

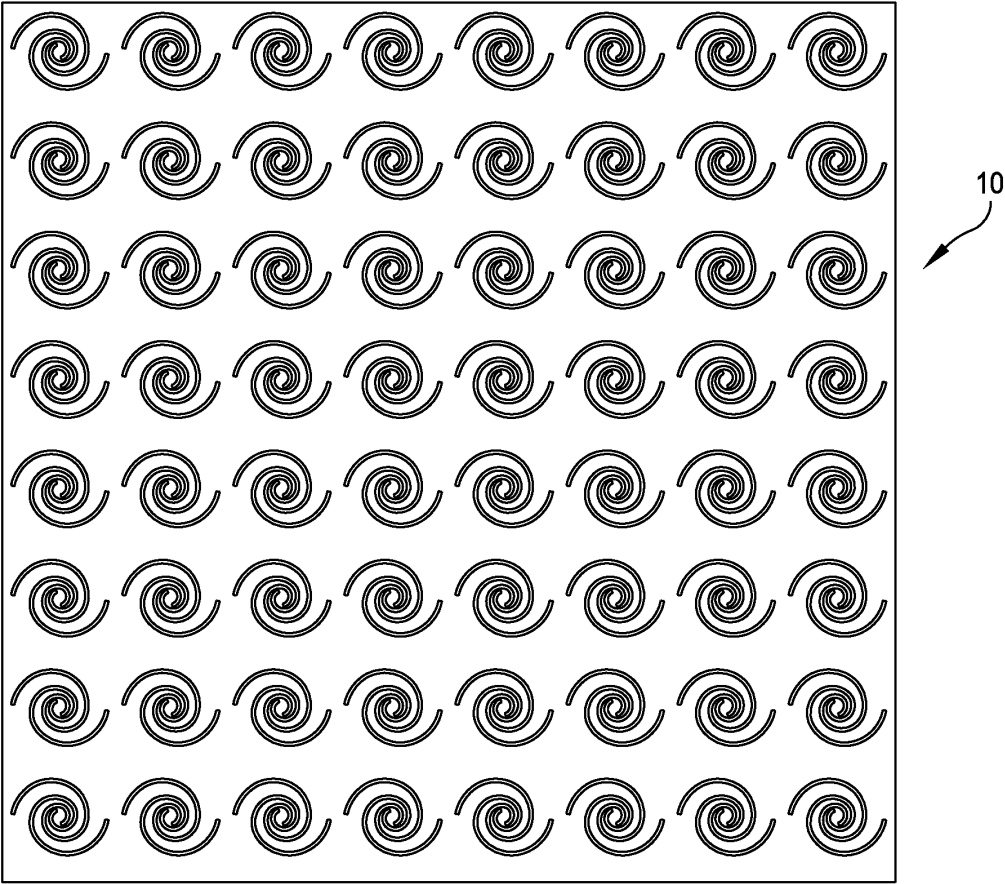


FIG. 1

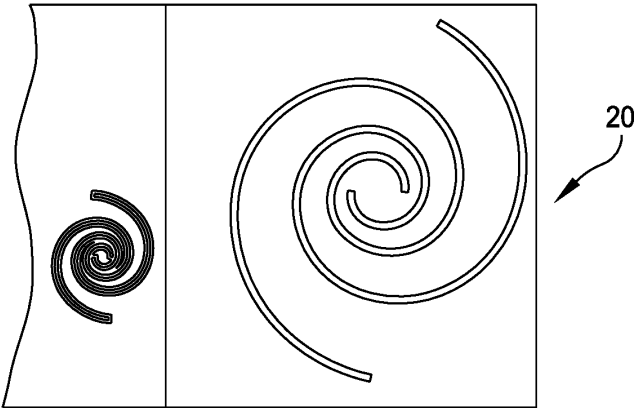


FIG. 2

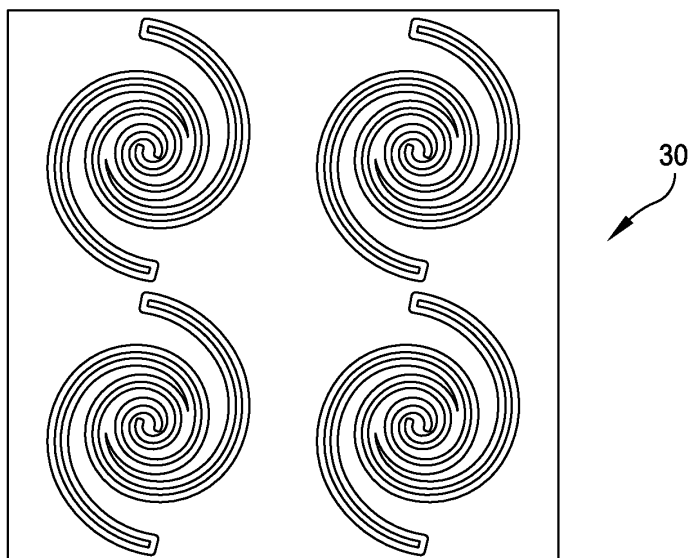


FIG. 3

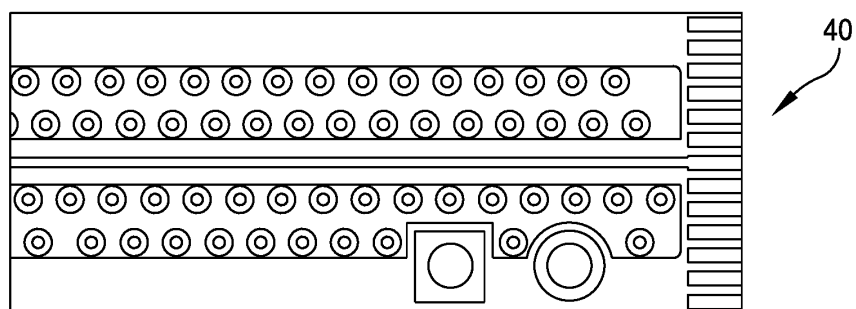


FIG. 4

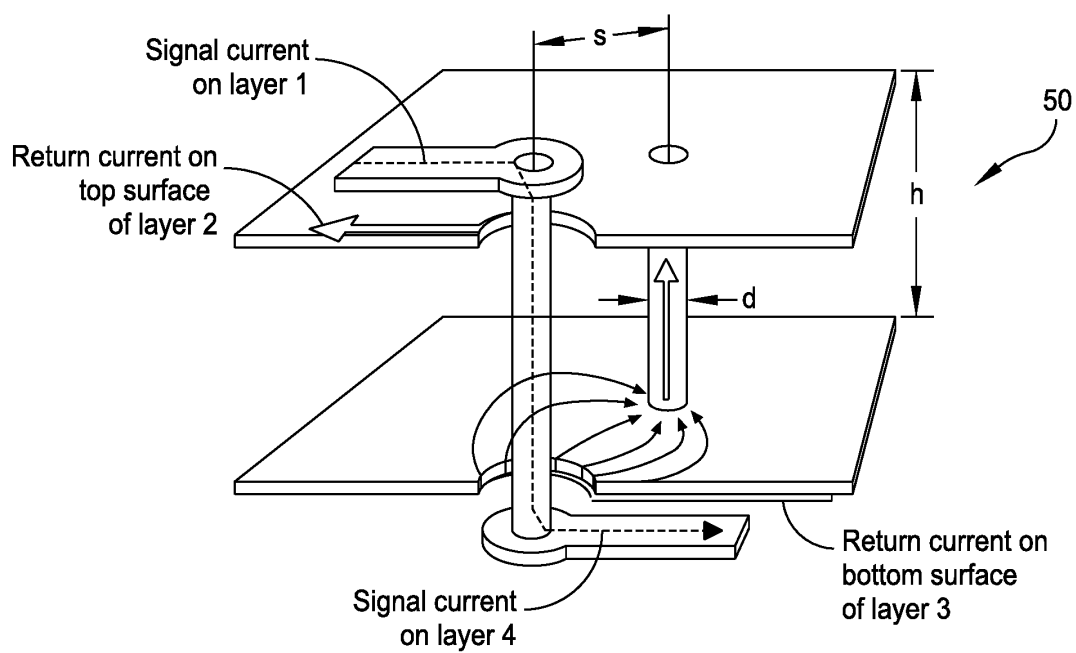


FIG. 5

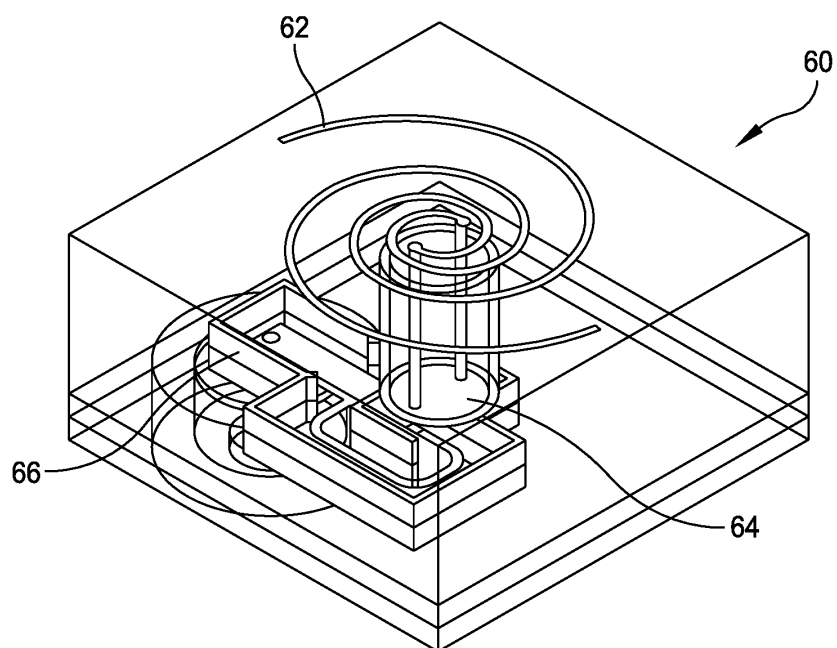


FIG. 6

