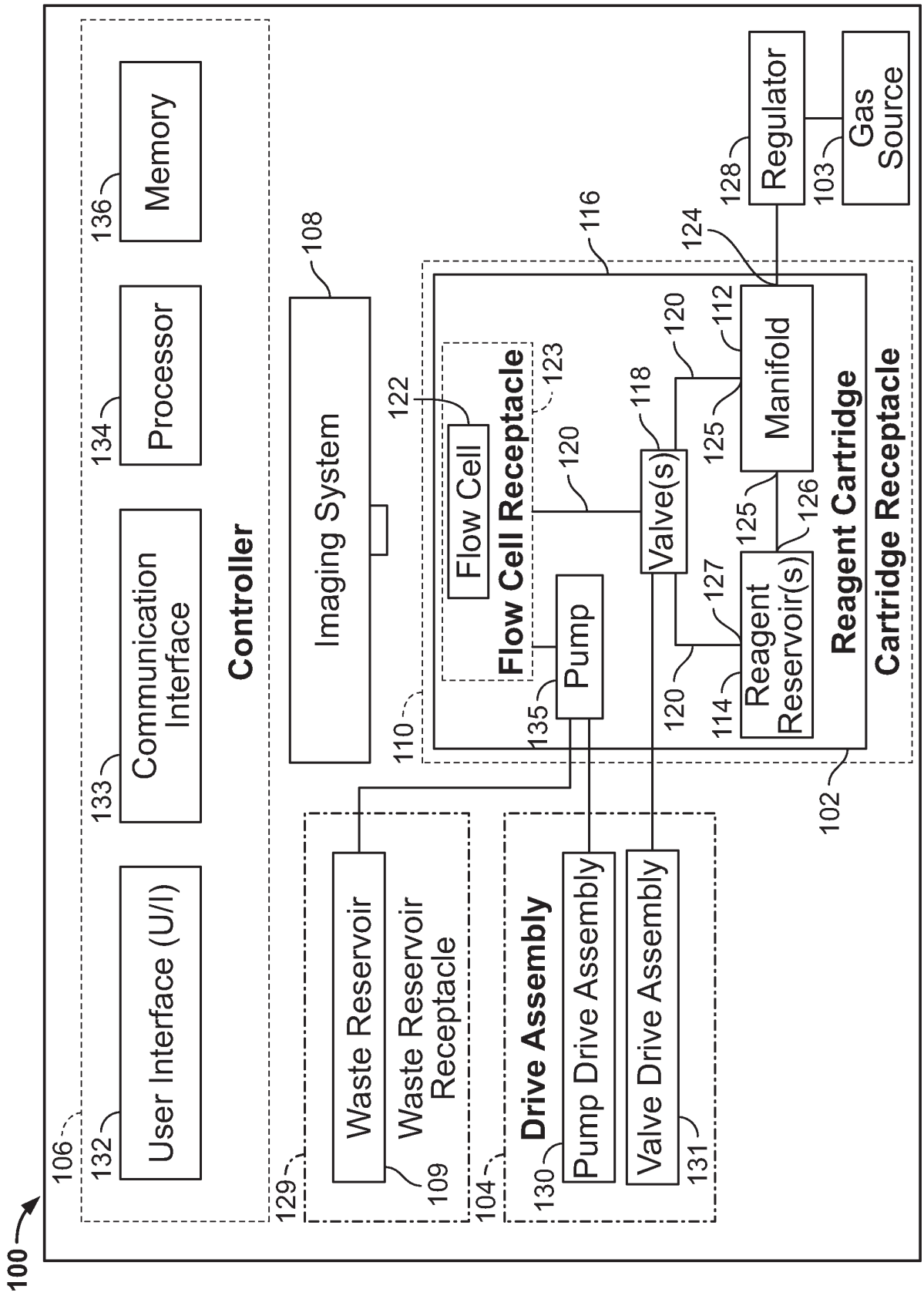

100
106
Controller
132
User Interface (U/I)
133
Communication Interface
134
Processor
136
Memory
108
Imaging System
122
Flow Cell
123
Flow Cell Receptacle
110
116
Cartridge Receptacle
102
Reagent Cartridge
124
112
Manifold
128
Regulator
103
Gas Source
120
118
Valve(s)
125
126
127
114
Reagent Reservoir(s)
135
Pump
129
Waste Reservoir
109
Waste Reservoir Receptacle
104
Drive Assembly
130
Pump Drive Assembly
131
Valve Drive Assembly

