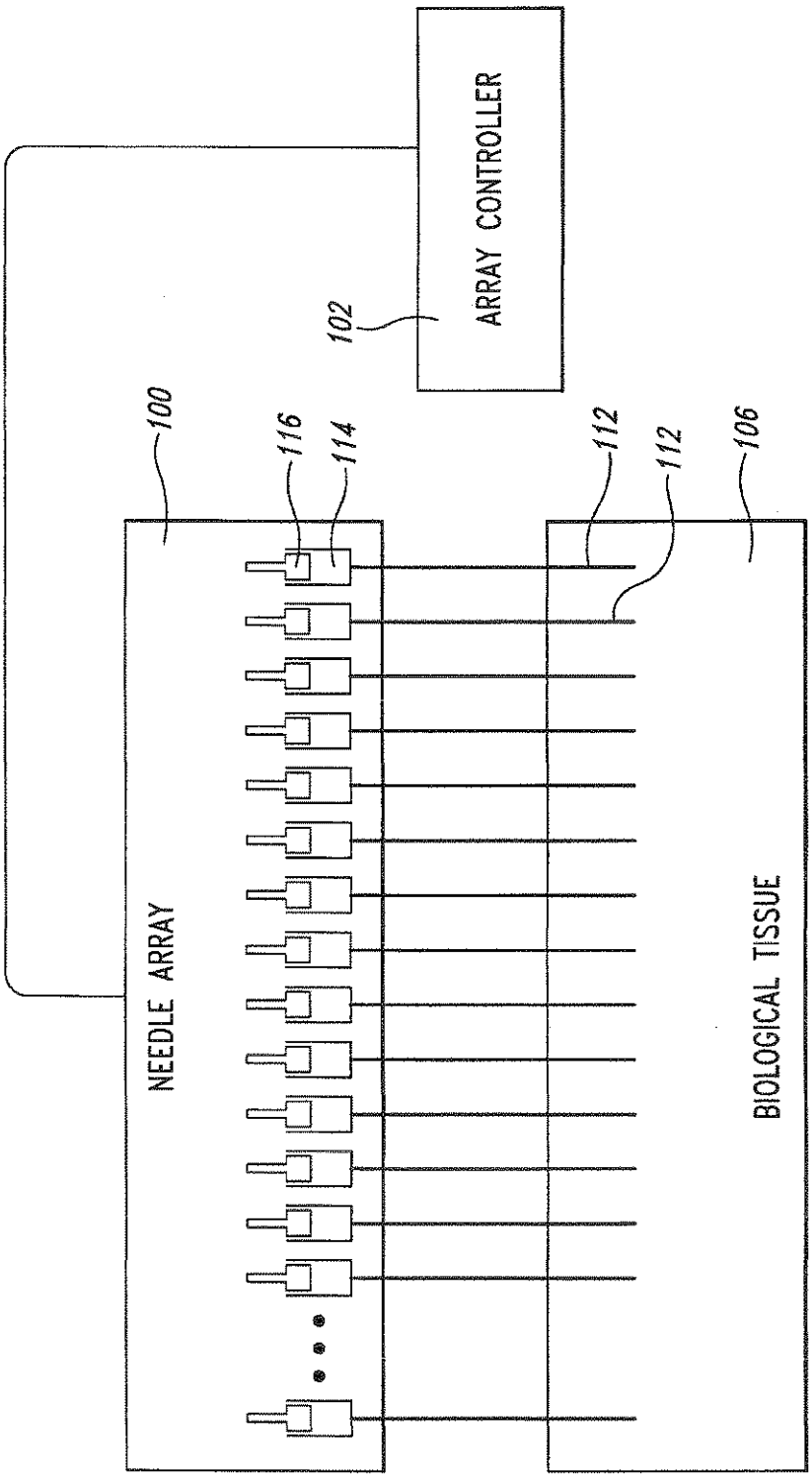

ARRAY CONTROLLER
102
100
116
114
112
112
106
NEEDLE ARRAY
BIOLOGICAL TISSUE

FIG. 1

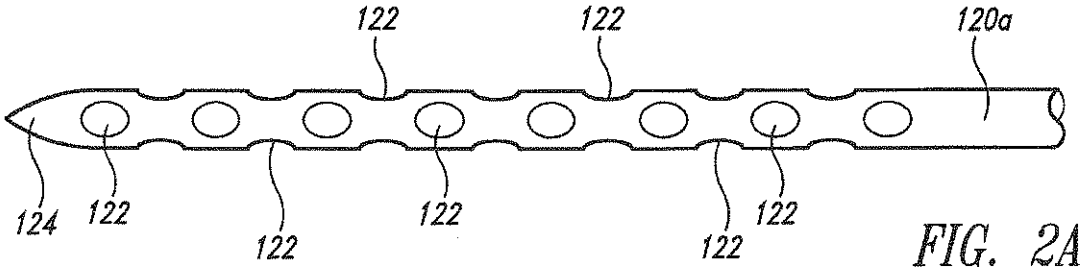


FIG. 2A

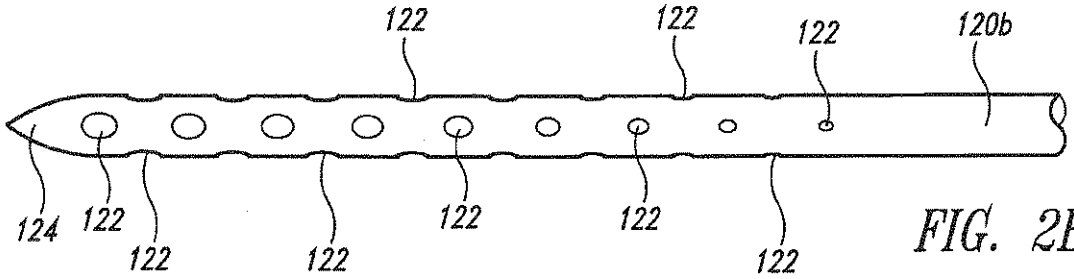