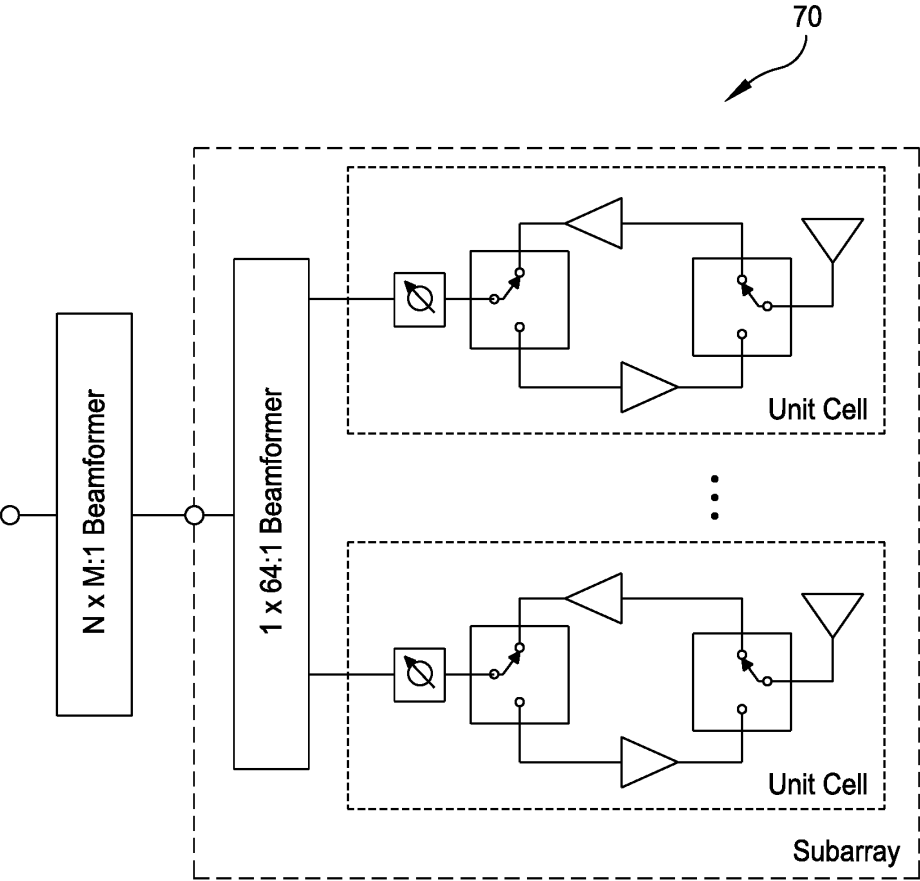


FIG. 7

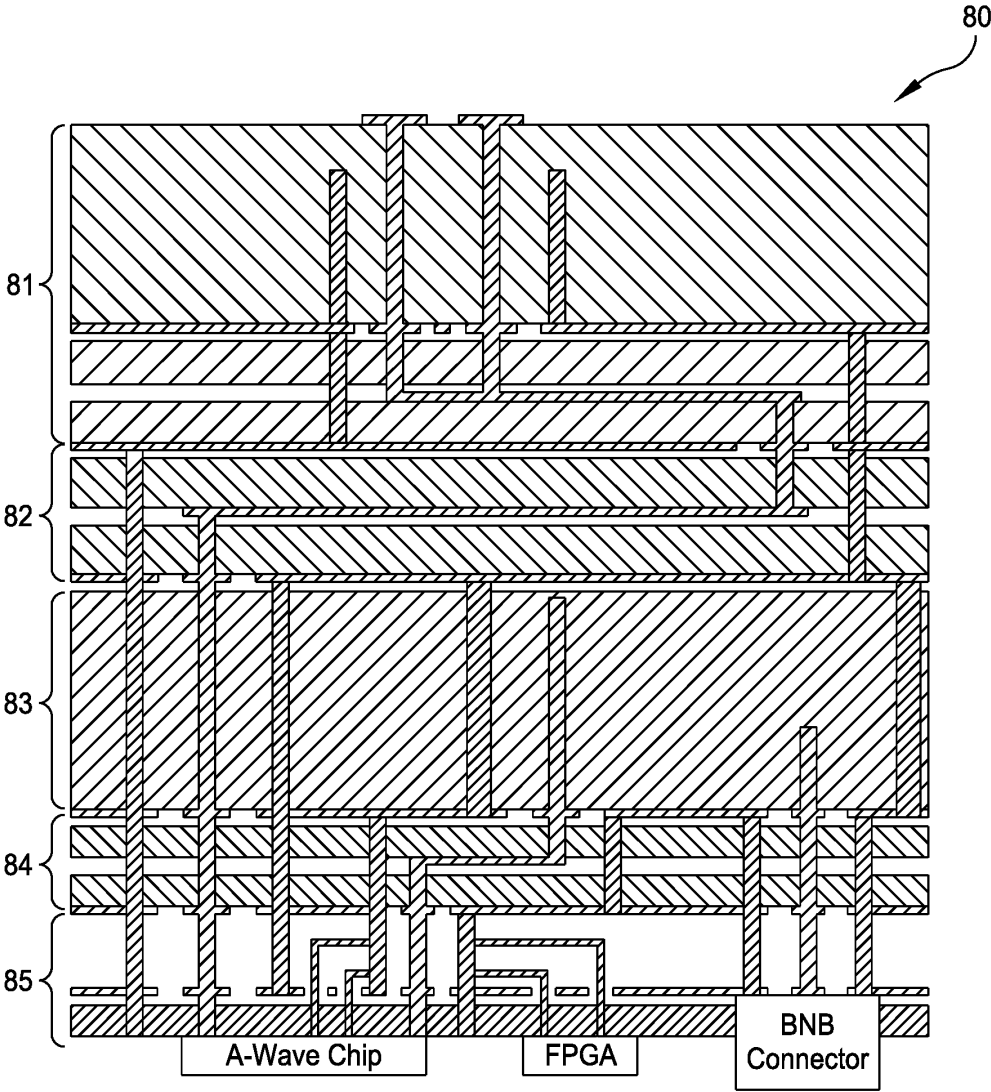


FIG. 8

Function	Material	Height (Mils)	Sub Total (Mils)
Conductive Spiral Radiator	Copper	0.7	
Radiator Feed Substrate	Rogers RT/Duroid 5880	73	
Conductive Feed Ground	Copper	0.7	
Radiator Bond Film	Rogers 3001 Bond Film	1	
Radiator Substrate Upper	Rogers RO3003	10	
Radiator Bond Film	Rogers 3001 Bond Film	1	
Radiator Substrate Lower	Rogers RO3003	10	
Radiator Ground	Copper	0.7	97.1
Dilation Bond Film	Rogers 3001 Bond Film	1	
Dilation Substrate Upper	Rogers RT/Duroid 6006	10	
Dilation Bond Film	Rogers 3001 Bond Film	1	
Dilation Substrate Lower	Rogers RT/Duroid 6006	10	
Dilation Ground	Copper	0.7	22.7
BeamFormer Bond Film	Rogers 3001 Bond Film	1	
BeamFormer Substrate	Taconic CER10	50	
BeamFormer Ground	Copper	0.7	51.7
DC & Logic Bond Film	Rogers 3001 Bond Film	1	
DC & Logic Substrate	FR-4	4	
DC & Logic Traces	Copper	0.7	5.7
		Total	177.2

