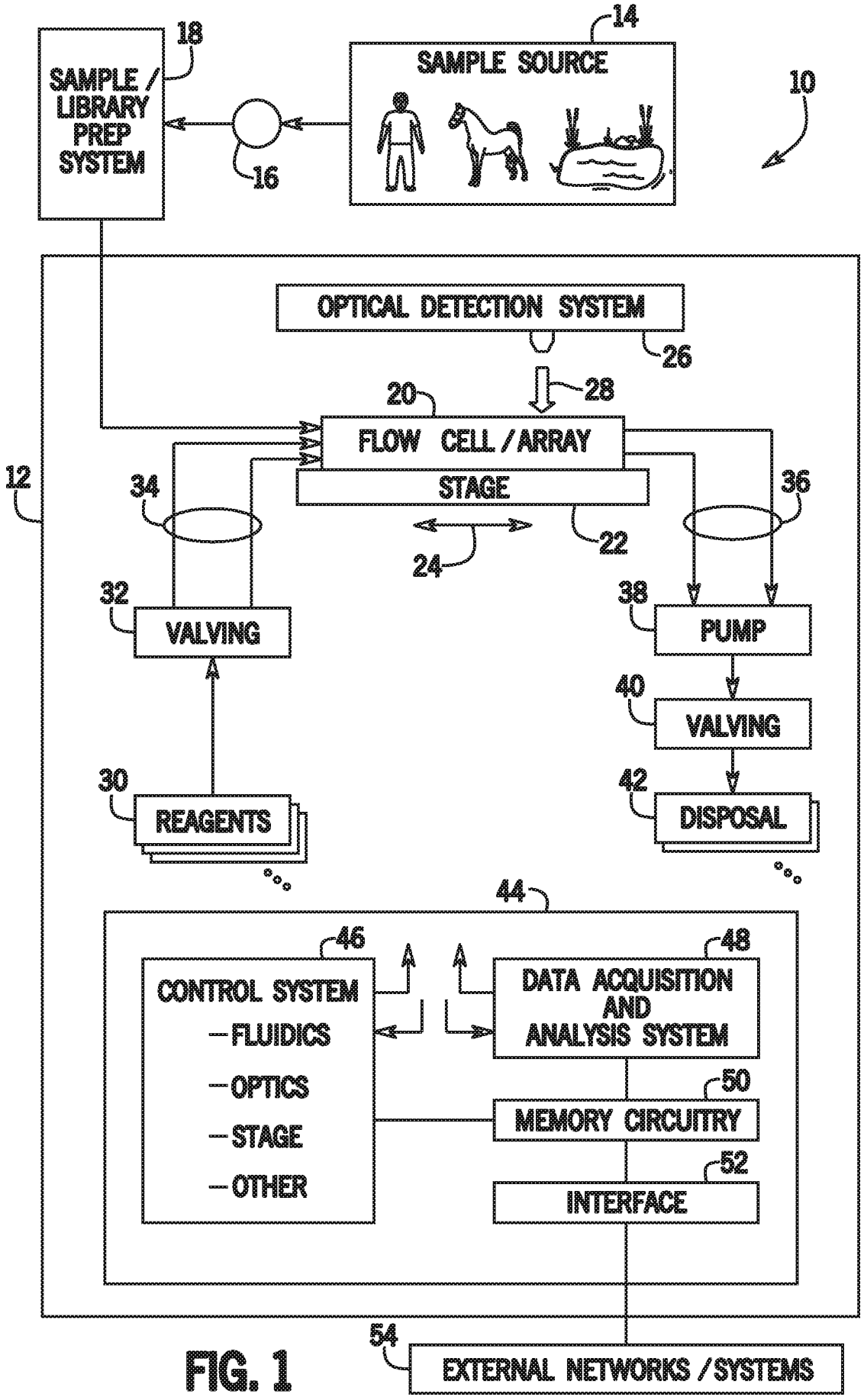

SAMPLE / LIBRARY PREP SYSTEM
18
16
SAMPLE SOURCE
14
10
OPTICAL DETECTION SYSTEM
26
28
20
FLOW CELL / ARRAY
STAGE
22
24
12
34
36
32
VALVING
38
PUMP
40
VALVING
30
REAGENTS
42
DISPOSAL
44
46
CONTROL SYSTEM
FLUIDICS
OPTICS
STAGE
OTHER
48
DATA ACQUISITION AND ANALYSIS SYSTEM
50
MEMORY CIRCUITRY
52
INTERFACE
54
EXTERNAL NETWORKS / SYSTEMS