FIG. 2B

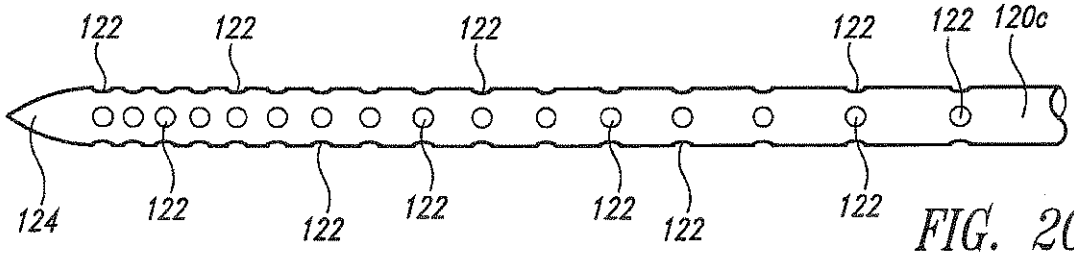


FIG. 2C

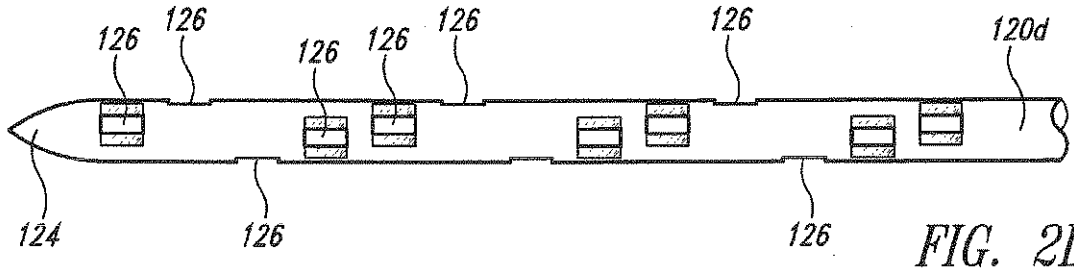


FIG. 2D

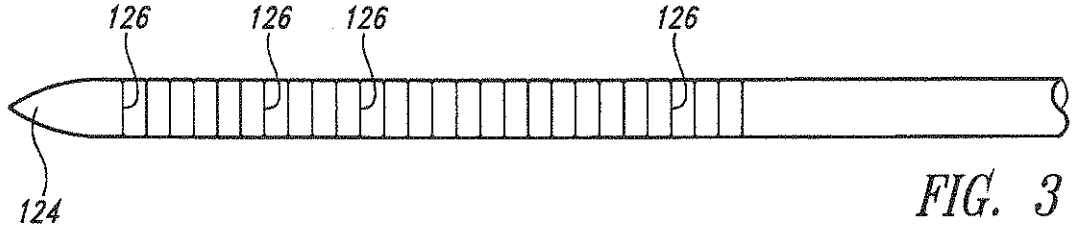


FIG. 3

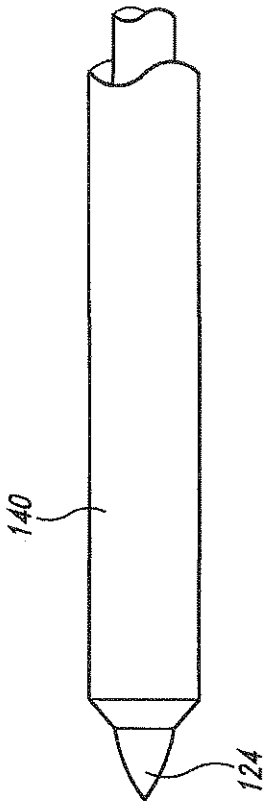


FIG. 4A

