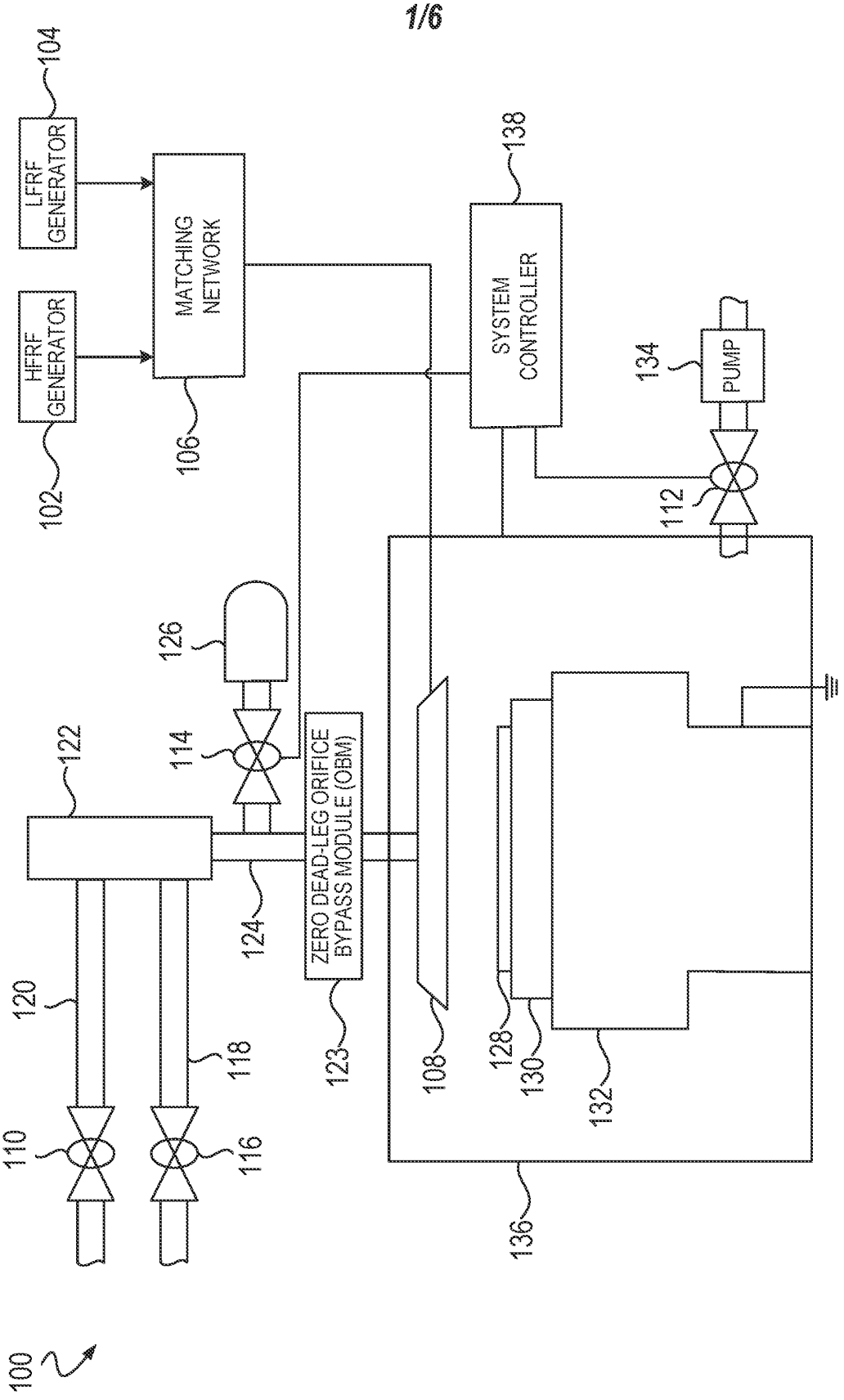

LFRF GENERATOR
104
HFRF GENERATOR
102
MATCHING NETWORK
106
SYSTEM CONTROLLER
138
PUMP
134
112
126
114
122
ZERO DEAD-LEG ORIFICE BYPASS MODULE (OBM)
124
123
120
118
110
116
108
128
130
132
136
100