FIG. 1

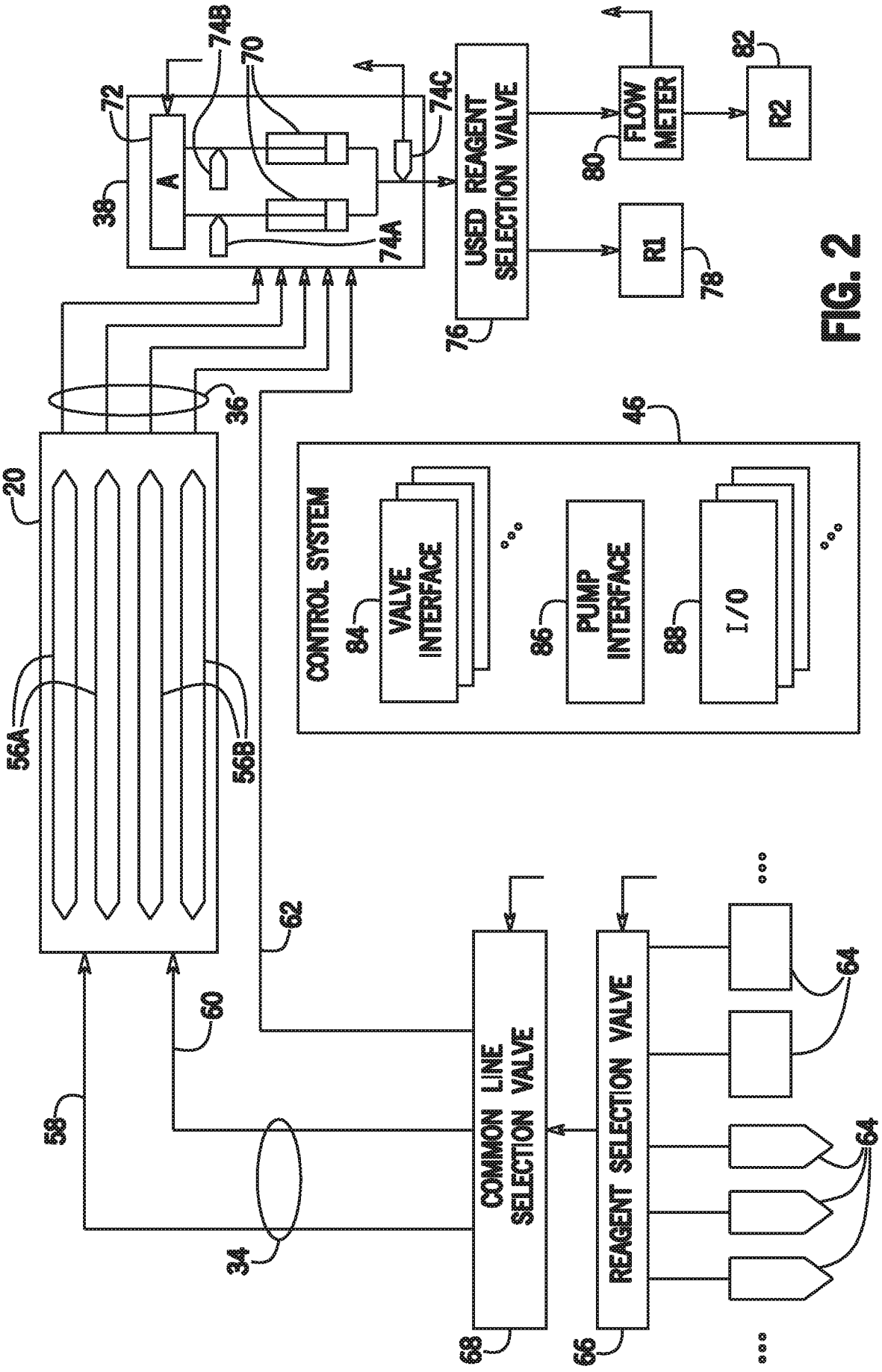

74B
70
72
74C
A
38
74A
USED REAGENT SELECTION VALVE
FLOW METER
80
82
R2
R1
78
76
36
46
20
CONTROL SYSTEM
VALVE INTERFACE
84
PUMP INTERFACE
86
I/O
88
56A
56B
62
60
58
34
COMMON LINE SELECTION VALVE
REAGENT SELECTION VALVE
64
68
66

