

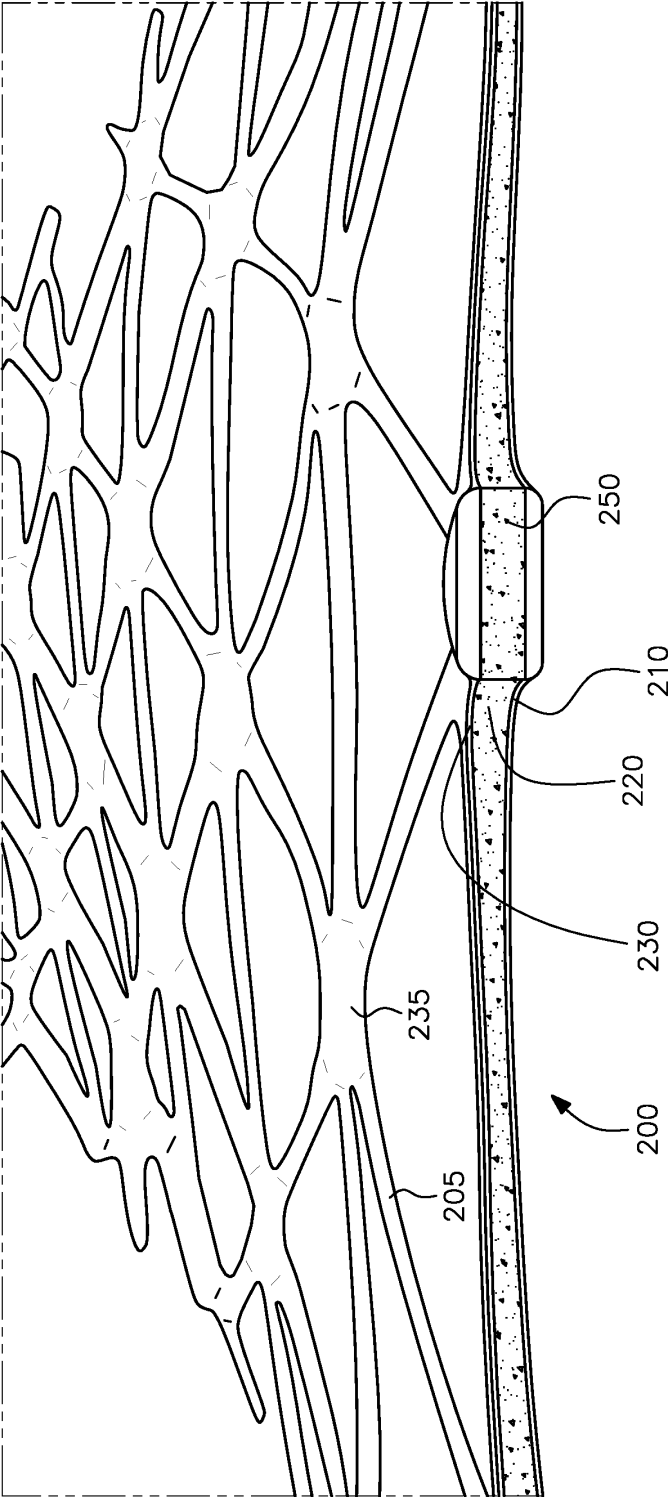


FIG. 1

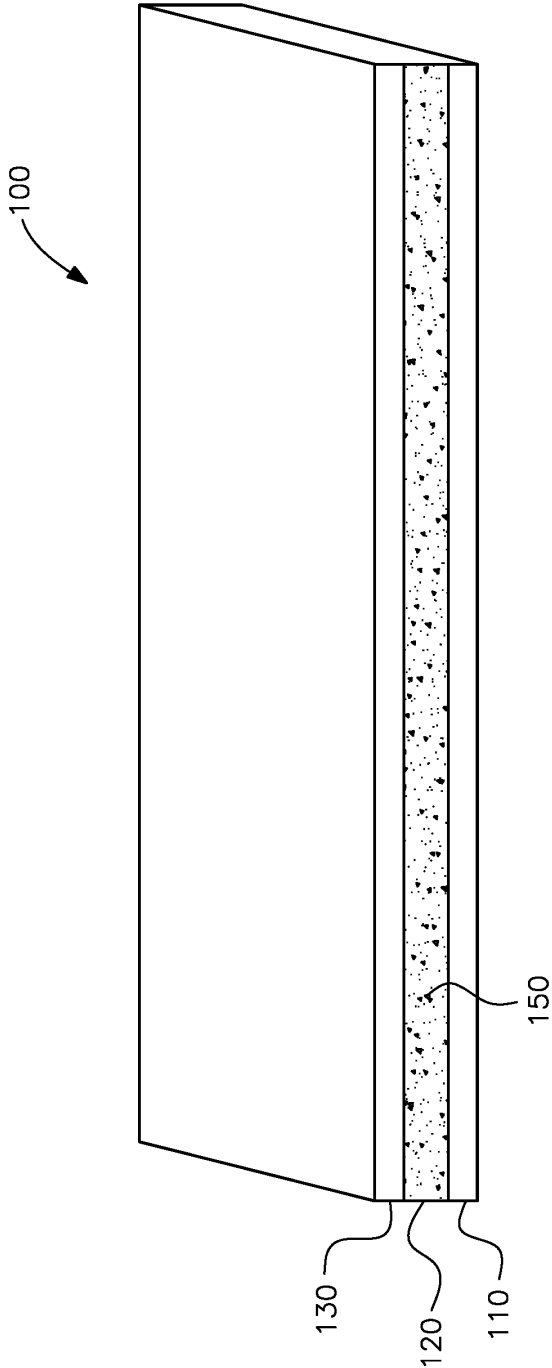


FIG. 2

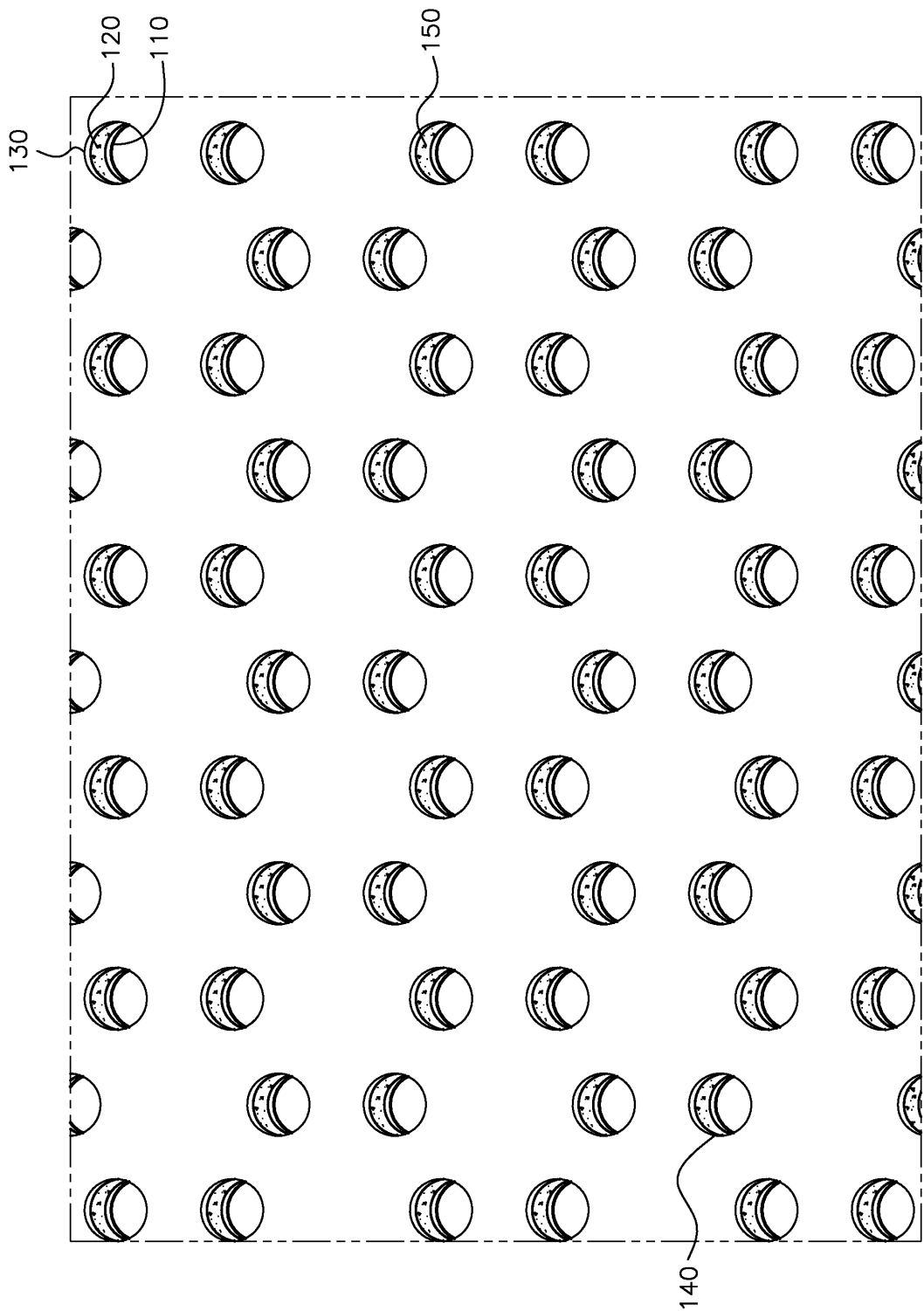