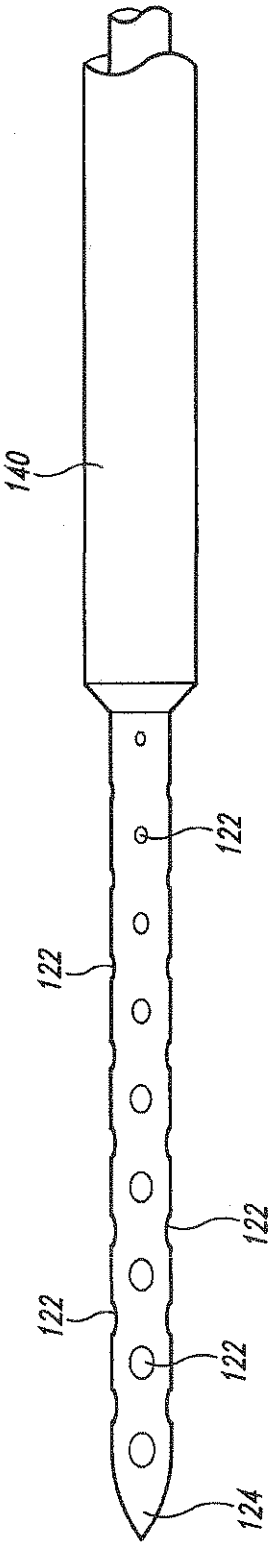


FIG. 4B

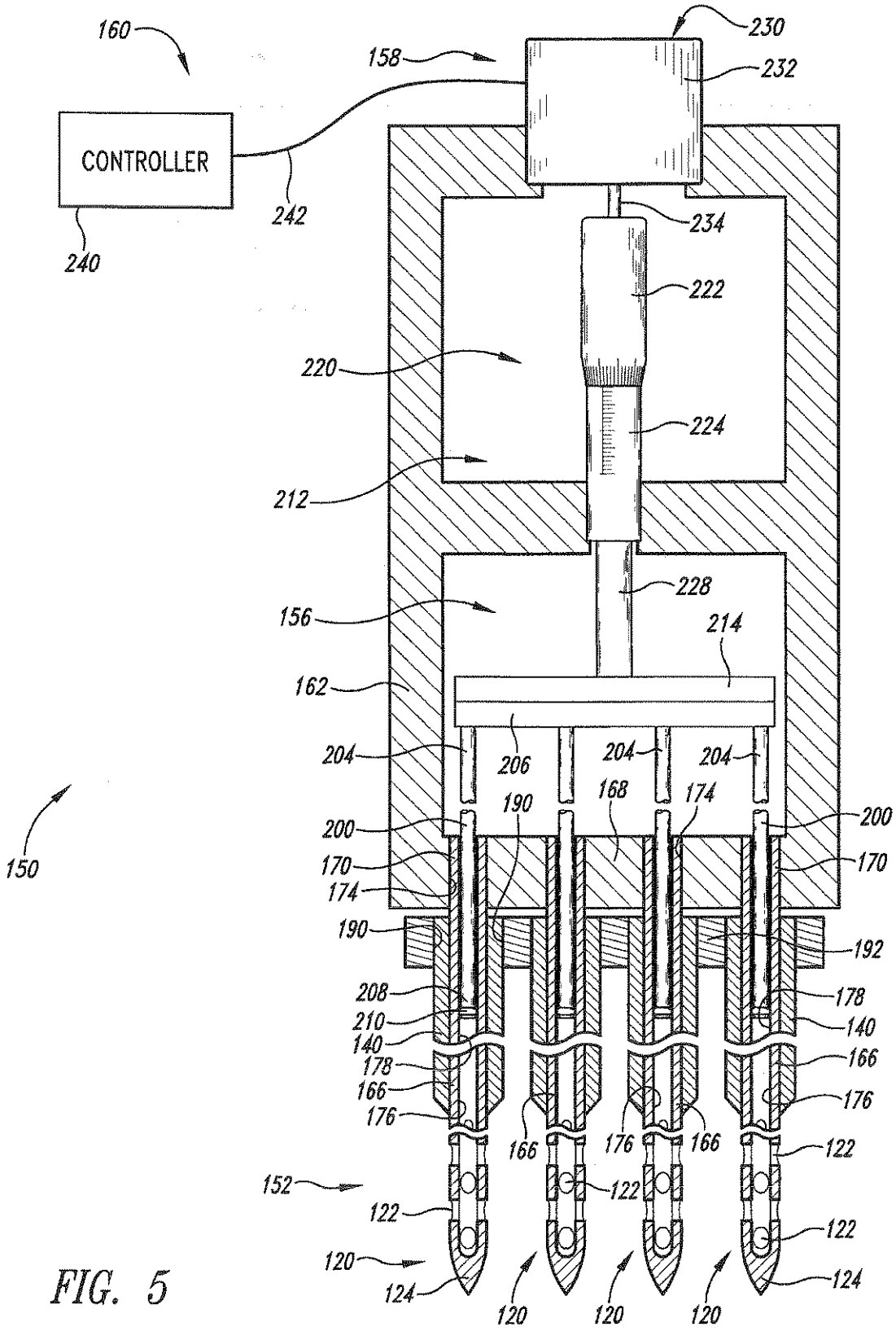

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CONTROLLER
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124