FIG. 2

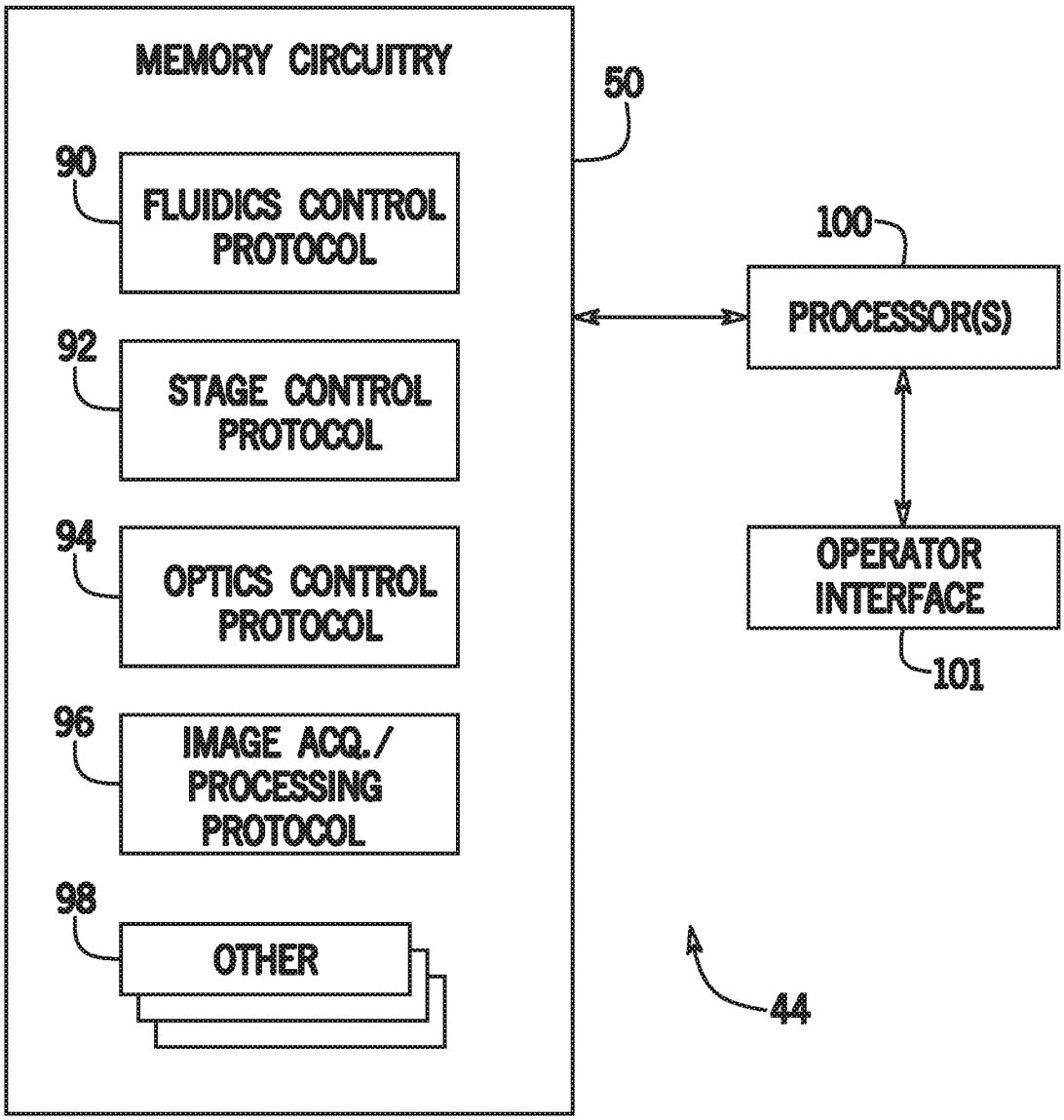

MEMORY CIRCUITRY
50
90
FLUIDICS CONTROL PROTOCOL
92
STAGE CONTROL PROTOCOL
94
OPTICS CONTROL PROTOCOL
96
IMAGE ACQ./ PROCESSING PROTOCOL
98
OTHER
100
PROCESSOR(S)
OPERATOR INTERFACE
101
44