FIG. 9

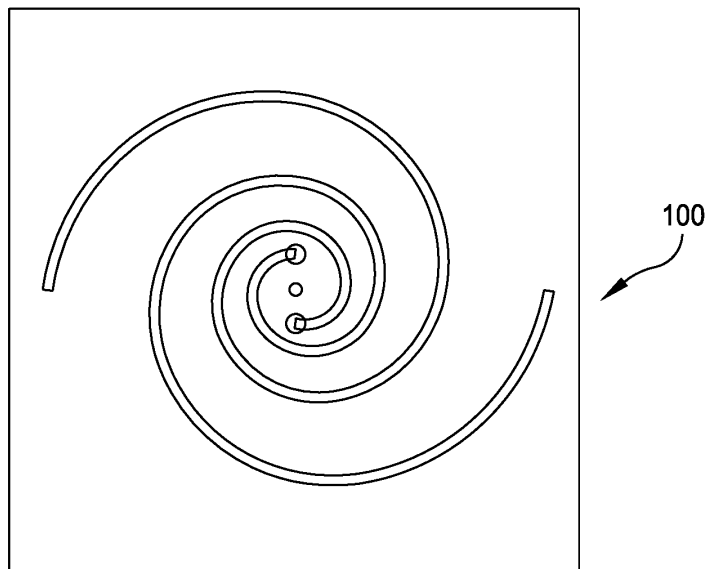


FIG. 10

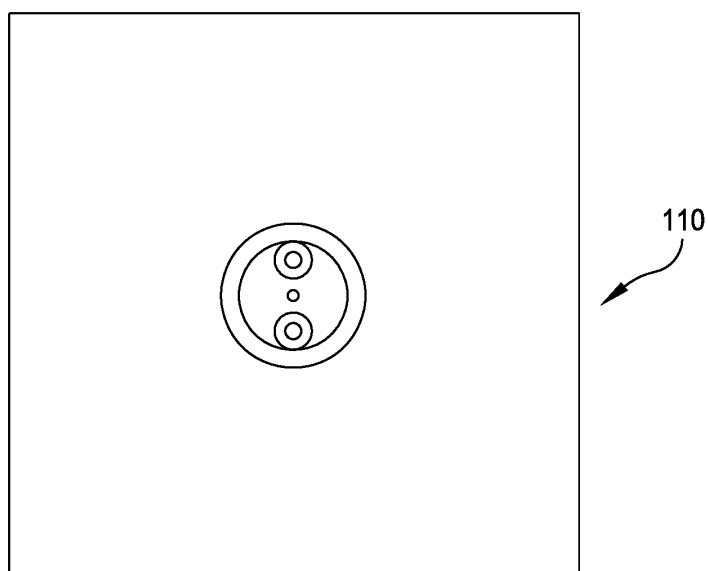


FIG. 11

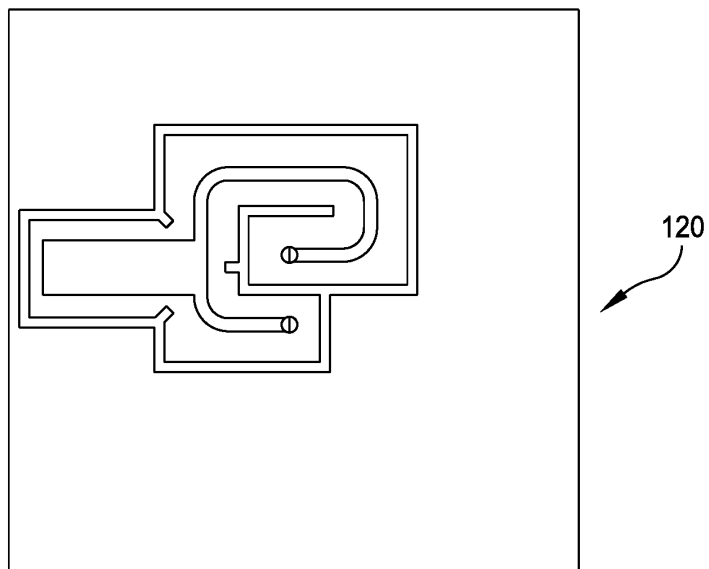


FIG. 12

