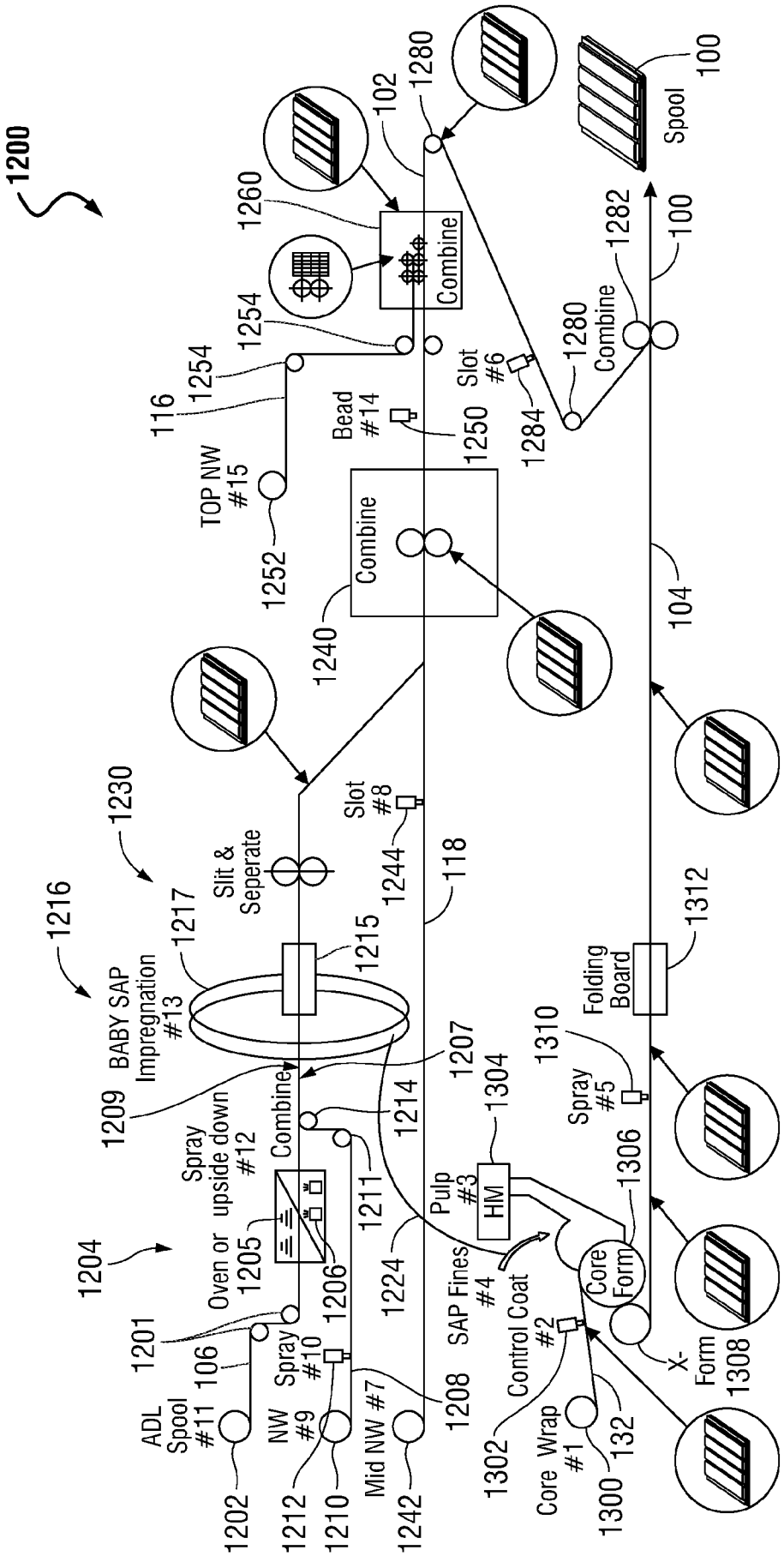

1200
1216
1230
1204
1201
1202
ADL Spool #11
106
1212
NW #9
1210
Spray #10
1208
Mid NW #7
1242
1206
Oven or 1205
Spray upside down #12
1211
1214
1207
1209
BABY SAP Impregnation #13
1217
1215
Slit & Seperate
Slot #8
1244
118
1224
Pulp #3
HM
1304
SAP Fines #4
Control Coat #2
1302
Core Wrap #1
1300
132
Core Form
1306
X-Form 1308
Spray #5
1310
Folding Board
1312
104
Combine
1240
1252
TOP NW #15
116
1254
1254
Bead #14
1250
Slot #6
1284
1280
Combine
1282
100
1260
Combine
102
1280
Spool
100