FIG. 1

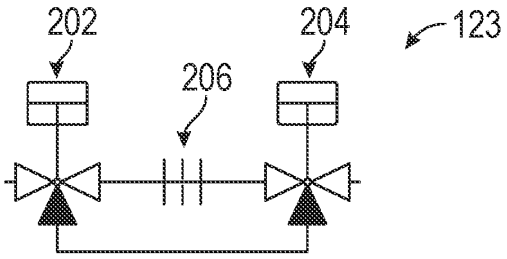


FIG. 2

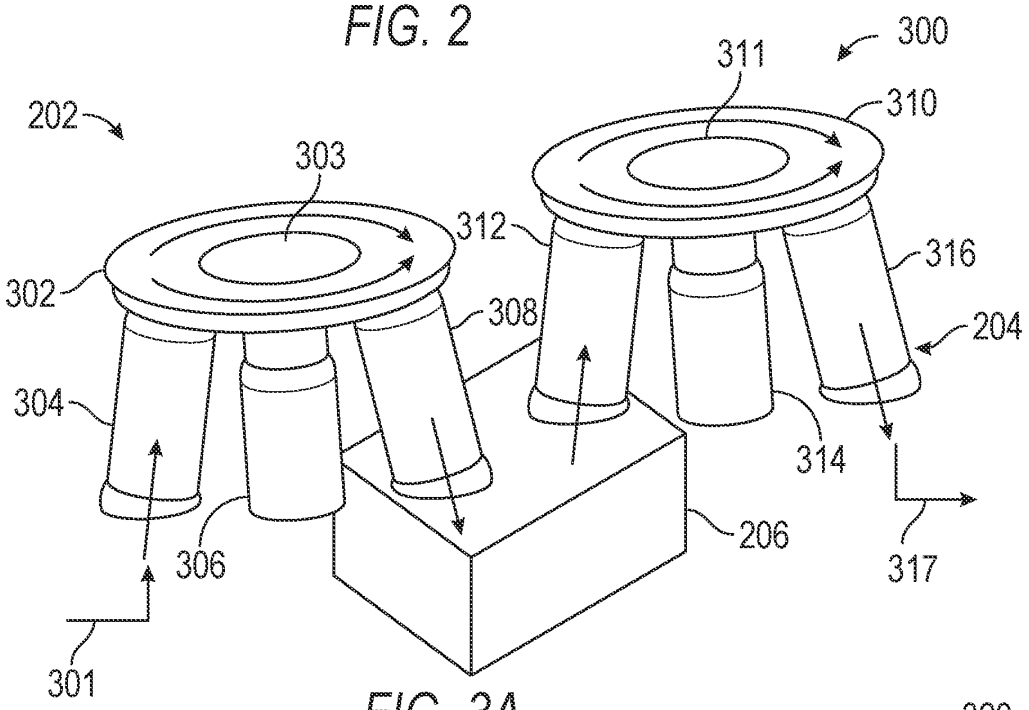


FIG. 3A

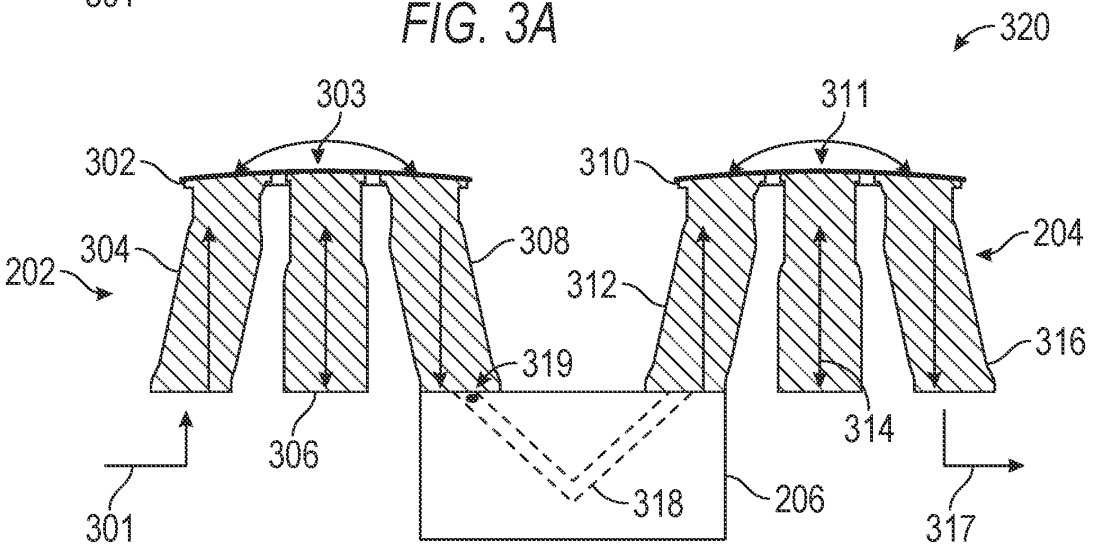


FIG. 3B

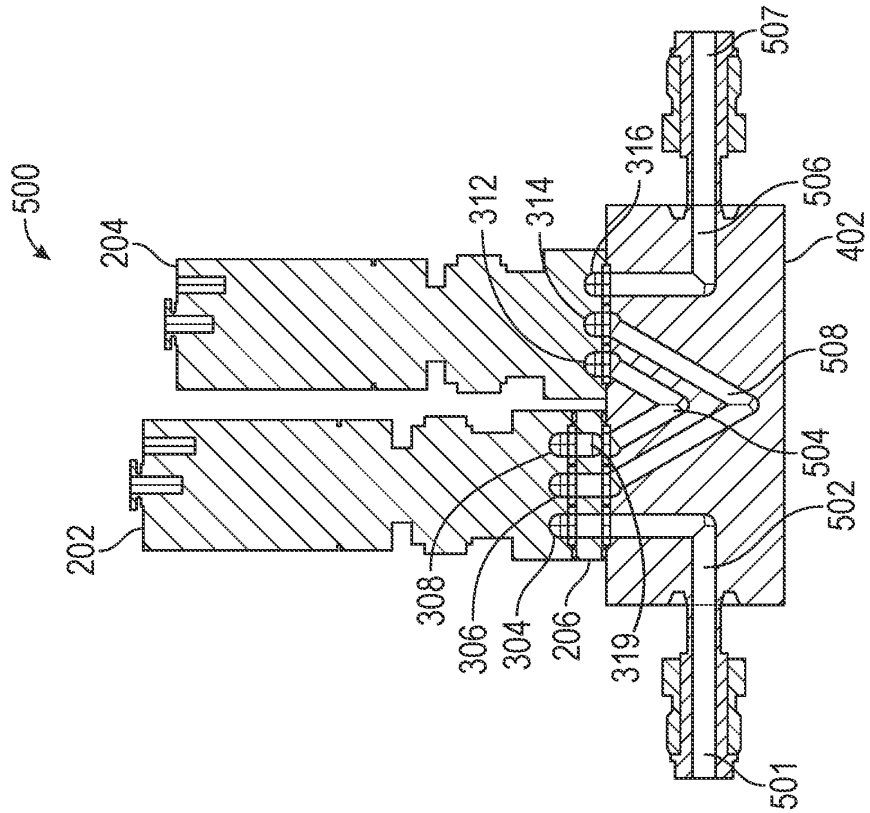