FIG. 5

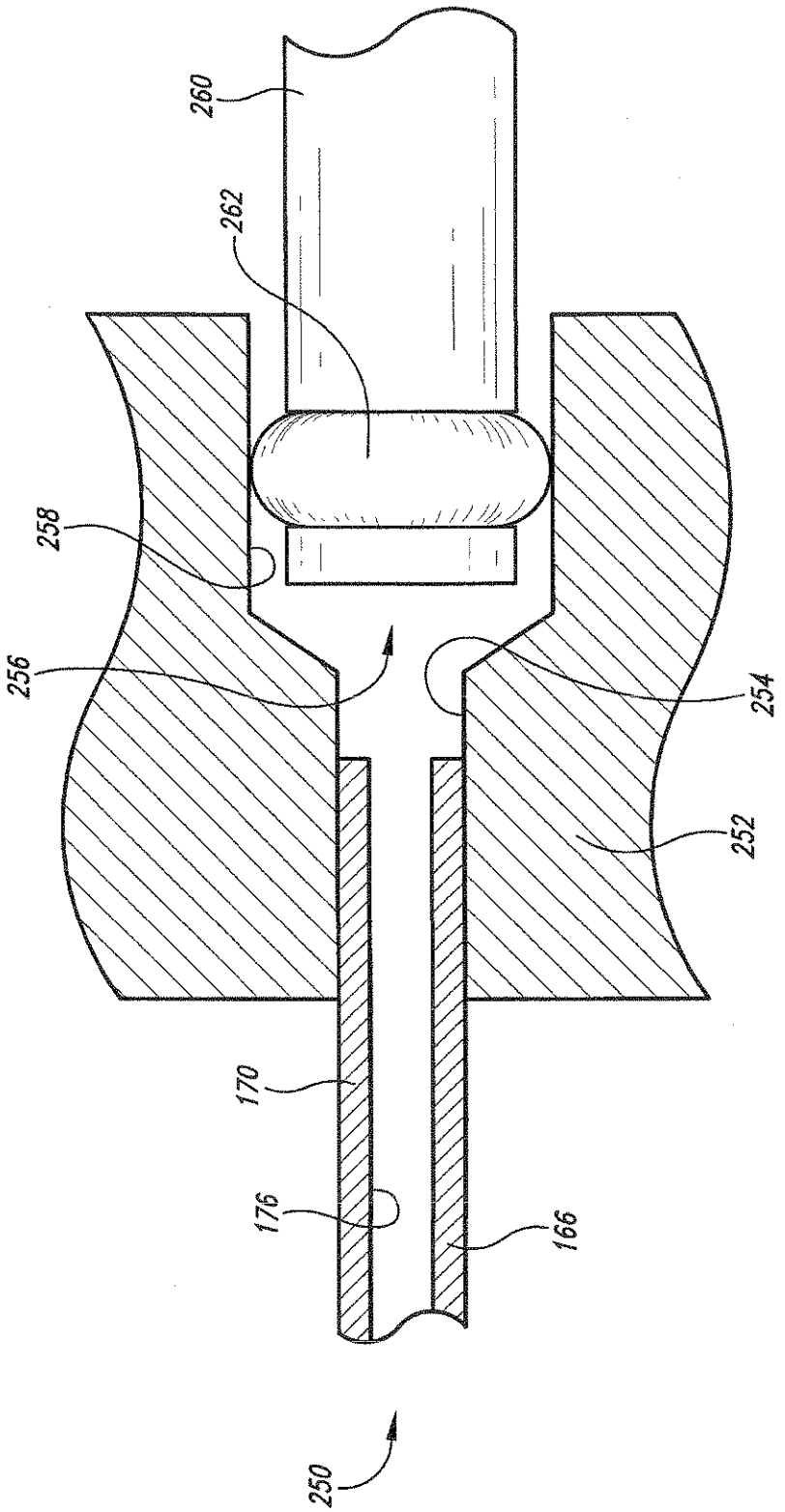