FIG. 12A

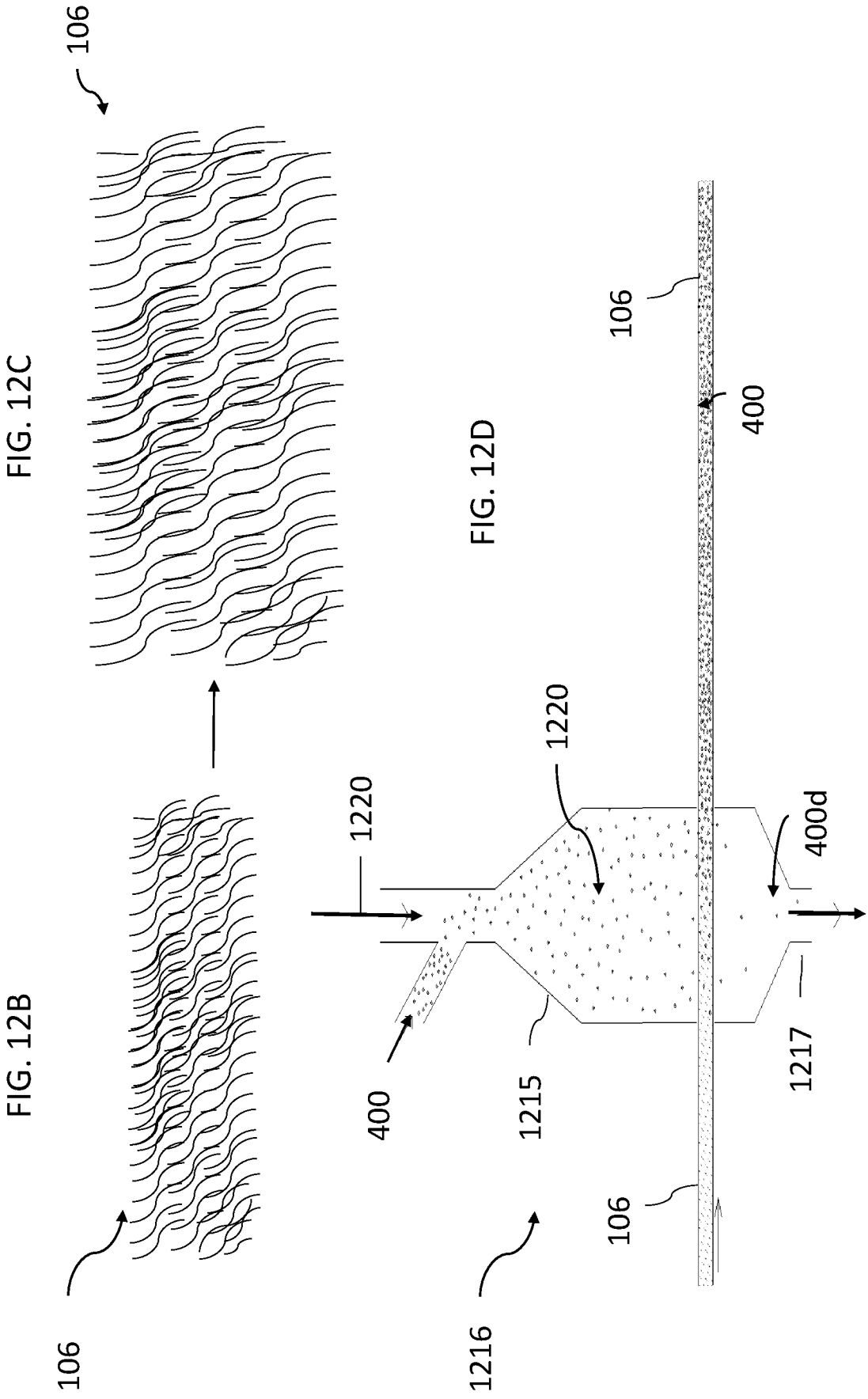


FIG. 12B
106
FIG. 12C
106
FIG. 12D
106
400
1220
1220
400d
400
1215
1217
106
1216

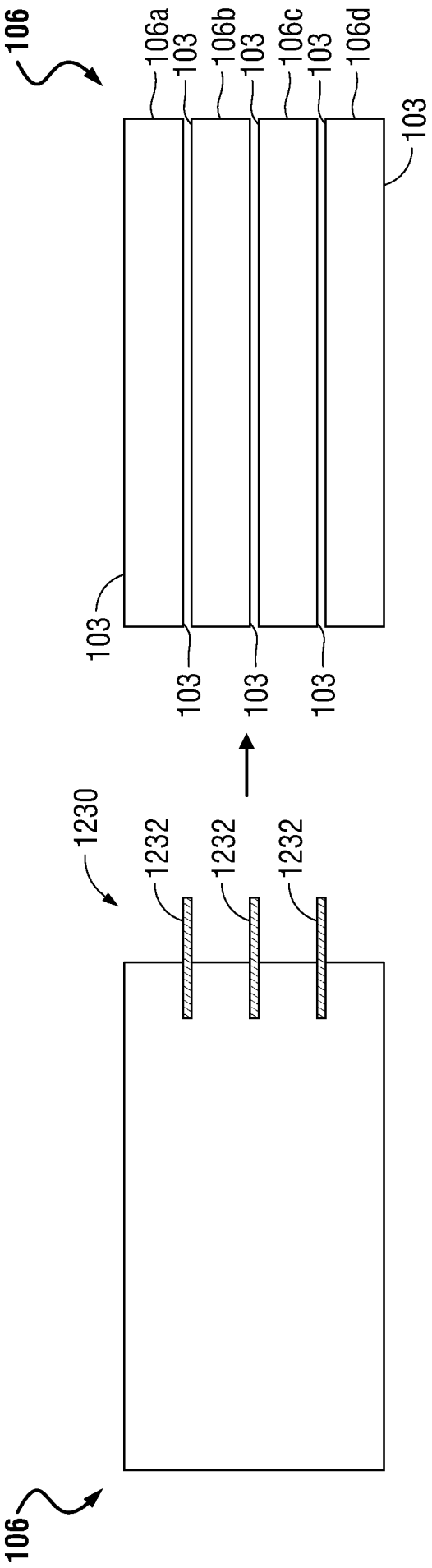


FIG. 12E

FIG. 12F