FIG. 3

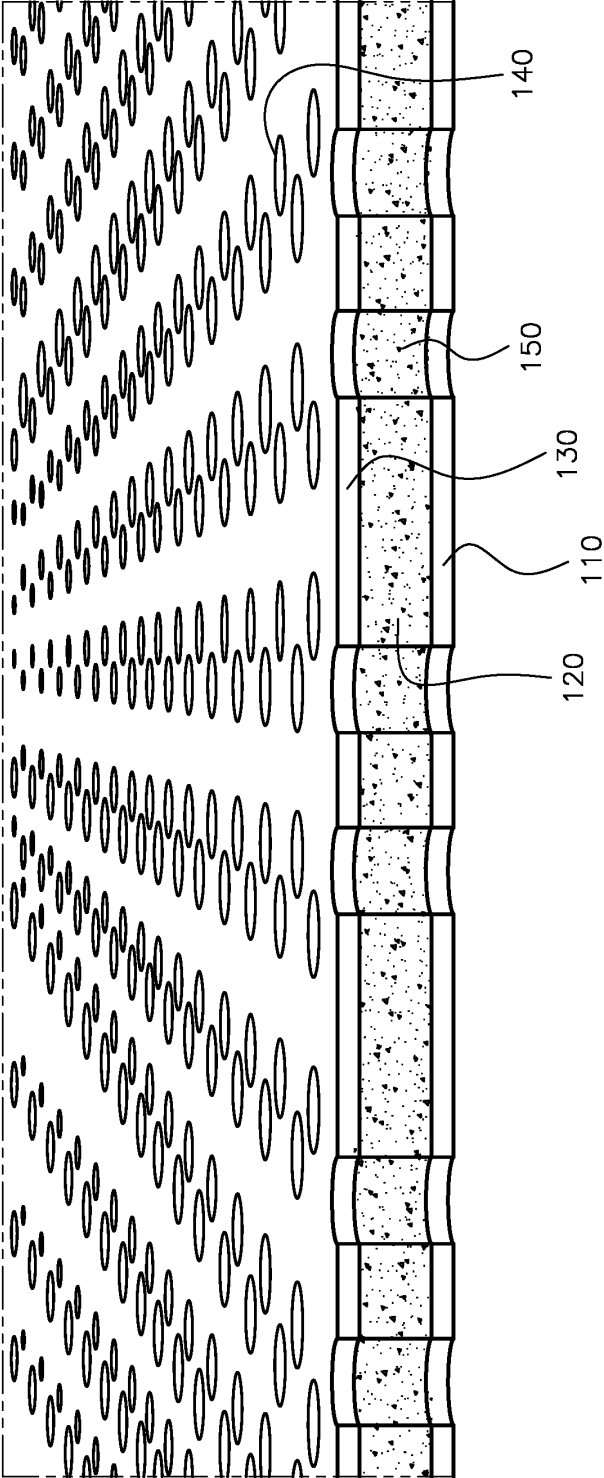


FIG. 4

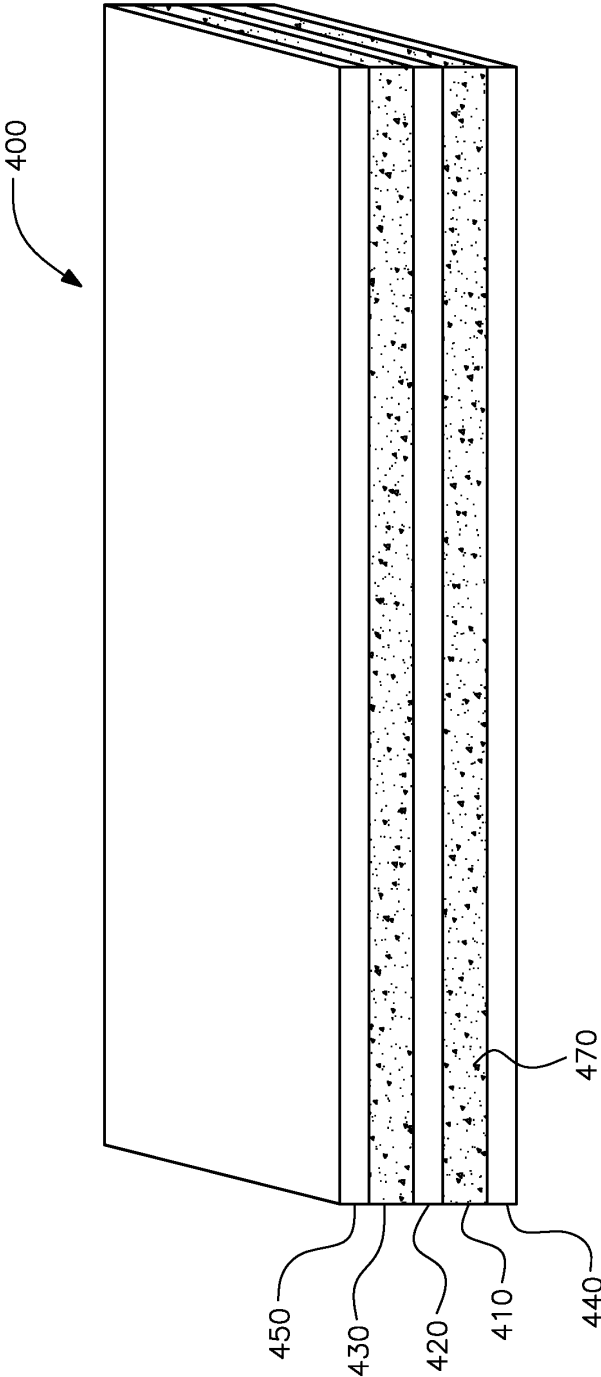