FIG. 3

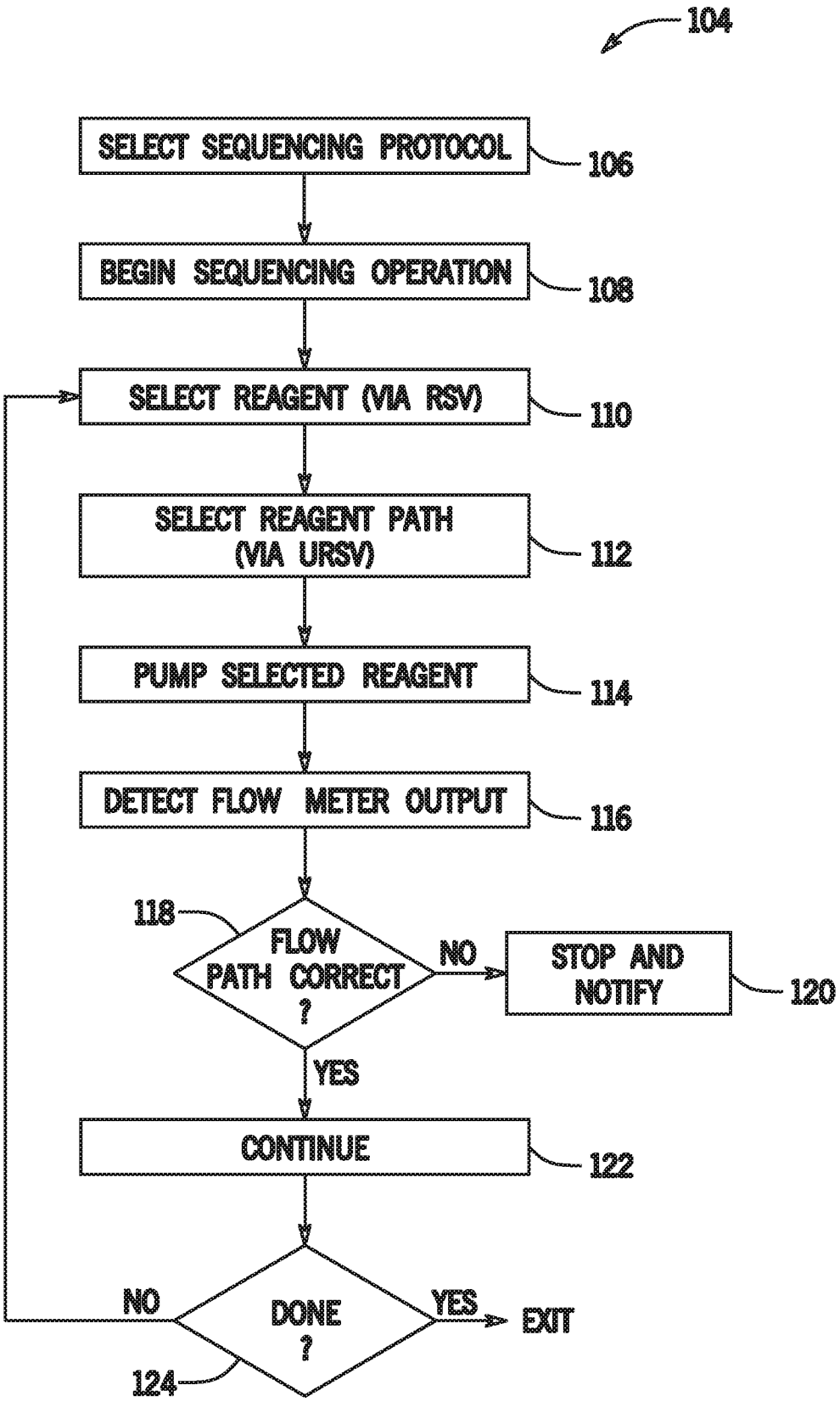

104
SELECT SEQUENCING PROTOCOL
106
BEGIN SEQUENCING OPERATION
108
SELECT REAGENT (VIA RSV)
110
SELECT REAGENT PATH (VIA URSV)
112
PUMP SELECTED REAGENT
114
DETECT FLOW METER OUTPUT
116
118
FLOW PATH CORRECT ?
NO
STOP AND NOTIFY
120
YES
CONTINUE
122
NO
DONE ?
YES
EXIT
124