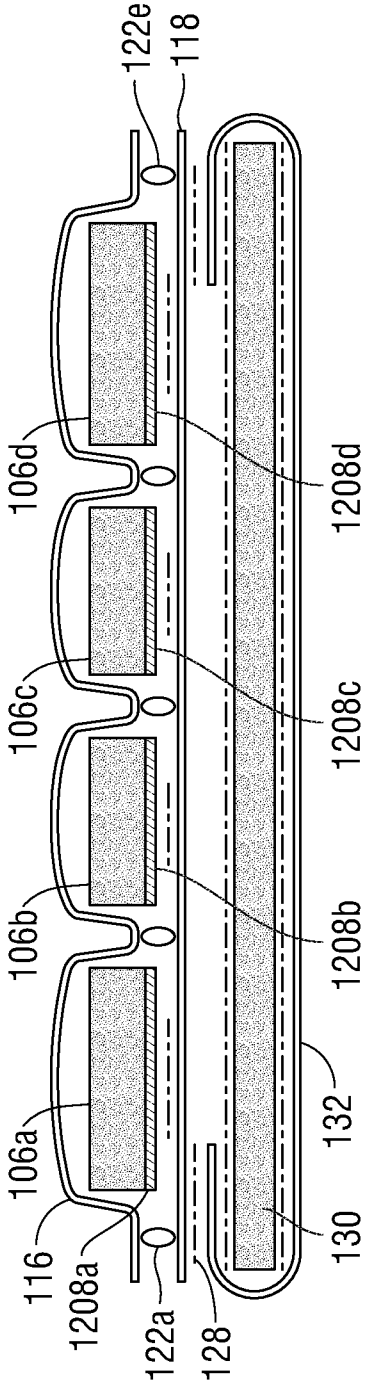


FIG. 12G

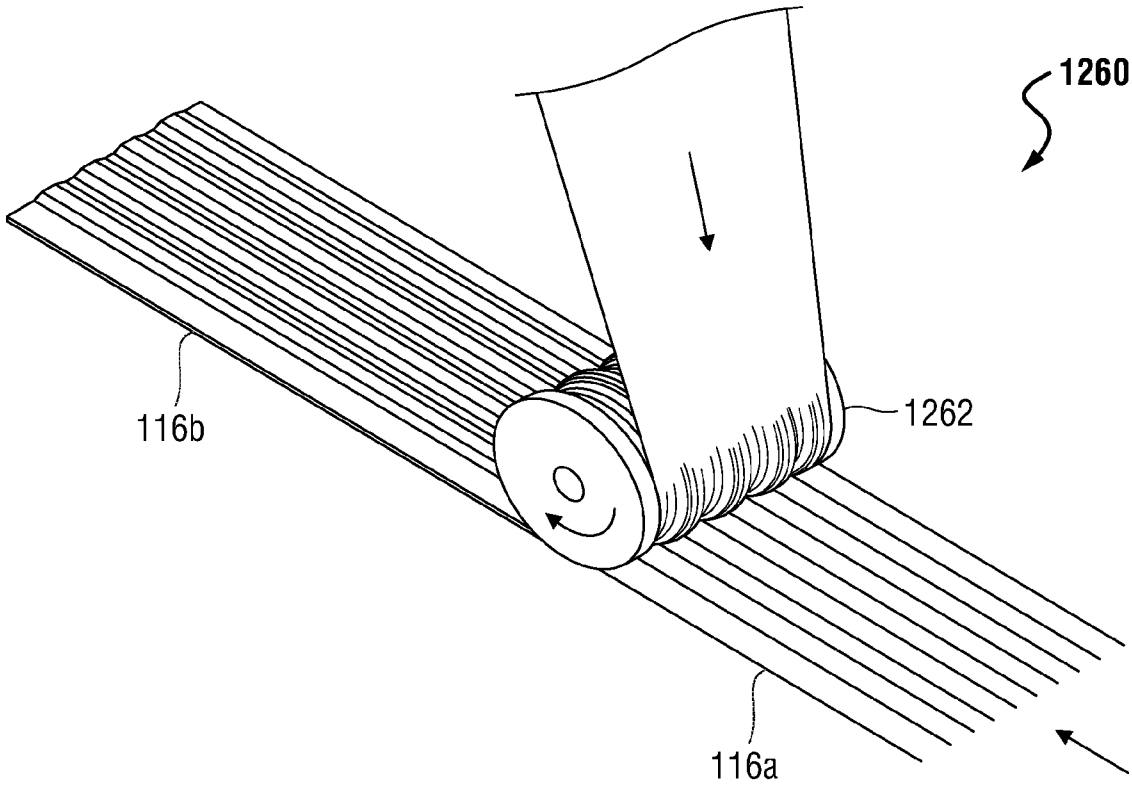


FIG. 12H

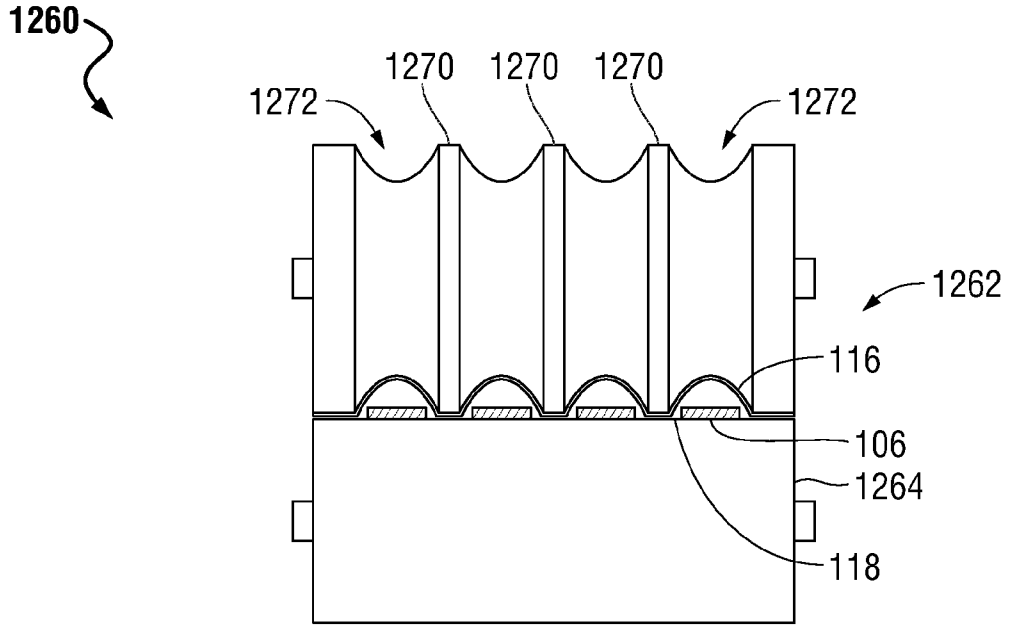


FIG. 12I

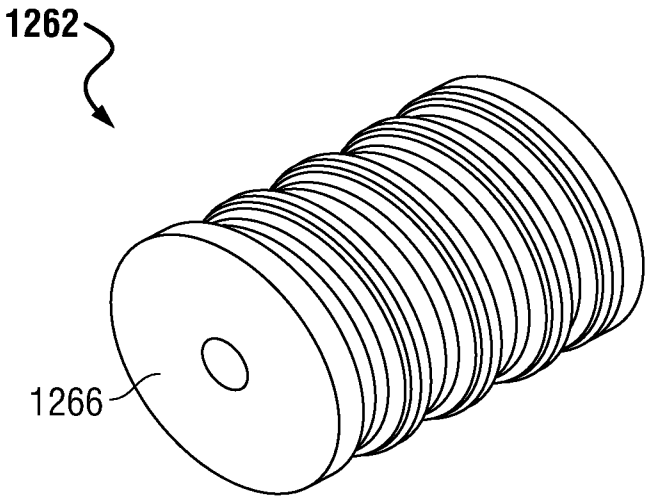


FIG. 12J

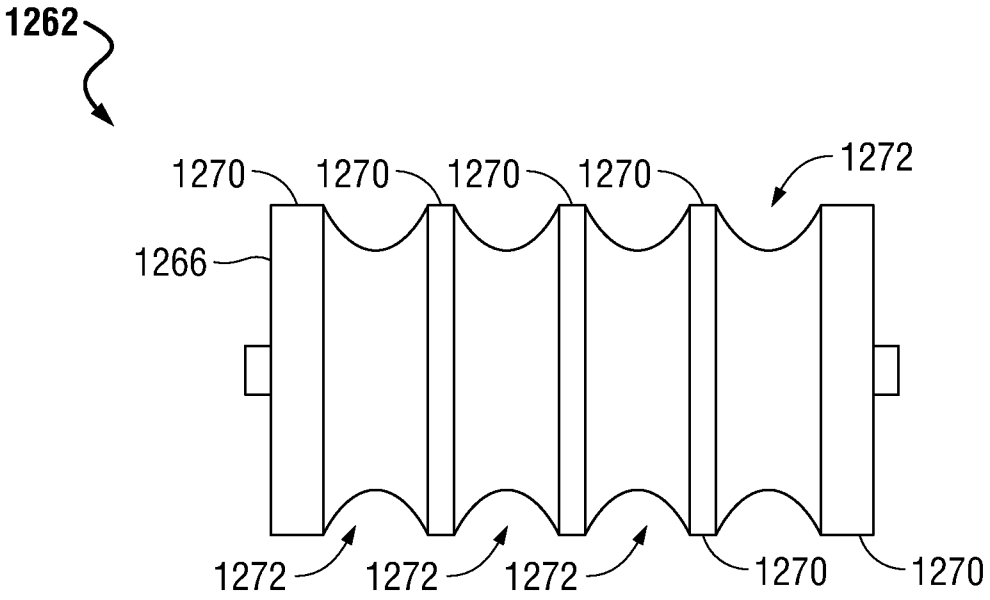