500
204
312
314
316
507
506
402
508
504
502
202
308
306
304
206
319
501

FIG. 5

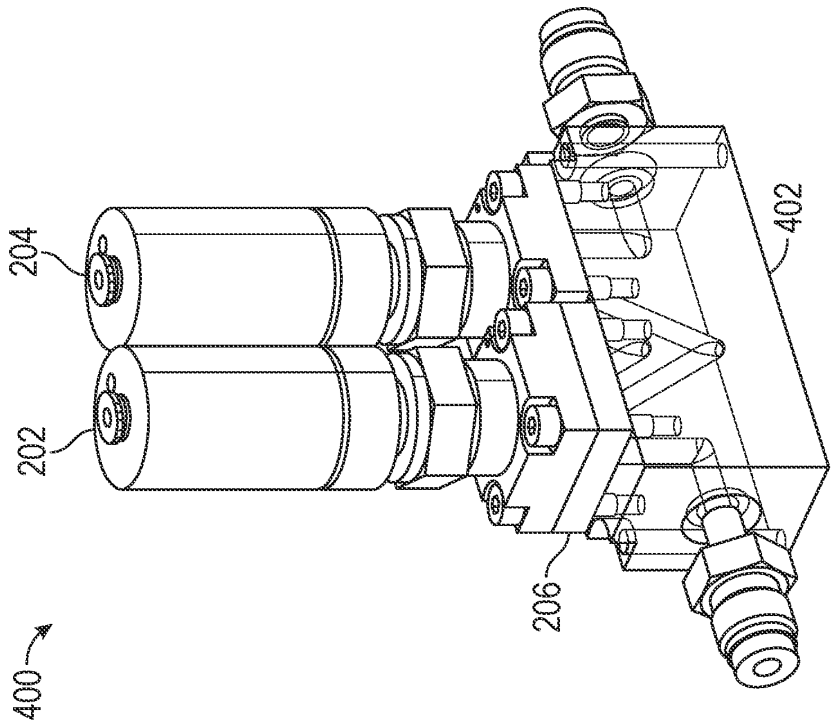

400
204
202
206
402

FIG. 4

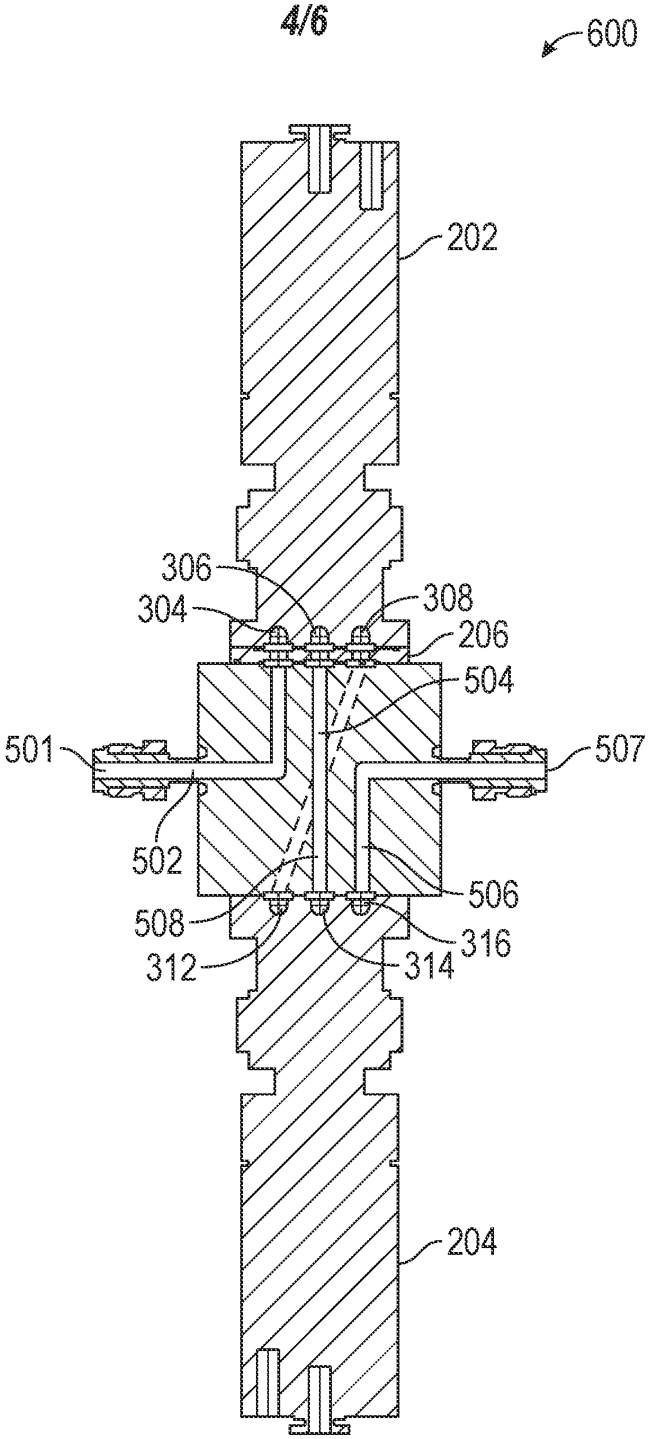