FIG. 5

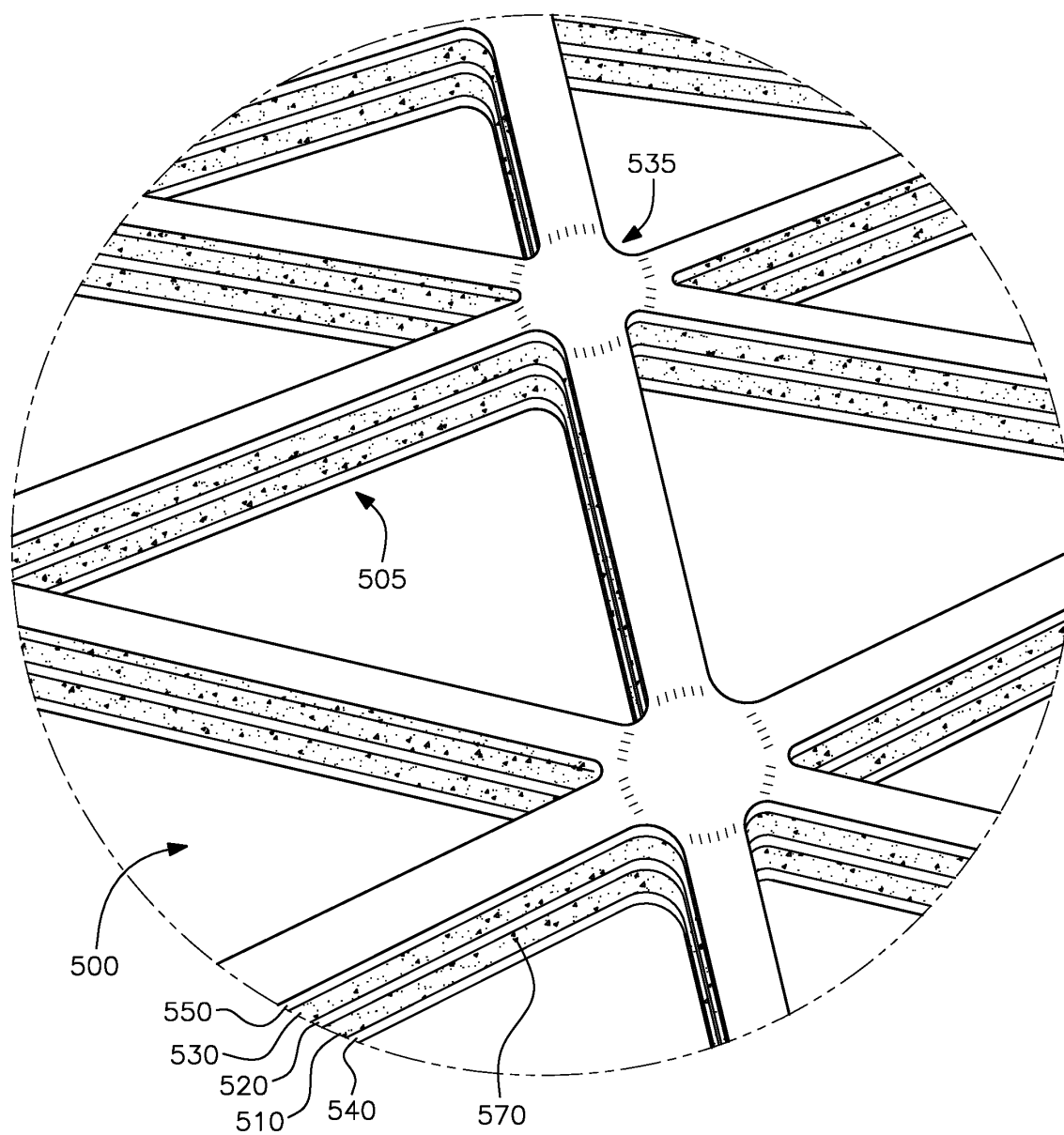


FIG. 6

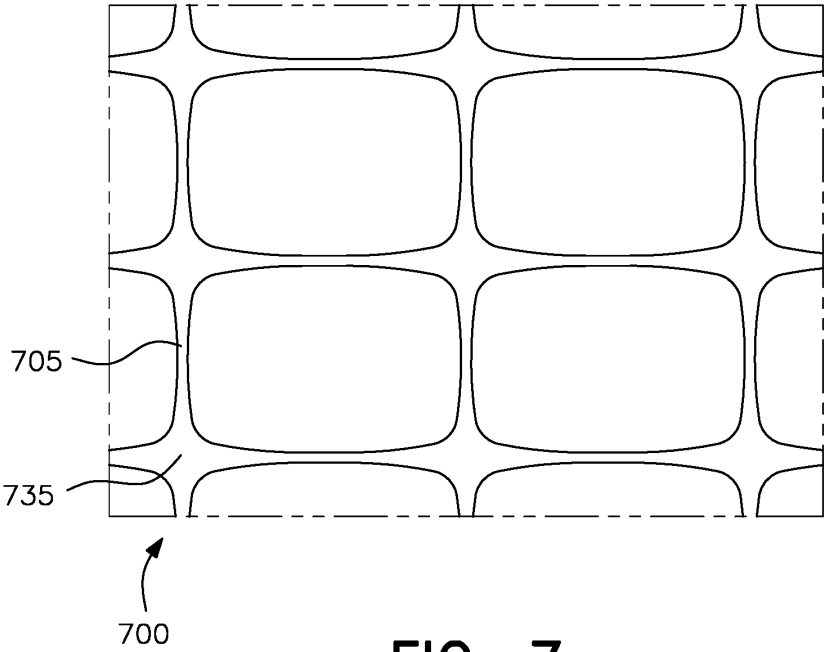


FIG. 7

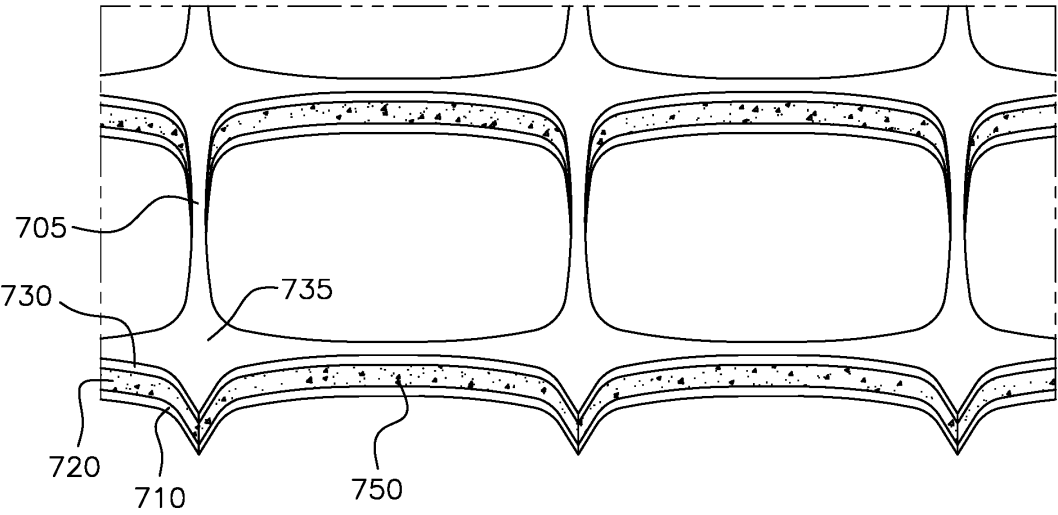