FIG. 12K

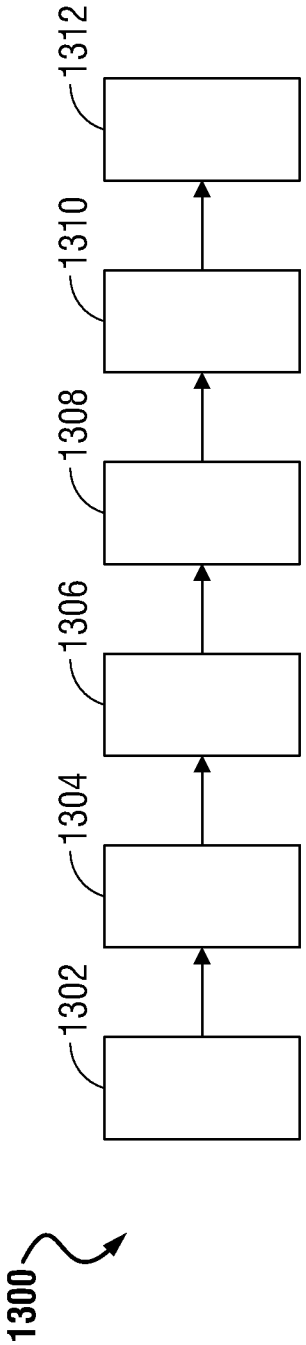


FIG. 13

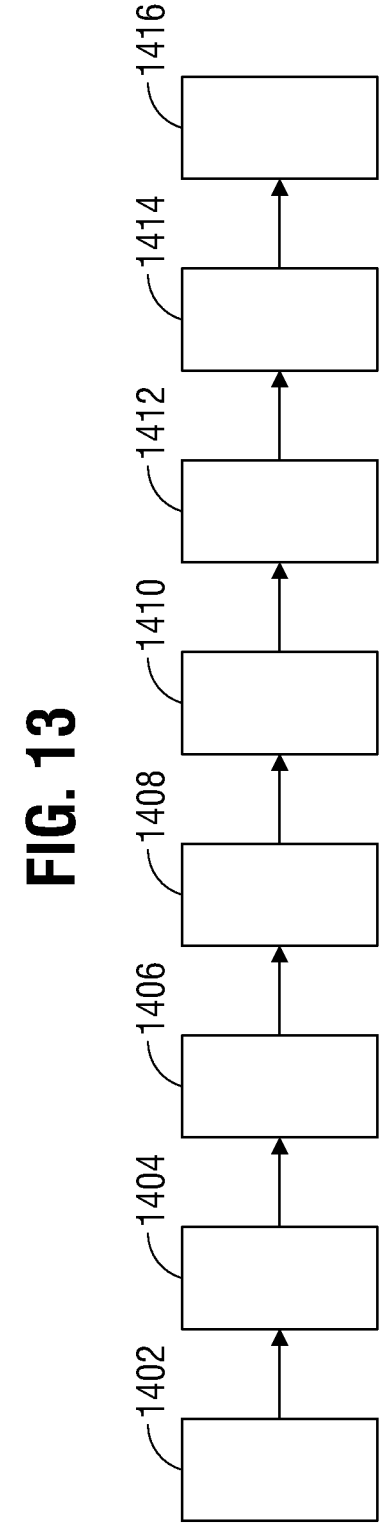


FIG. 14

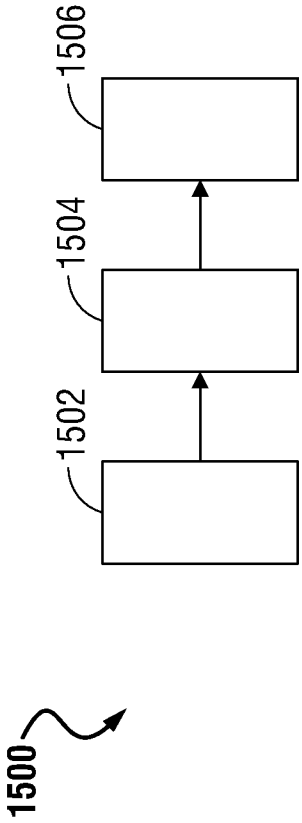
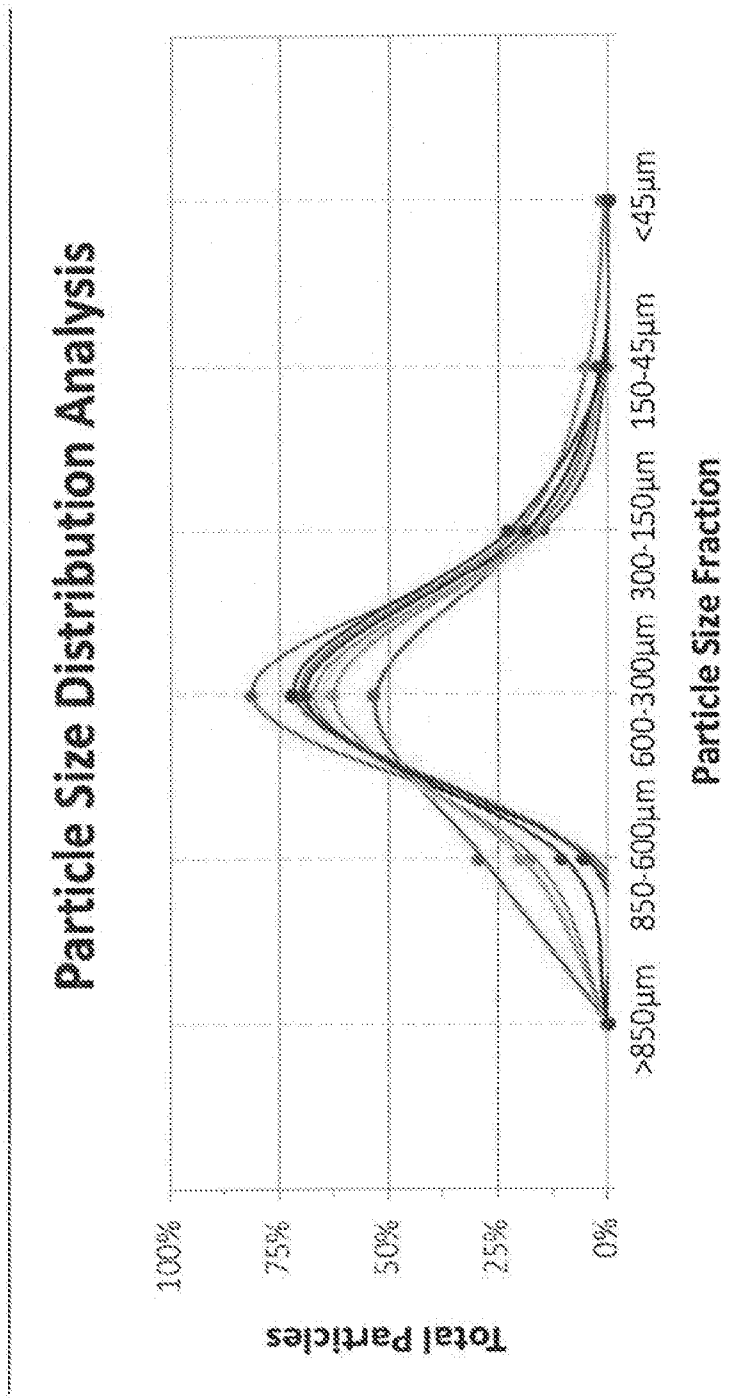