FIG. 6

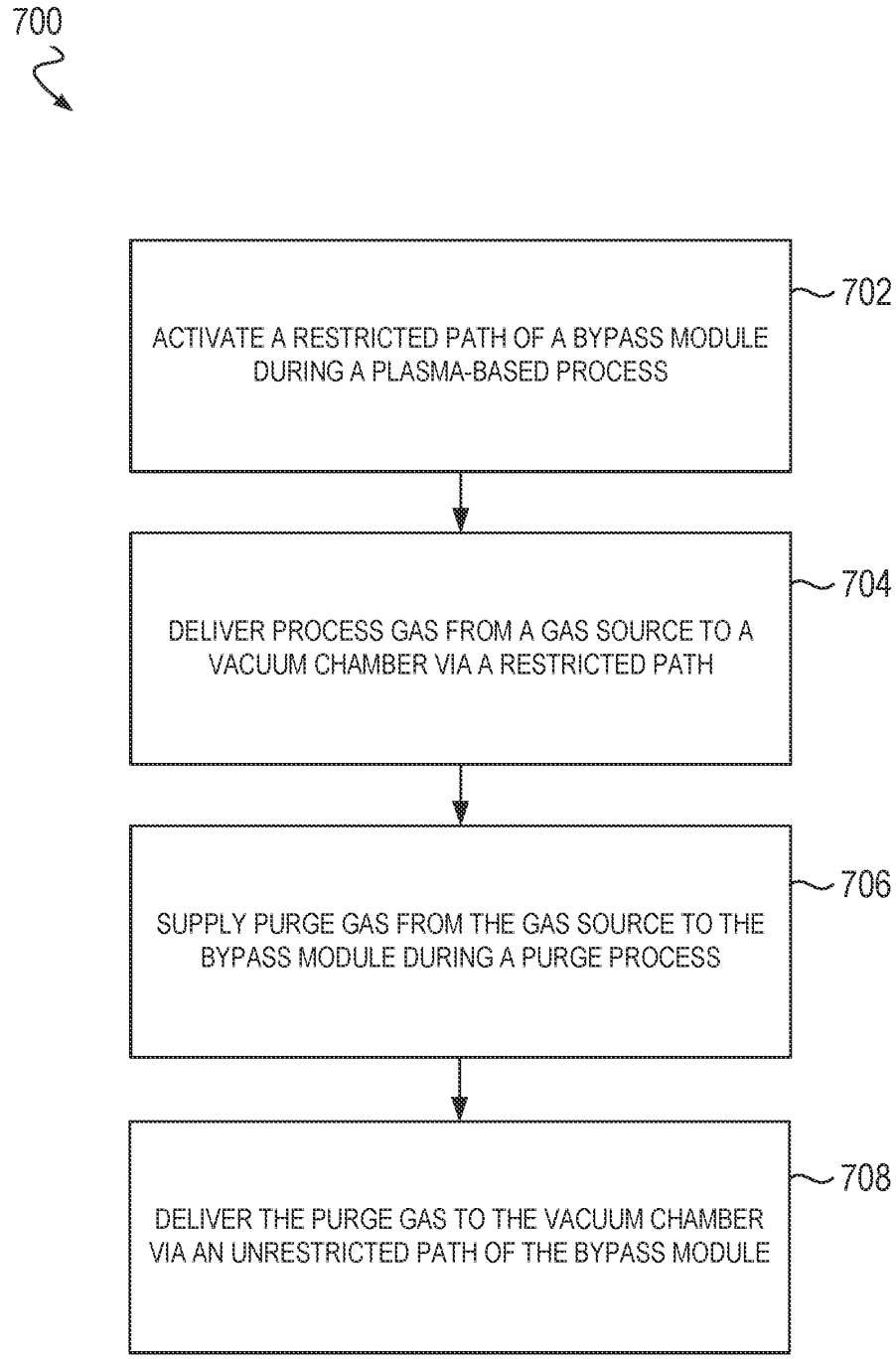

700
ACTIVATE A RESTRICTED PATH OF A BYPASS MODULE DURING A PLASMA-BASED PROCESS
702
DELIVER PROCESS GAS FROM A GAS SOURCE TO A VACUUM CHAMBER VIA A RESTRICTED PATH
704
SUPPLY PURGE GAS FROM THE GAS SOURCE TO THE BYPASS MODULE DURING A PURGE PROCESS
706
DELIVER THE PURGE GAS TO THE VACUUM CHAMBER VIA AN UNRESTRICTED PATH OF THE BYPASS MODULE
708