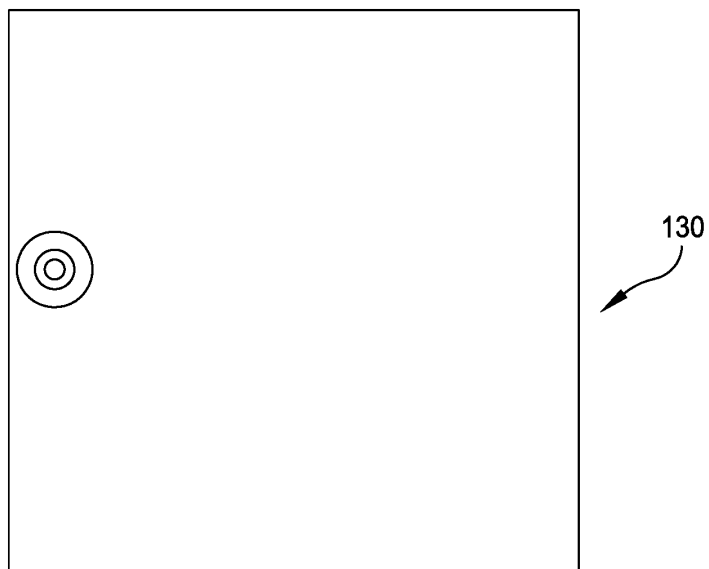


FIG. 13

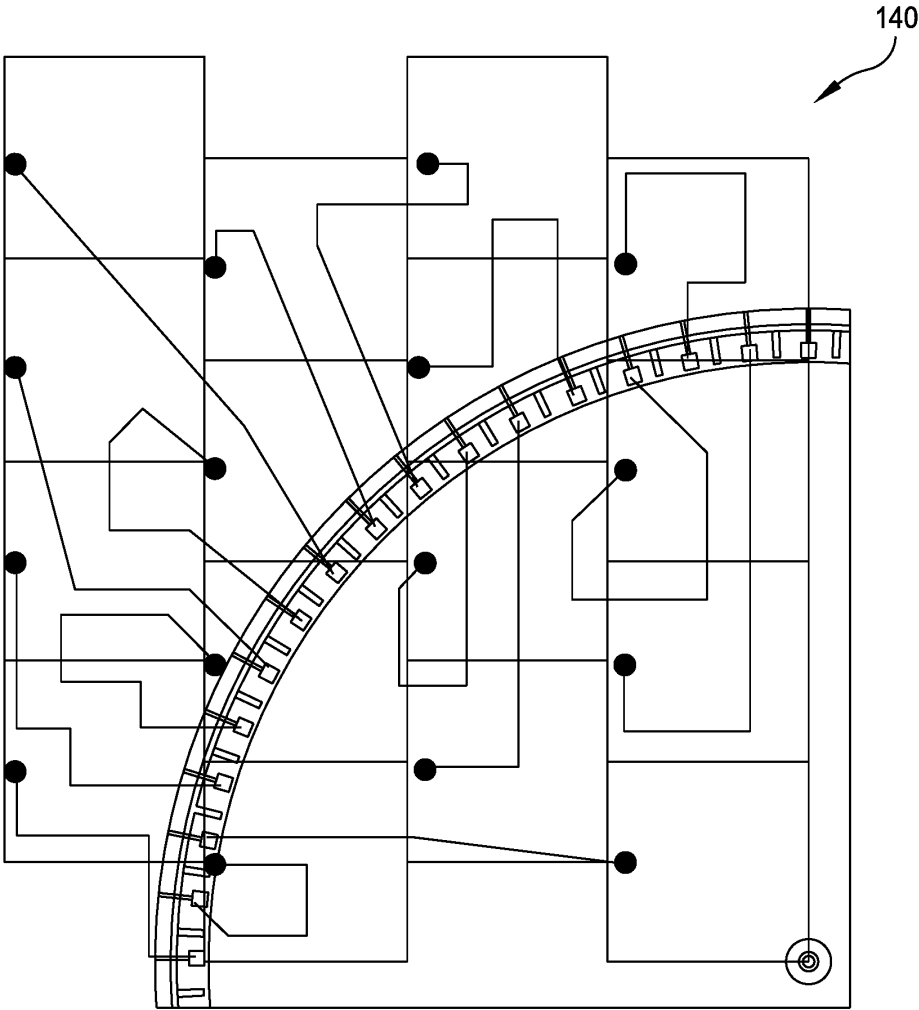


FIG. 14

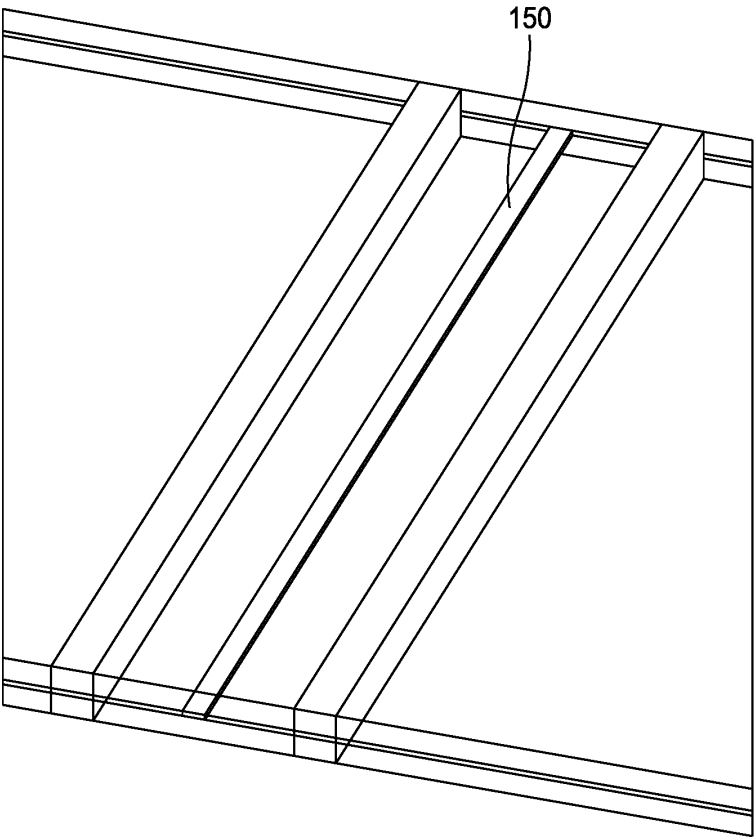


FIG. 15