FIG. 8

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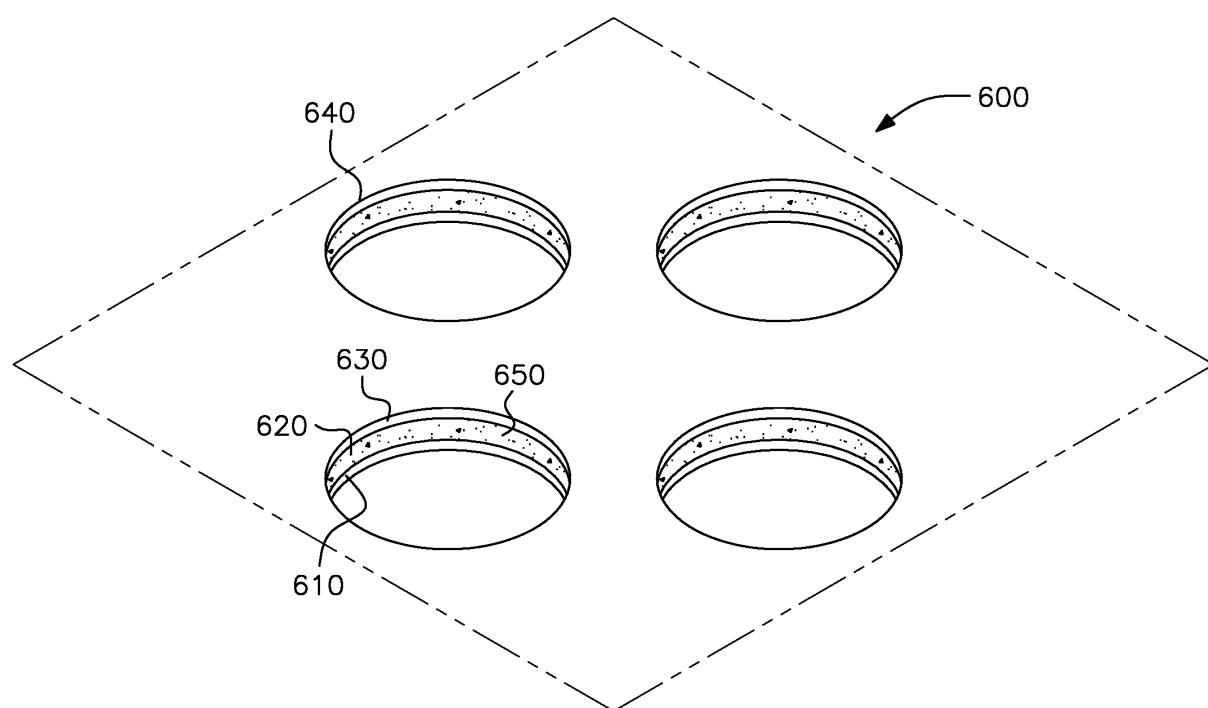