FIG. 15

FIG. 16


Particle Size Distribution Analysis
Total Particles
100%
75%
50%
25%
0%
>850µm
850-600µm
600-300µm
300-150µm
150-45µm
<45µm
Particle Size Fraction

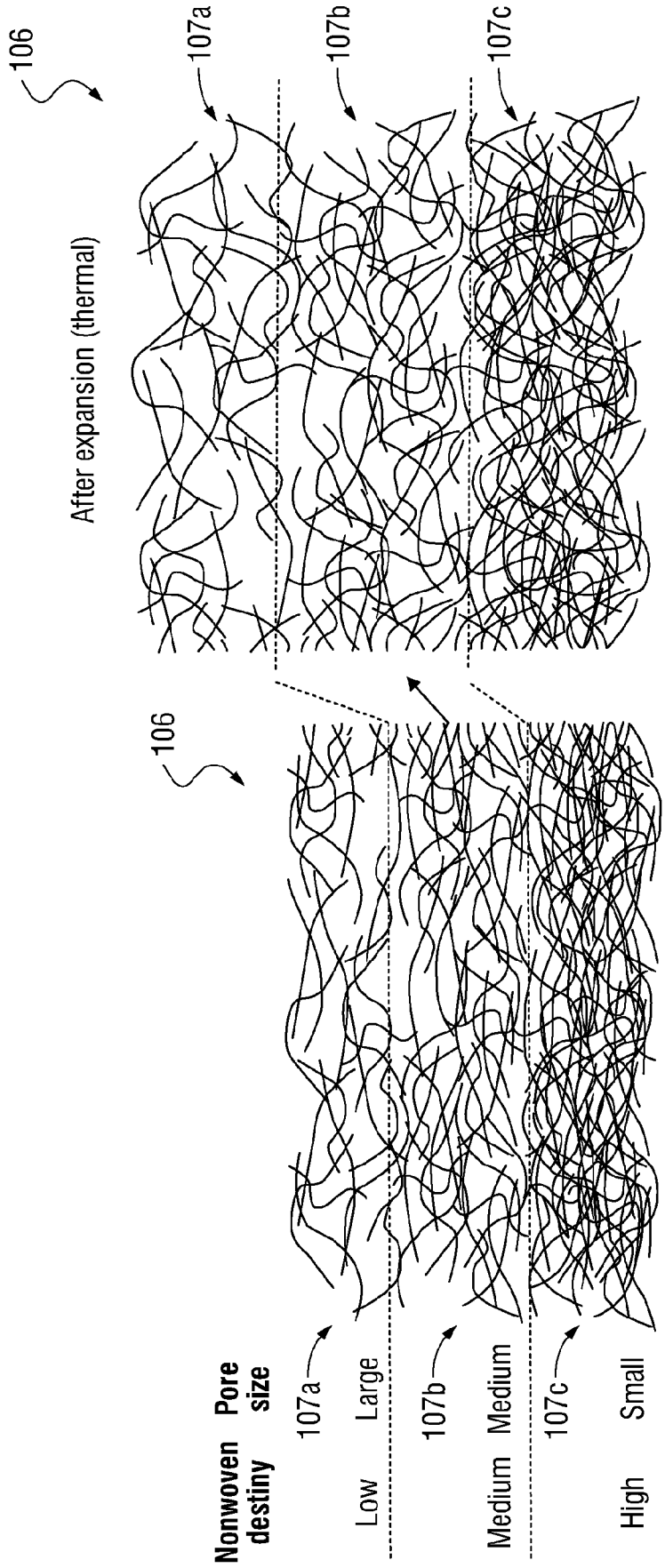


FIG. 17B

FIG. 17A

FIG. 18

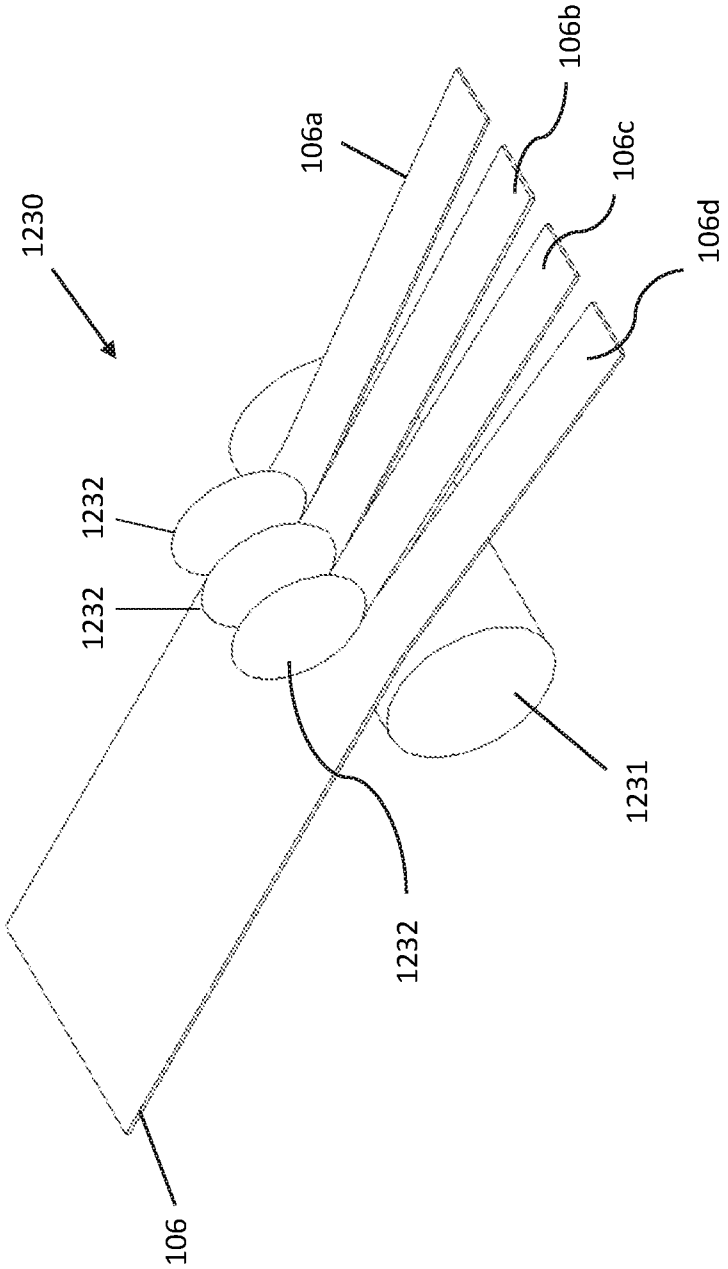
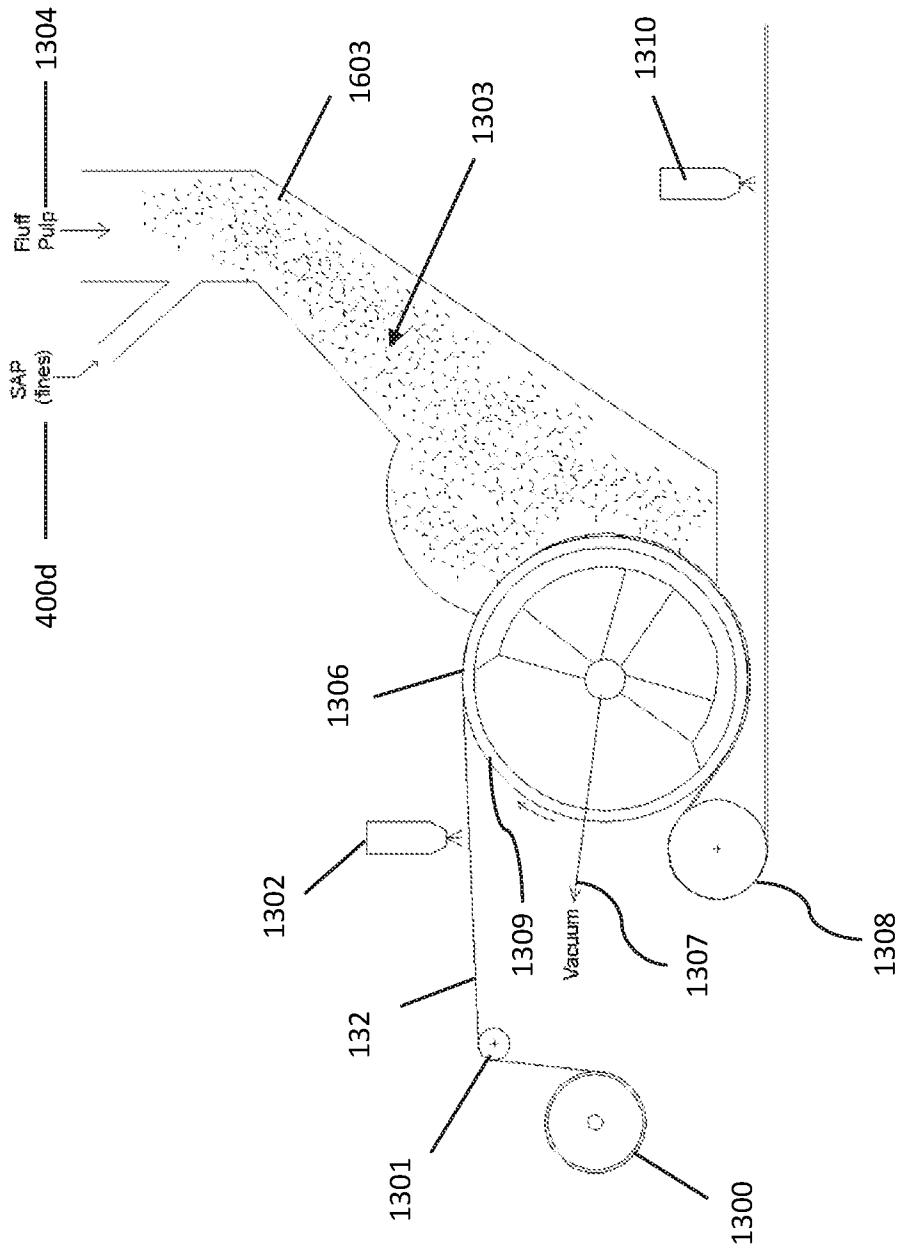