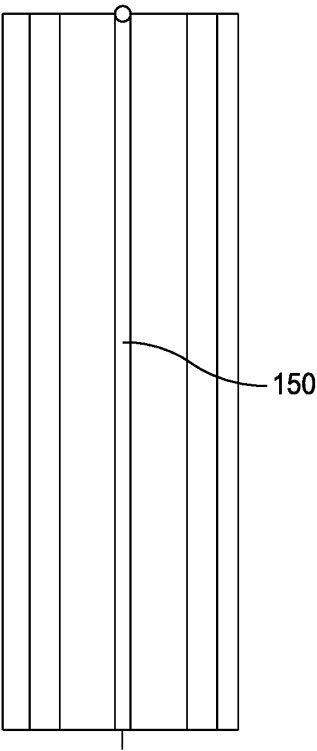


FIG. 16

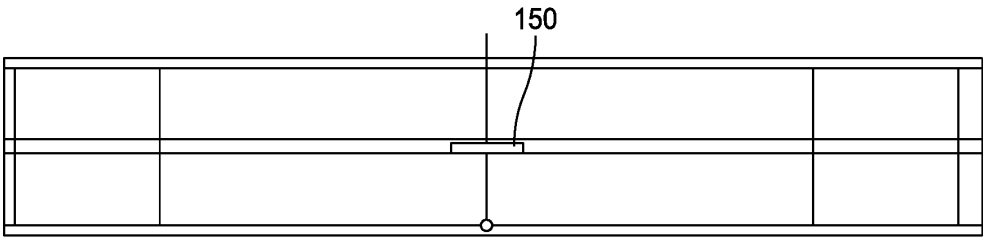


FIG. 17

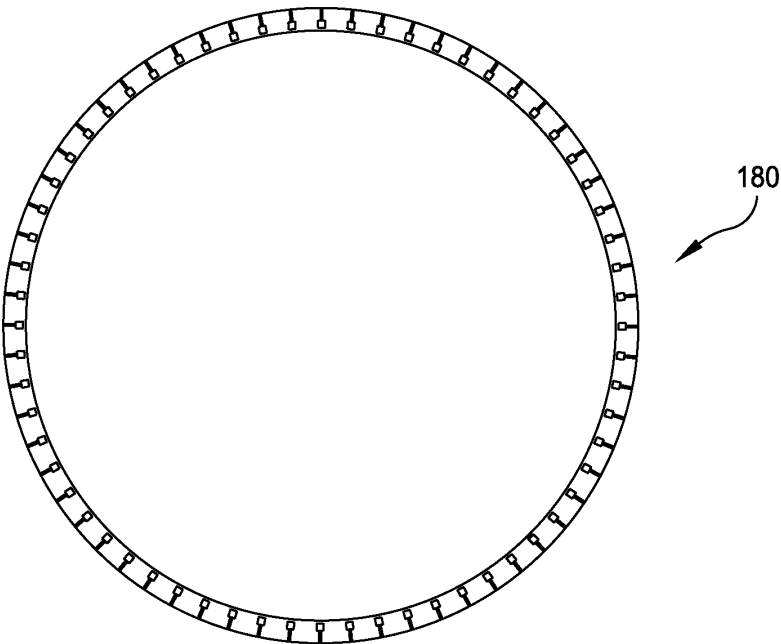


FIG. 18

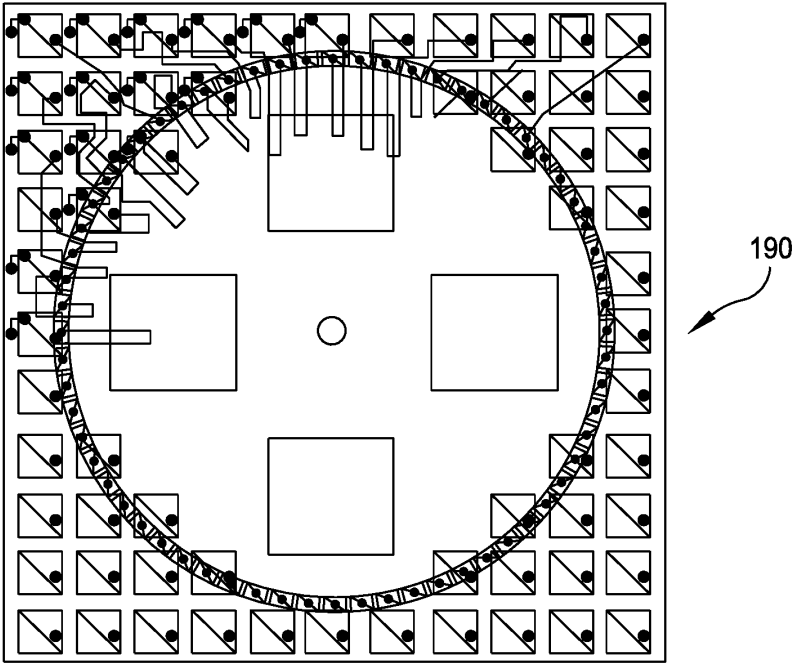