FIG. 1

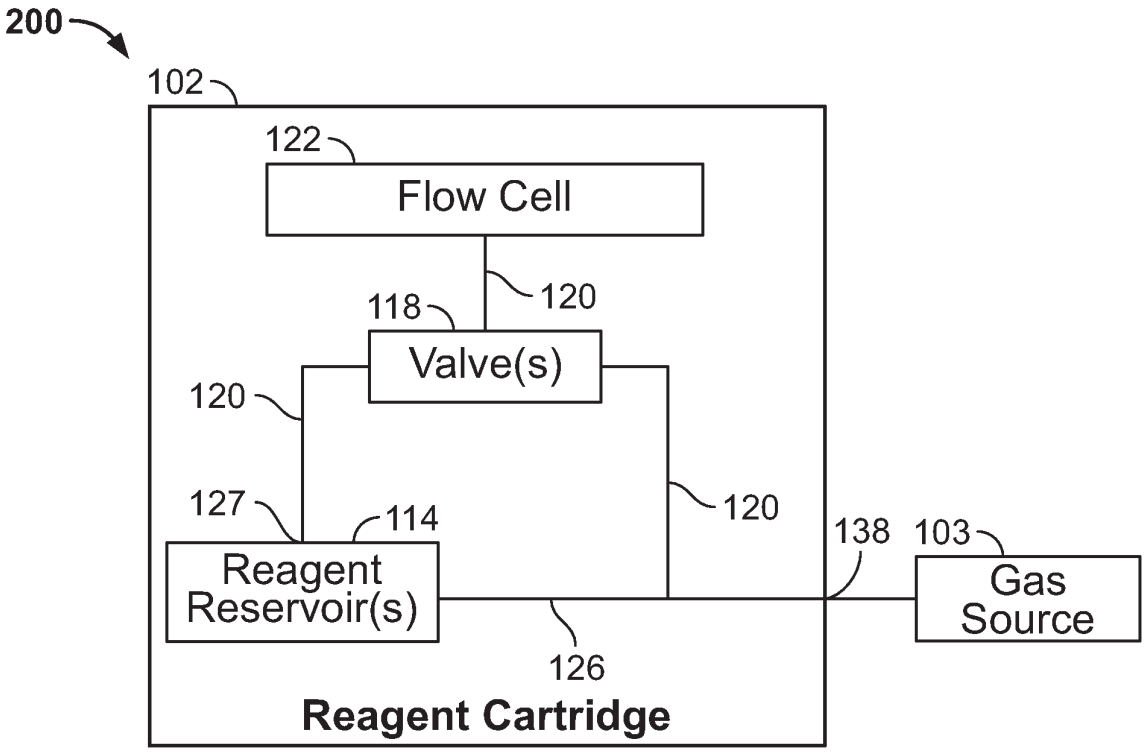

200
102
122
Flow Cell
120
118
Valve(s)
120
120
127
114
Reagent Reservoir(s)
138
103
Gas Source
126
Reagent Cartridge