FIG. 9

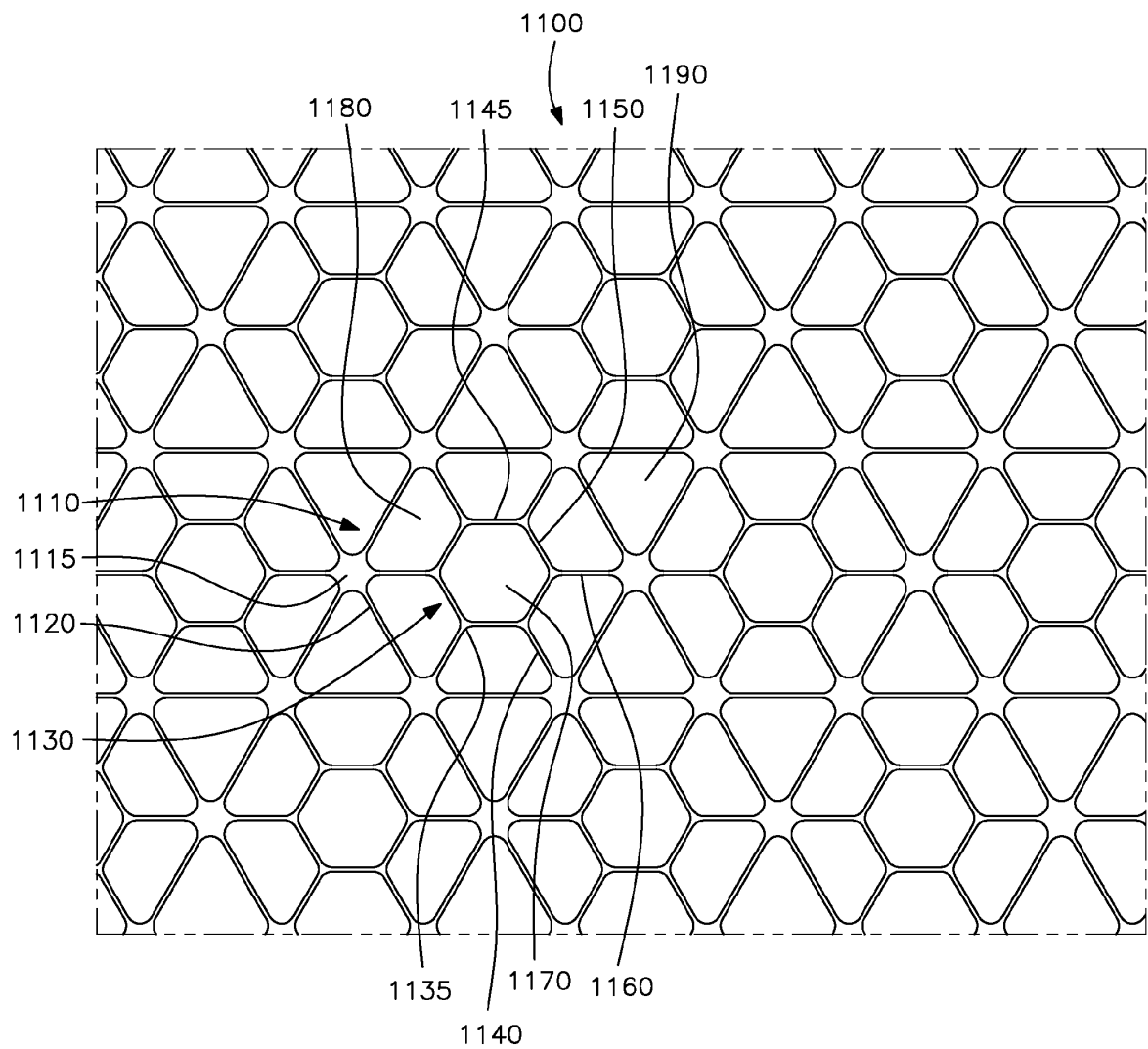


FIG. 10

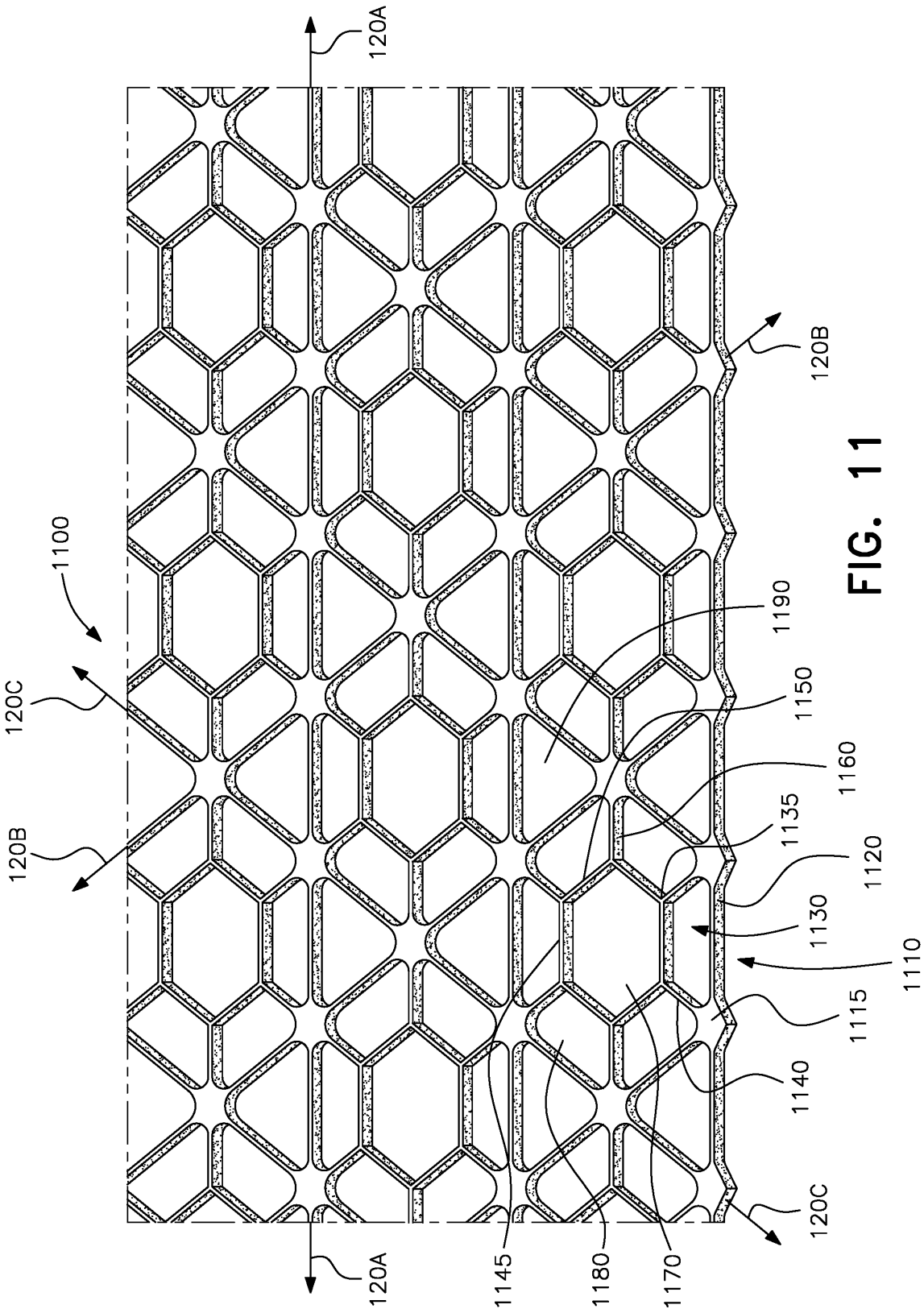


FIG. 11

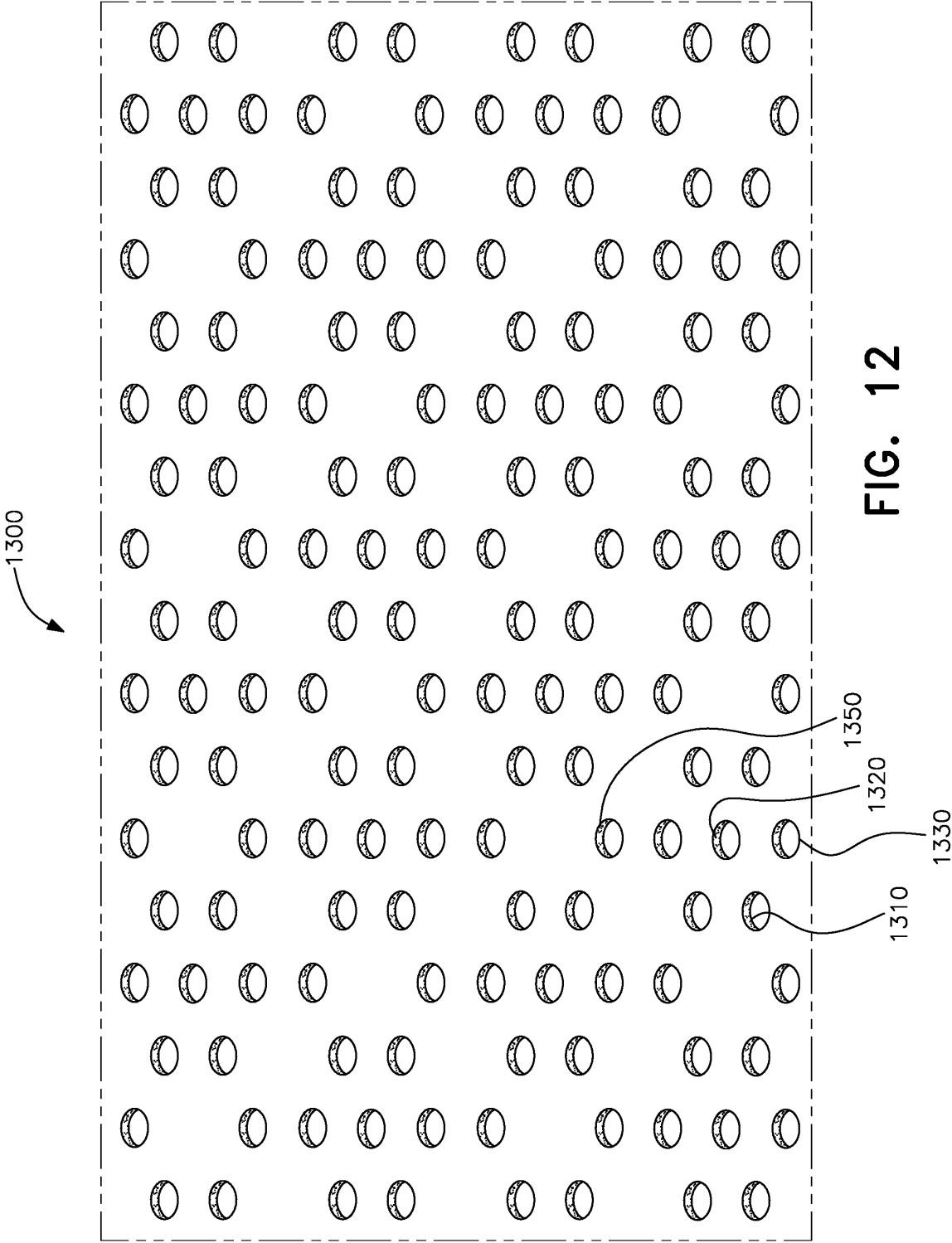


FIG. 12

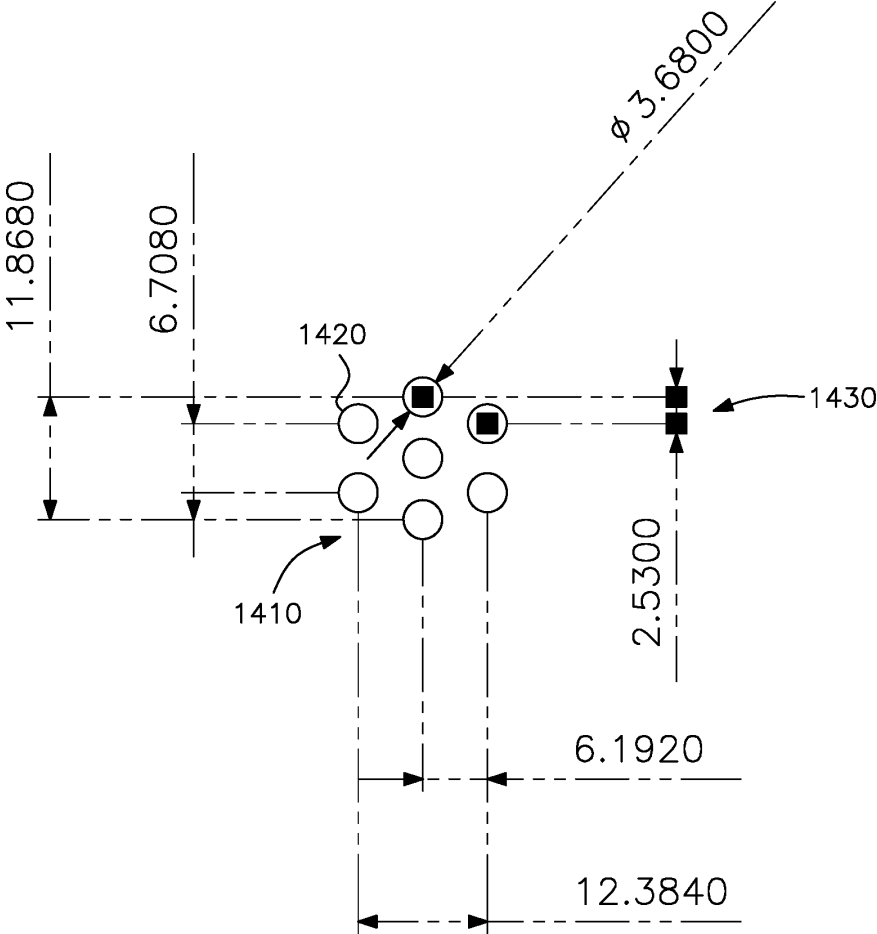


FIG. 13

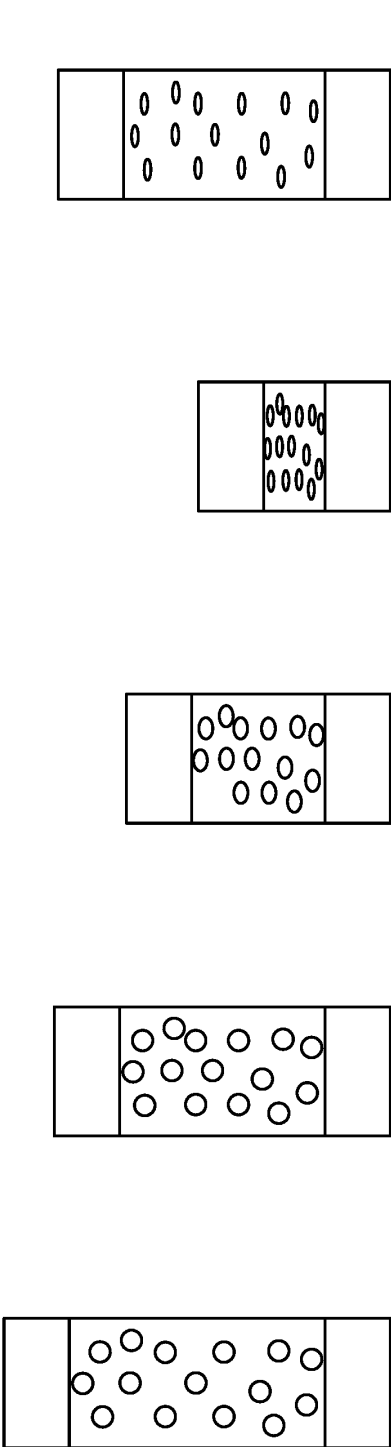


FIG. 14A FIG. 14B FIG. 14C FIG. 14D FIG. 14E

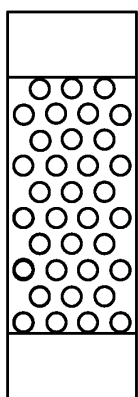