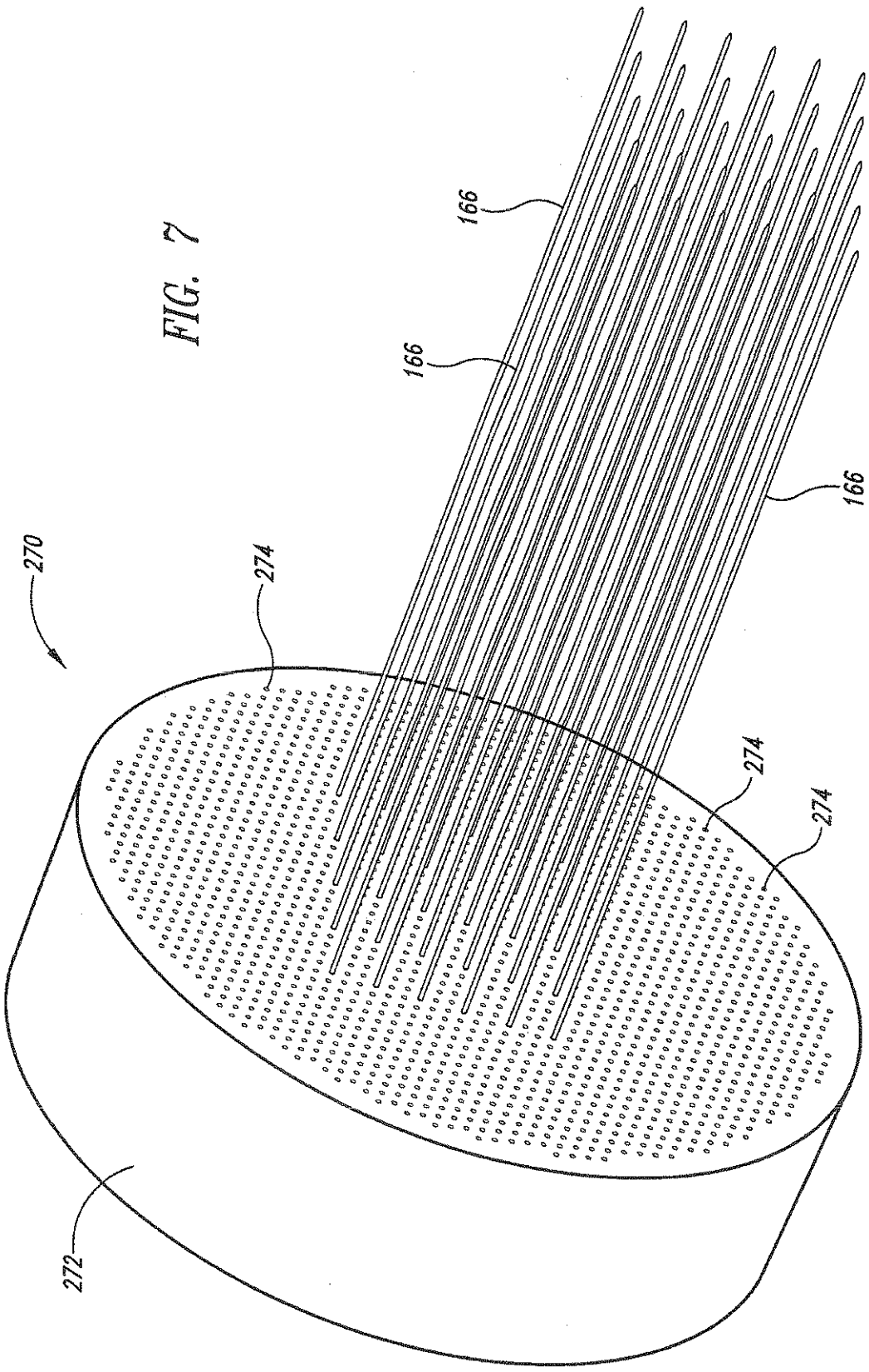