FIG. 2

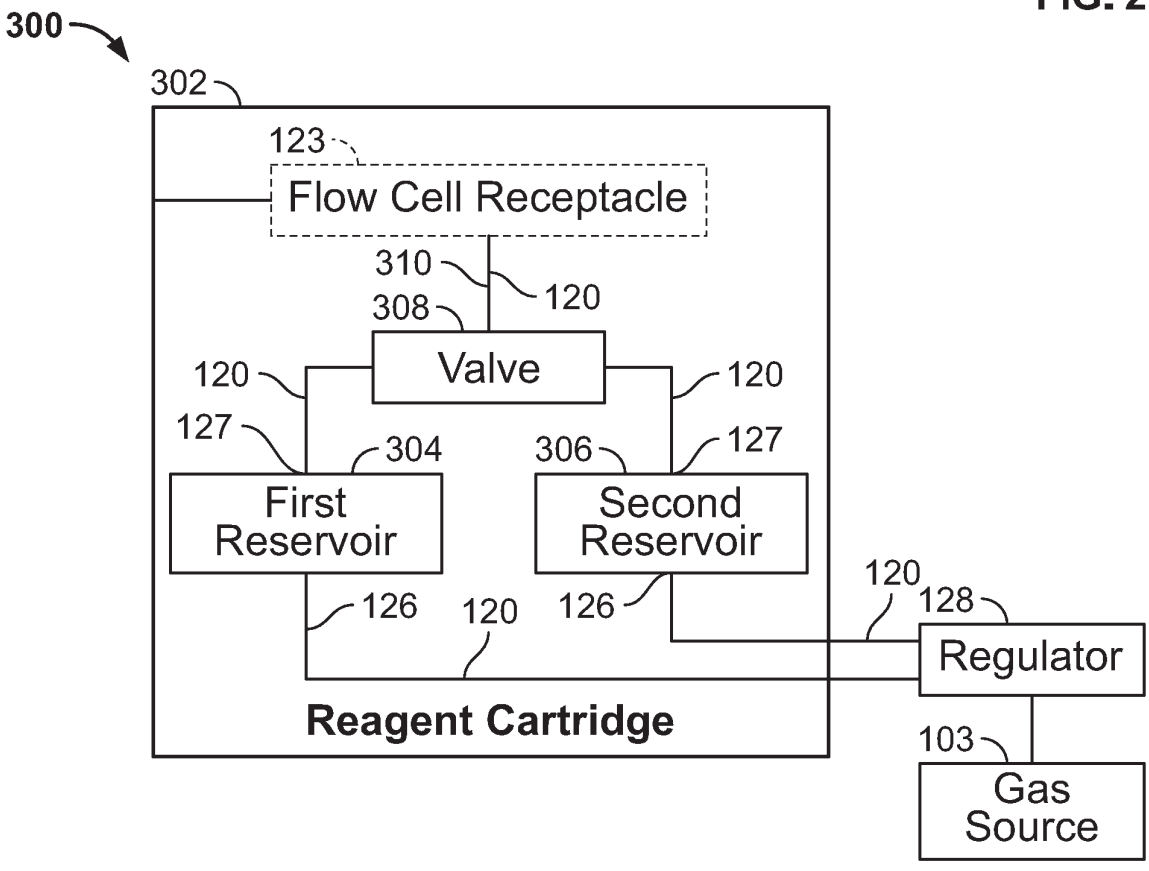

300
302
123
Flow Cell Receptacle
310
120
308
Valve
120
120
127
304
306
127
First Reservoir
Second Reservoir
120
126
120
126
128
Regulator
Reagent Cartridge
103
Gas Source