FIG. 15A

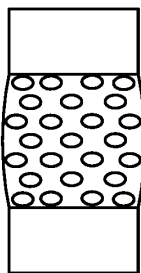


FIG. 15B

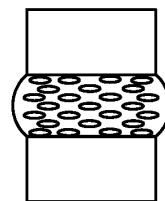


FIG. 15C

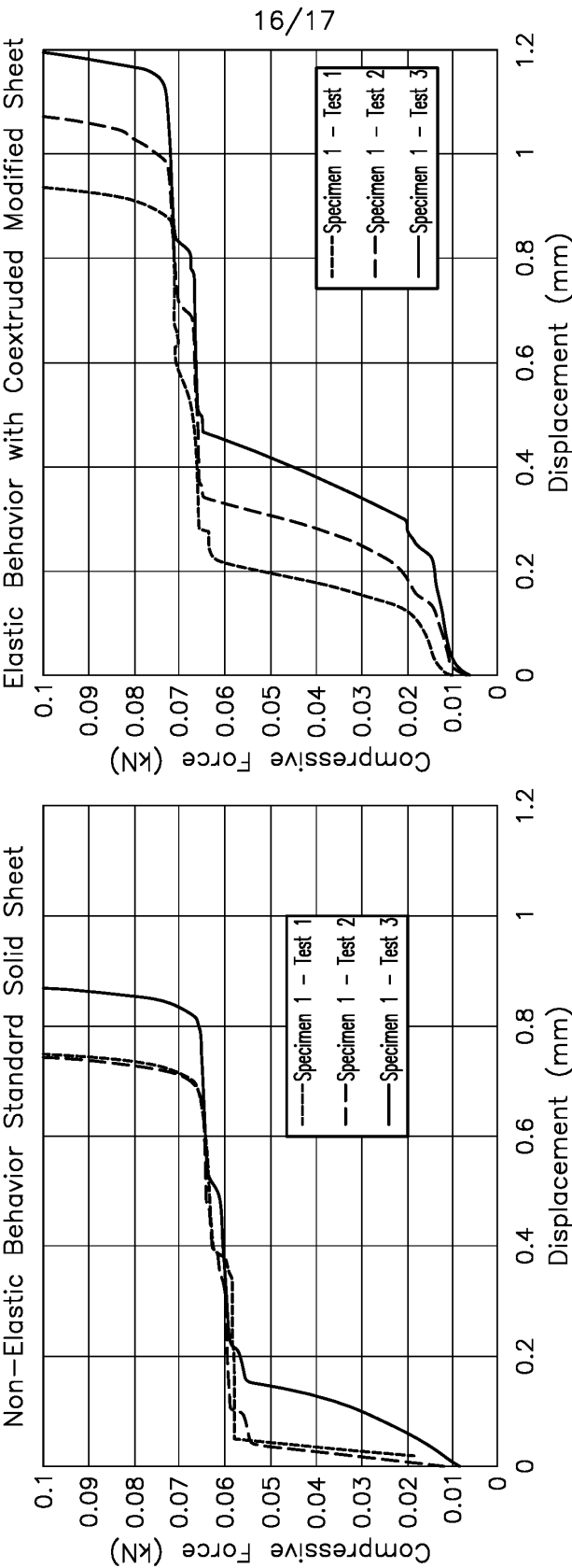


FIG. 16

Expanded core vs monolayer product performance comparison

Sample #	Total sheet thickness (mm)	Sheet structure	Geometry	Finished product unit weight (gm/sq.m)	Performance (mm): as measured by Avg surface deformation for last 500 passess in small scale testing
1	4.15	monolayer PP	Triangles	200	61.8
2	4.2	0.5mm PP/3.2mm expanded PP/0.5mm PP	Triangles	171	61.6
3	4.55	monolayer PP	Triangles	217	46.4
4	6.2	1mm PP/4.2mm expanded PP/1mm PP	Triangles	215	37.2

Principle 1: Using expanded core technology, product weight can be reduced and still achieve equivalent performance
Example Sample #2 is 14.5% lighter than smaple #1, with equivalent performance

Principle 2: Using expanded core technology, at equivalent finished product weight, higher performance can be achieved
Example Sample #4 has similar weight as sample #3, but 19.8% better performance

FIG. 17