FIG. 19


1304
Fluff Pulp
SAP (fines)
400d
1603
1303
1310
1306
1302
132
1301
1309
Vacuum
1307
1308
1300

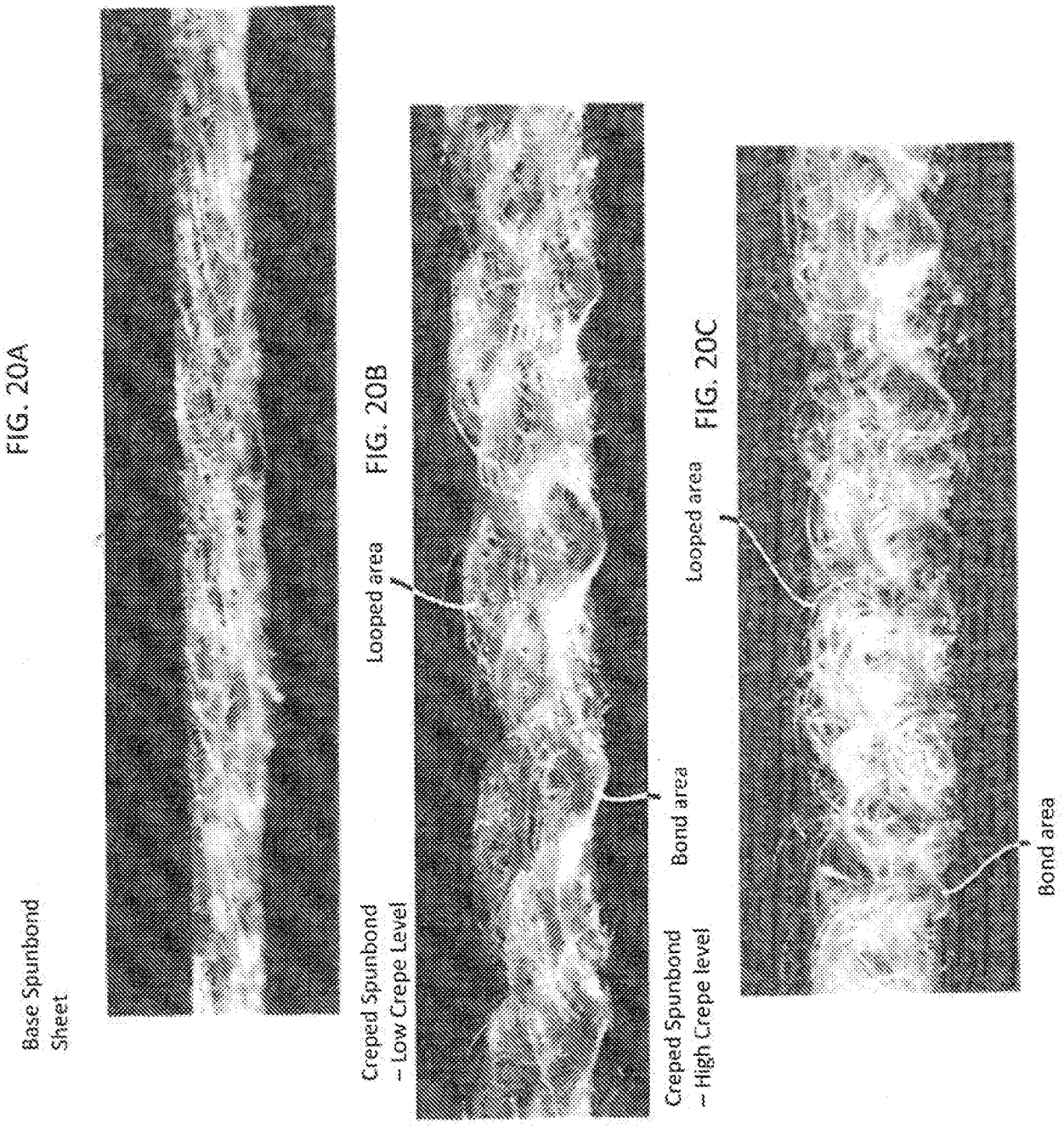


FIG. 20A

FIG. 20B

FIG. 20C

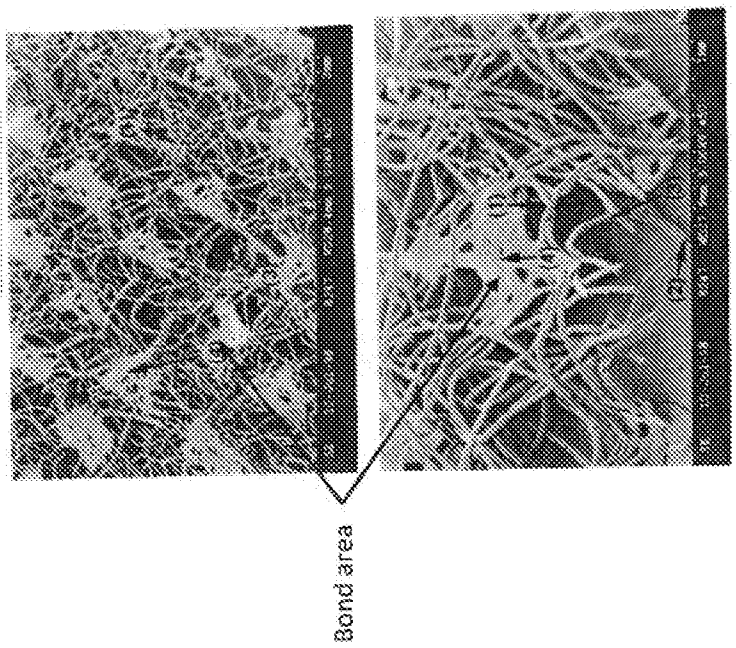


FIG. 20D

FIG. 20E