FIG. 7

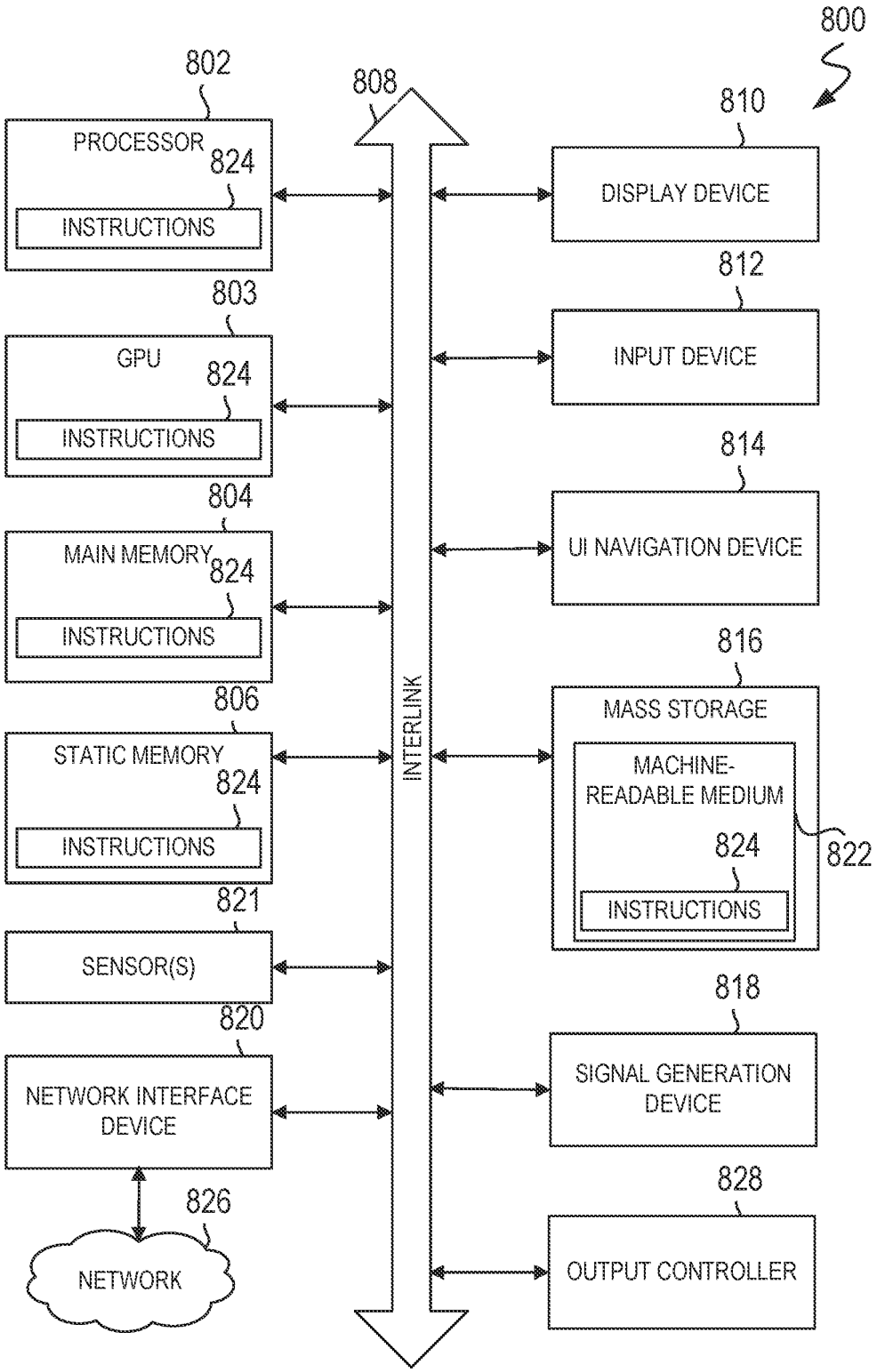

800
802
PROCESSOR
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INSTRUCTIONS
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GPU
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INSTRUCTIONS
804
MAIN MEMORY
824
INSTRUCTIONS
806
STATIC MEMORY
824
INSTRUCTIONS
821
SENSOR(S)
820
NETWORK INTERFACE DEVICE
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NETWORK
808
INTERLINK
810
DISPLAY DEVICE
812
INPUT DEVICE
814
UI NAVIGATION DEVICE
816
MASS STORAGE
MACHINE-READABLE MEDIUM
824
INSTRUCTIONS
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818
SIGNAL GENERATION DEVICE
828
OUTPUT CONTROLLER

FIG. 8