FIG. 19

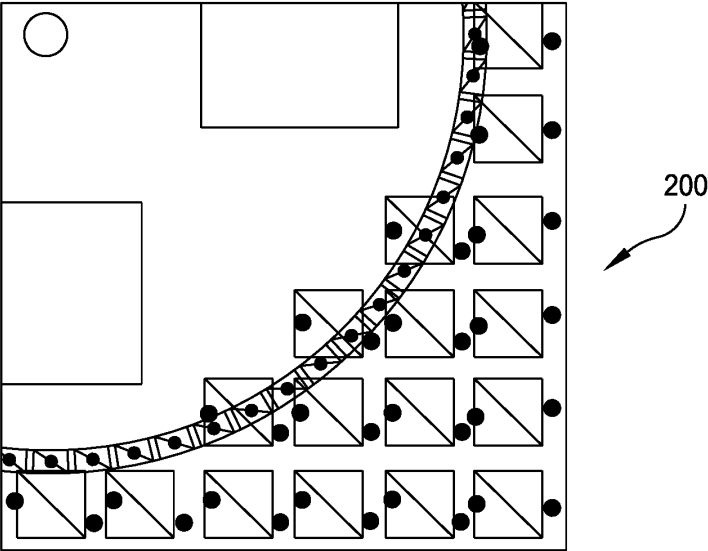


FIG. 20

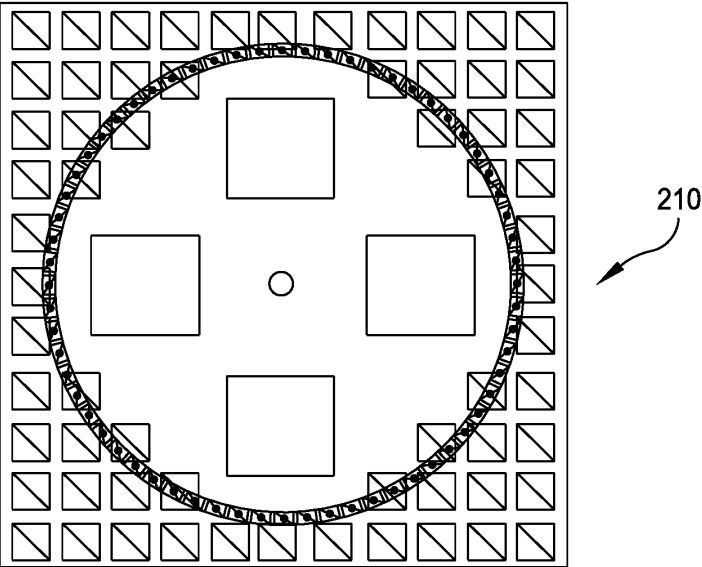


FIG. 21

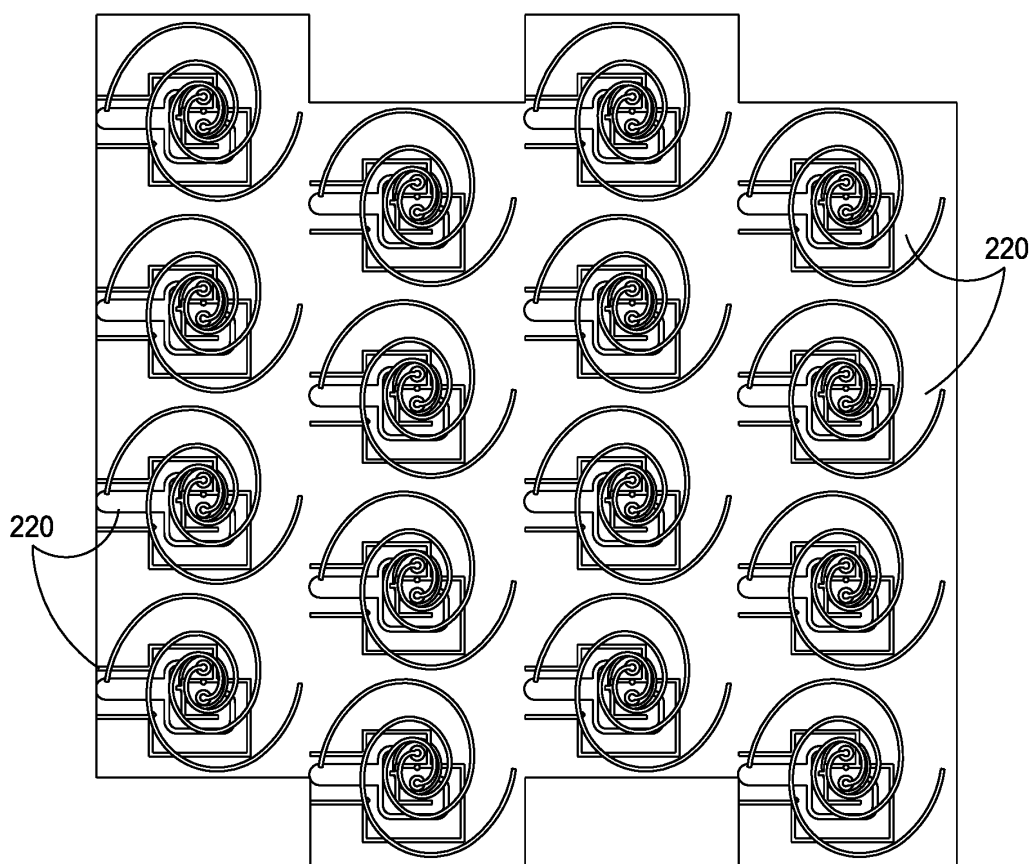


FIG. 22