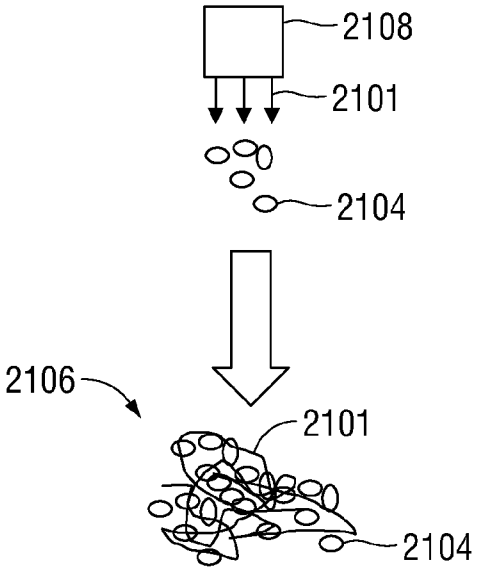


FIG. 21

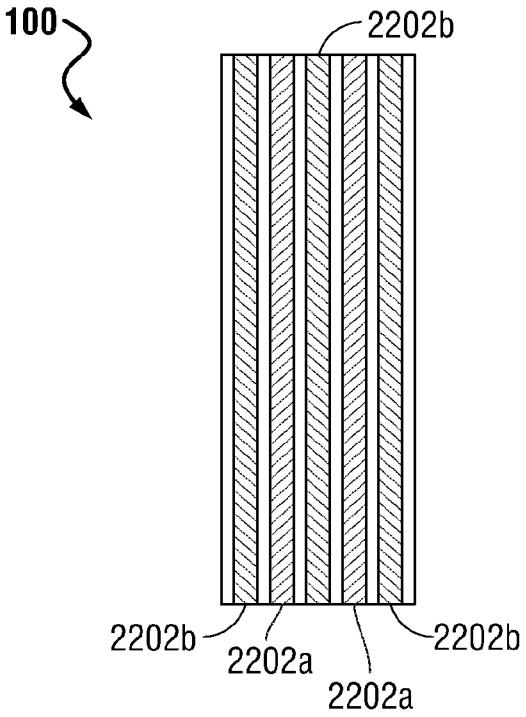


FIG. 22

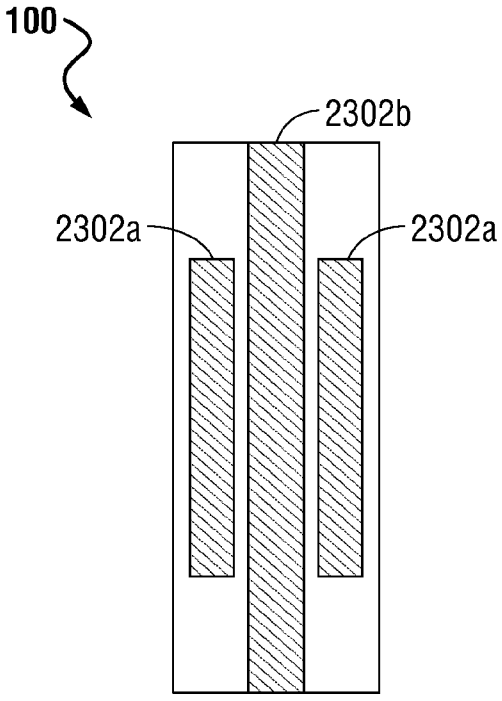


FIG. 23

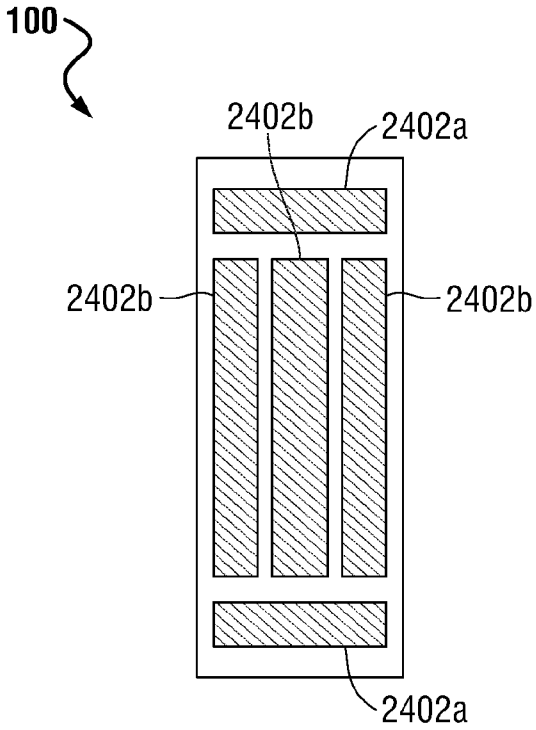


FIG. 24

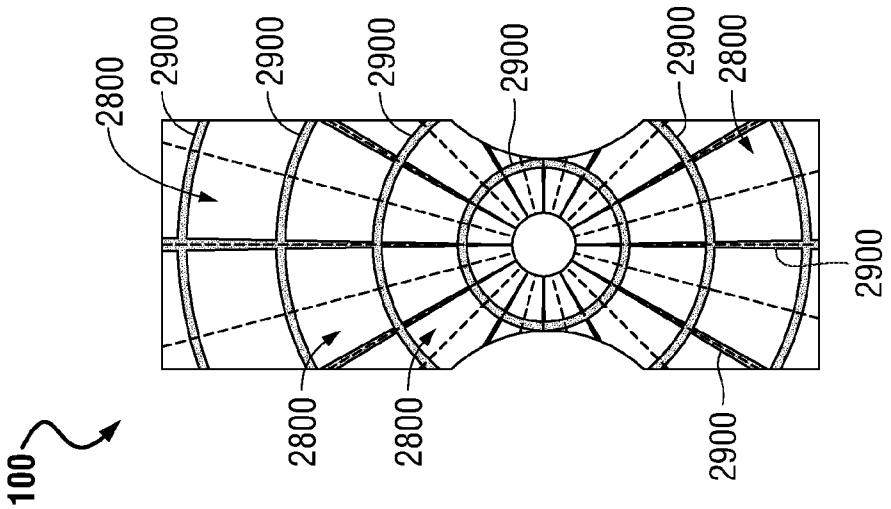