FIG. 6

FIG. 7



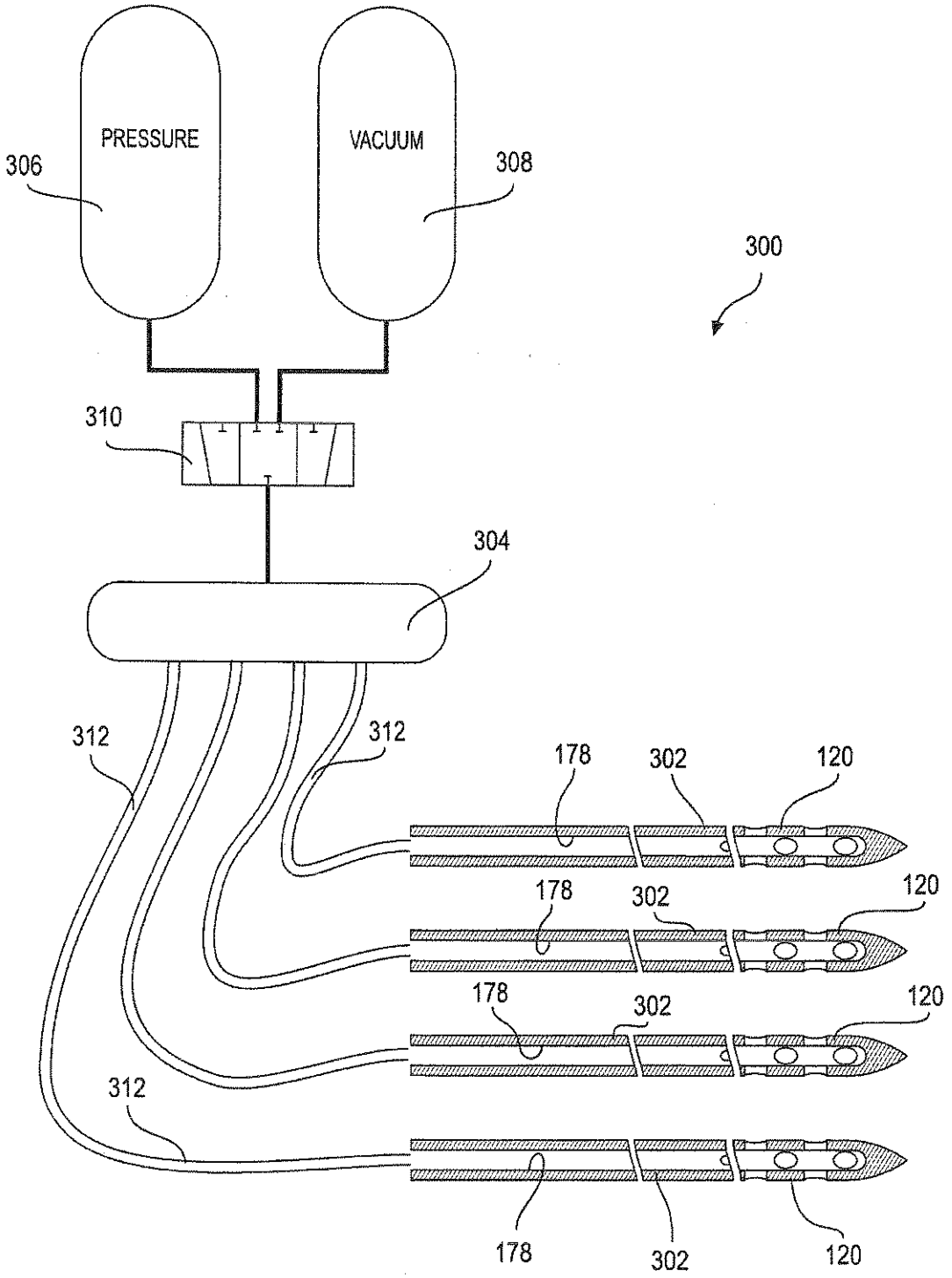

PRESSURE
VACUUM
306
308
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310
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302
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178
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302
120