FIG. 4

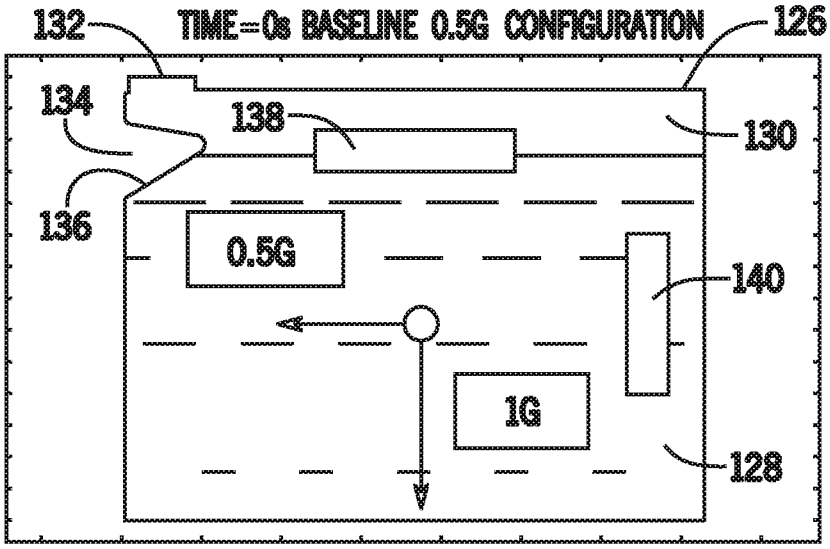


FIG. 5A

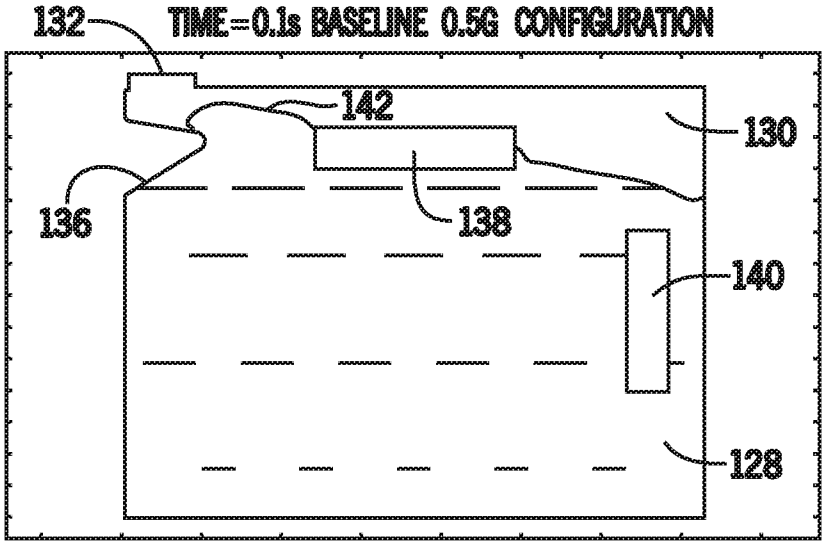


FIG. 5B

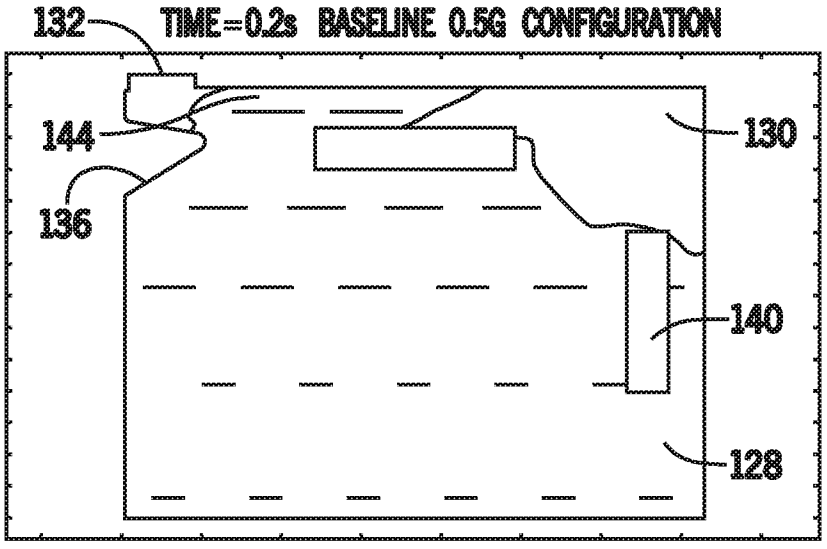


FIG. 5C