FIG. 3

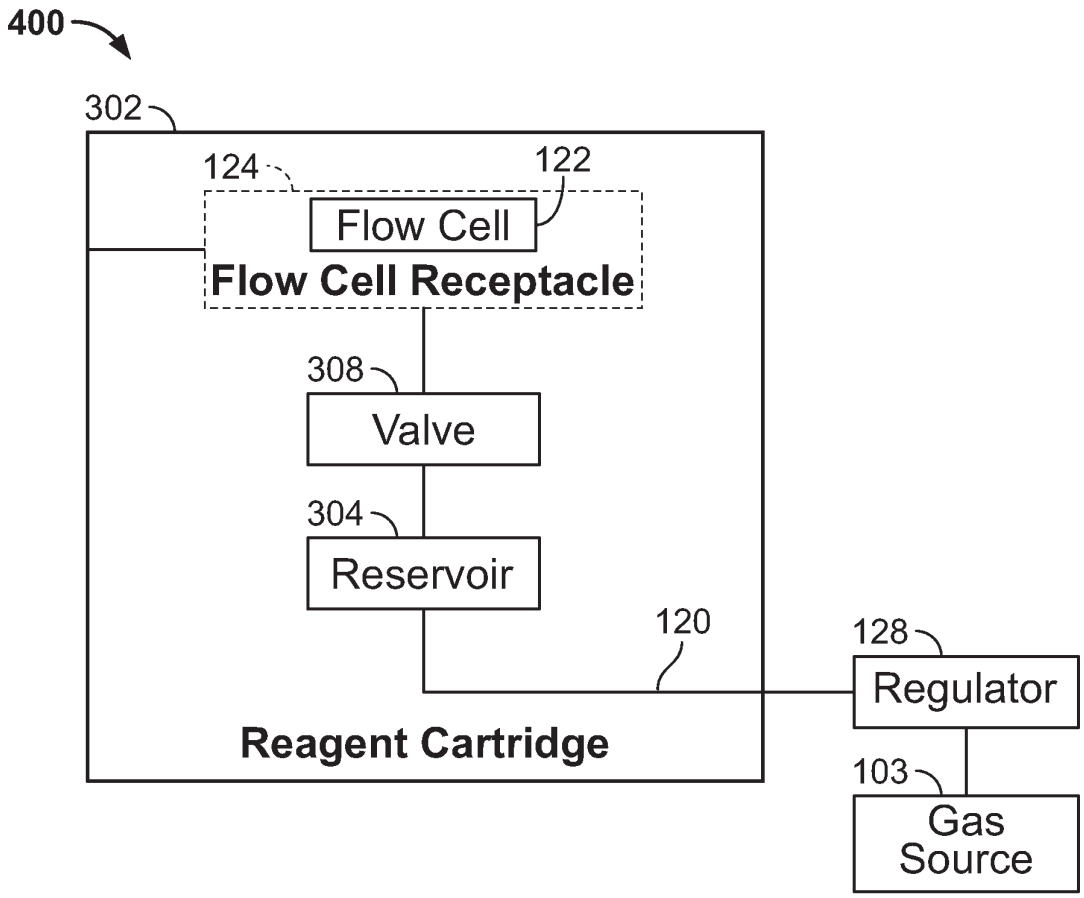

400
302
124
122
Flow Cell
Flow Cell Receptacle
308
Valve
304
Reservoir
120
128
Regulator
Reagent Cartridge
103
Gas Source