Figure 8

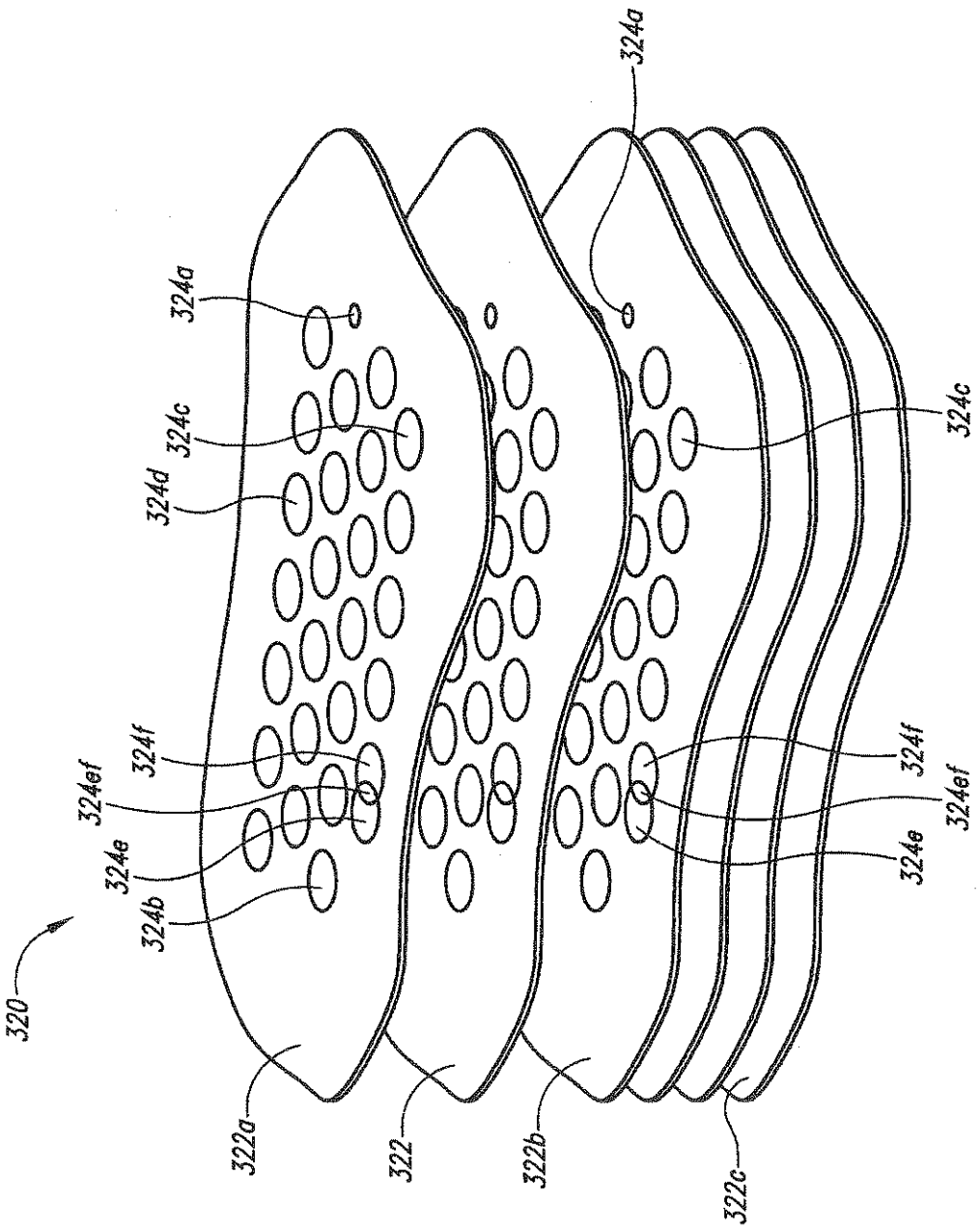


FIG. 9

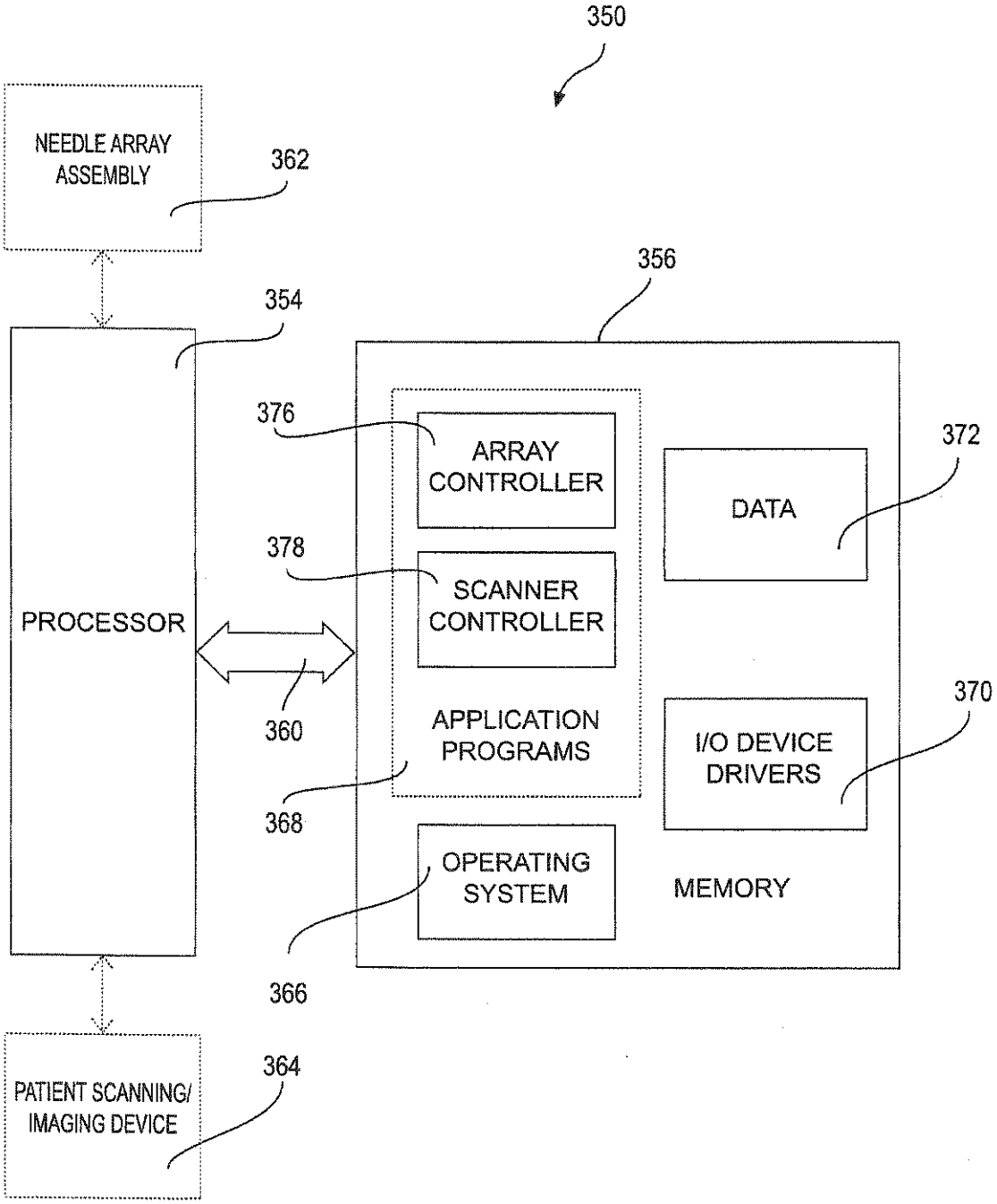

350
NEEDLE ARRAY ASSEMBLY
362
354
356
376
ARRAY CONTROLLER
372
DATA
378
SCANNER CONTROLLER
PROCESSOR
360
APPLICATION PROGRAMS
370
I/O DEVICE DRIVERS
368
OPERATING SYSTEM
MEMORY
366
364
PATIENT SCANNING/ IMAGING DEVICE

Figure 10