FIG. 27

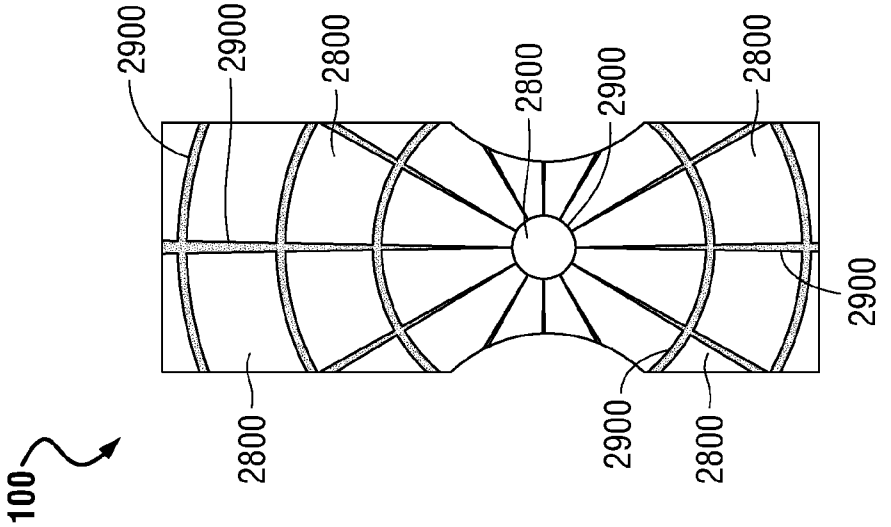


FIG. 26

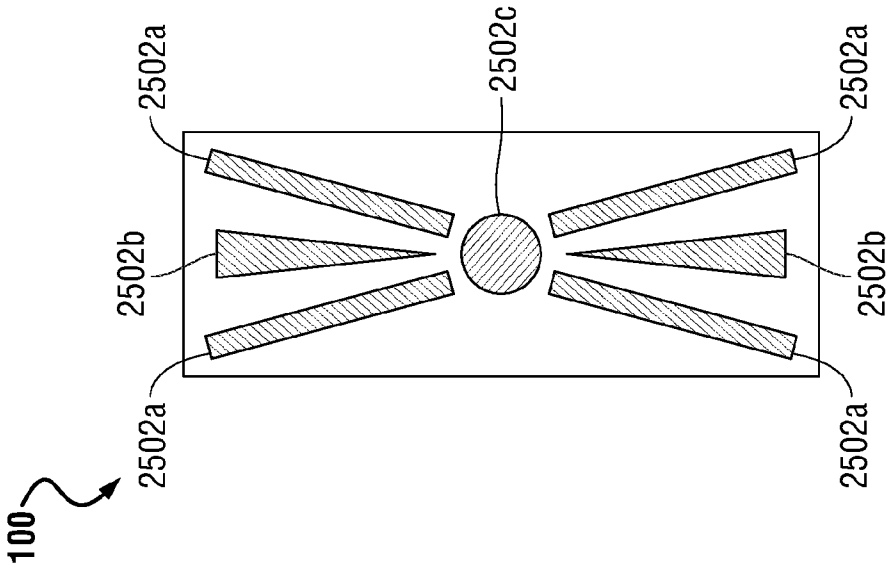


FIG. 25

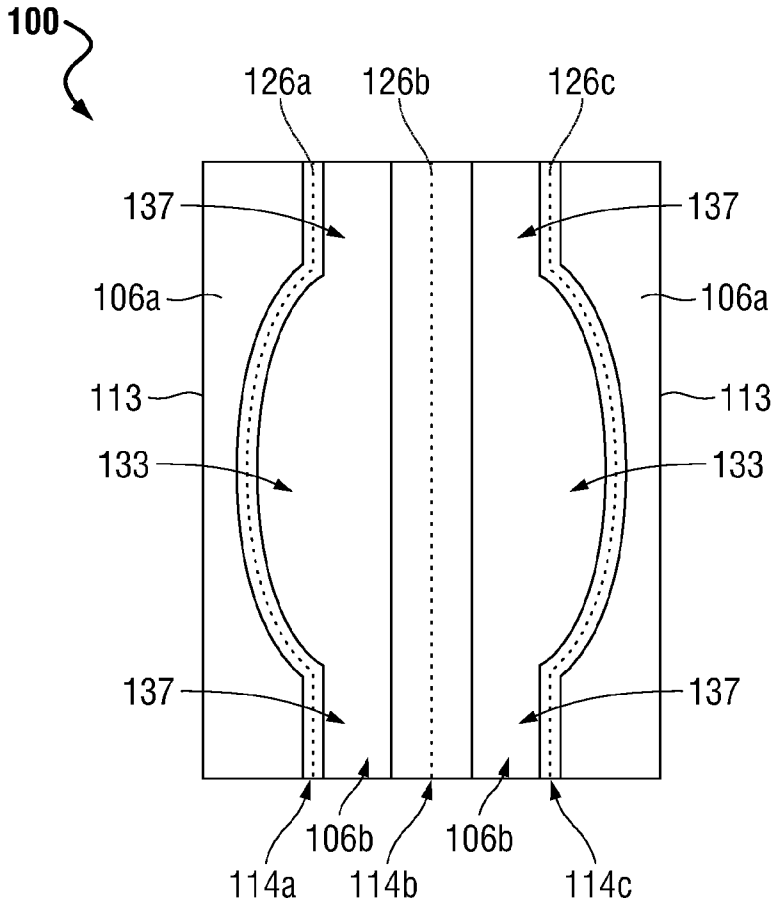

100
126a
126b
126c
137
137
106a
106a
113
113
133
133
137
137
106b
106b
114a
114b
114c

FIG. 28