FIG. 4

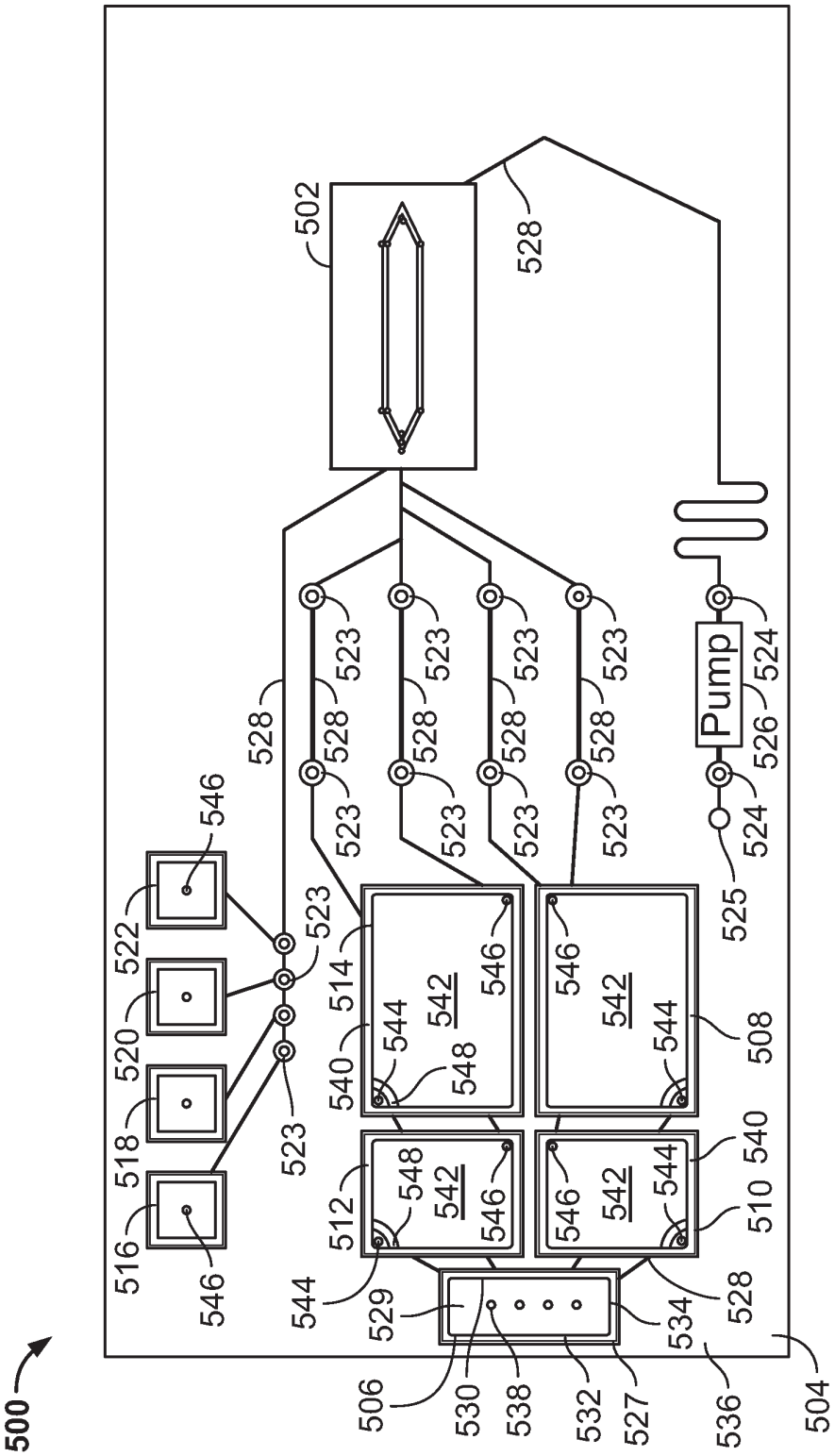

500
502
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536
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542
544
546
548
Pump

FIG. 5

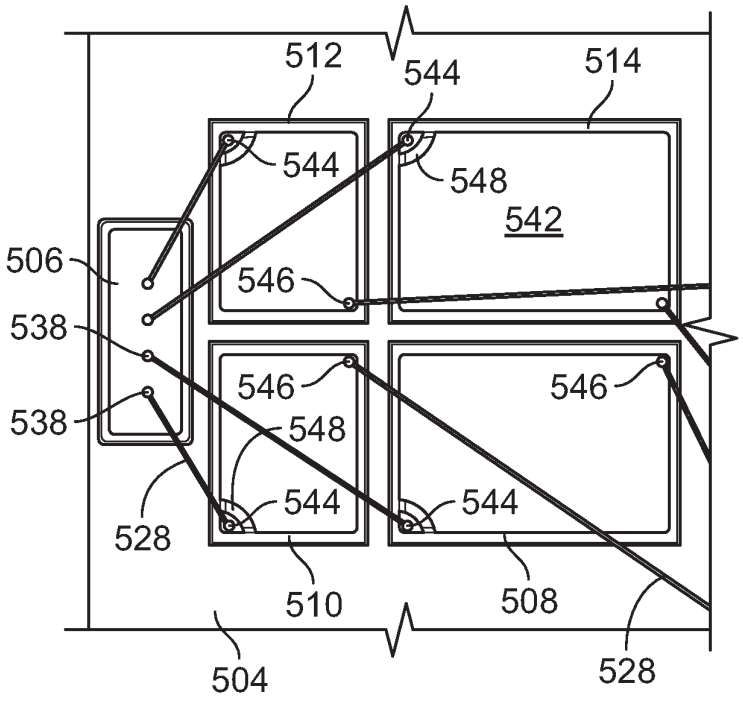

512
544
514
544
548
542
506
546
538
546
546
538
548
544
544
528
510
508
504
528

FIG. 6

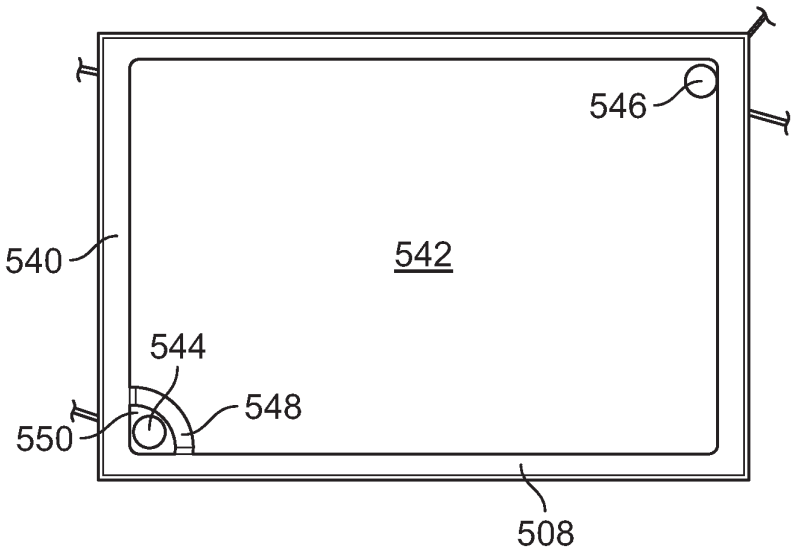

546
542
540
544
548
550
508

FIG. 7

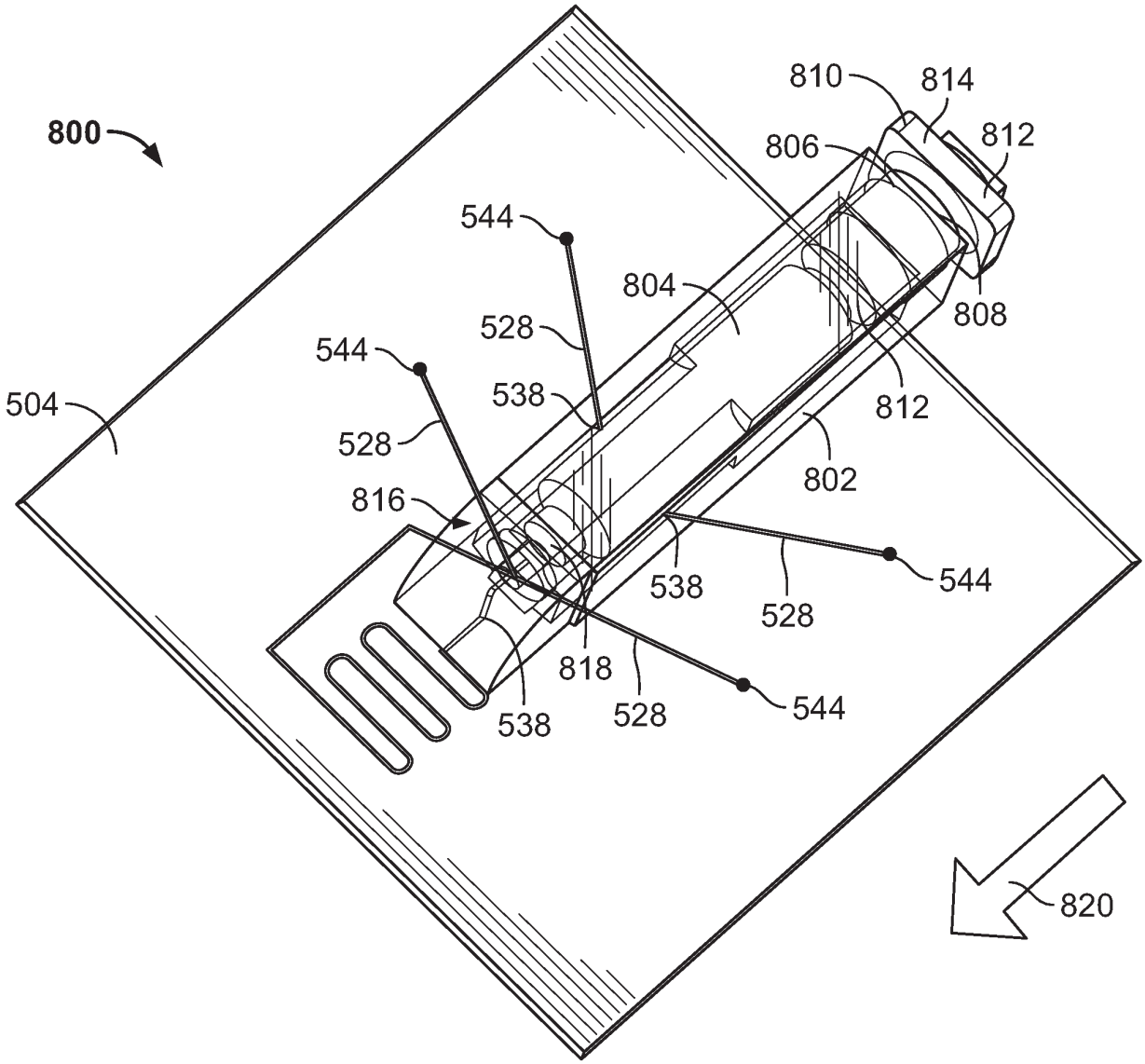

800
810
814
812
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544
804
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544
538
812
504
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802
816
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544
528
818
538
528
544
820

FIG. 8

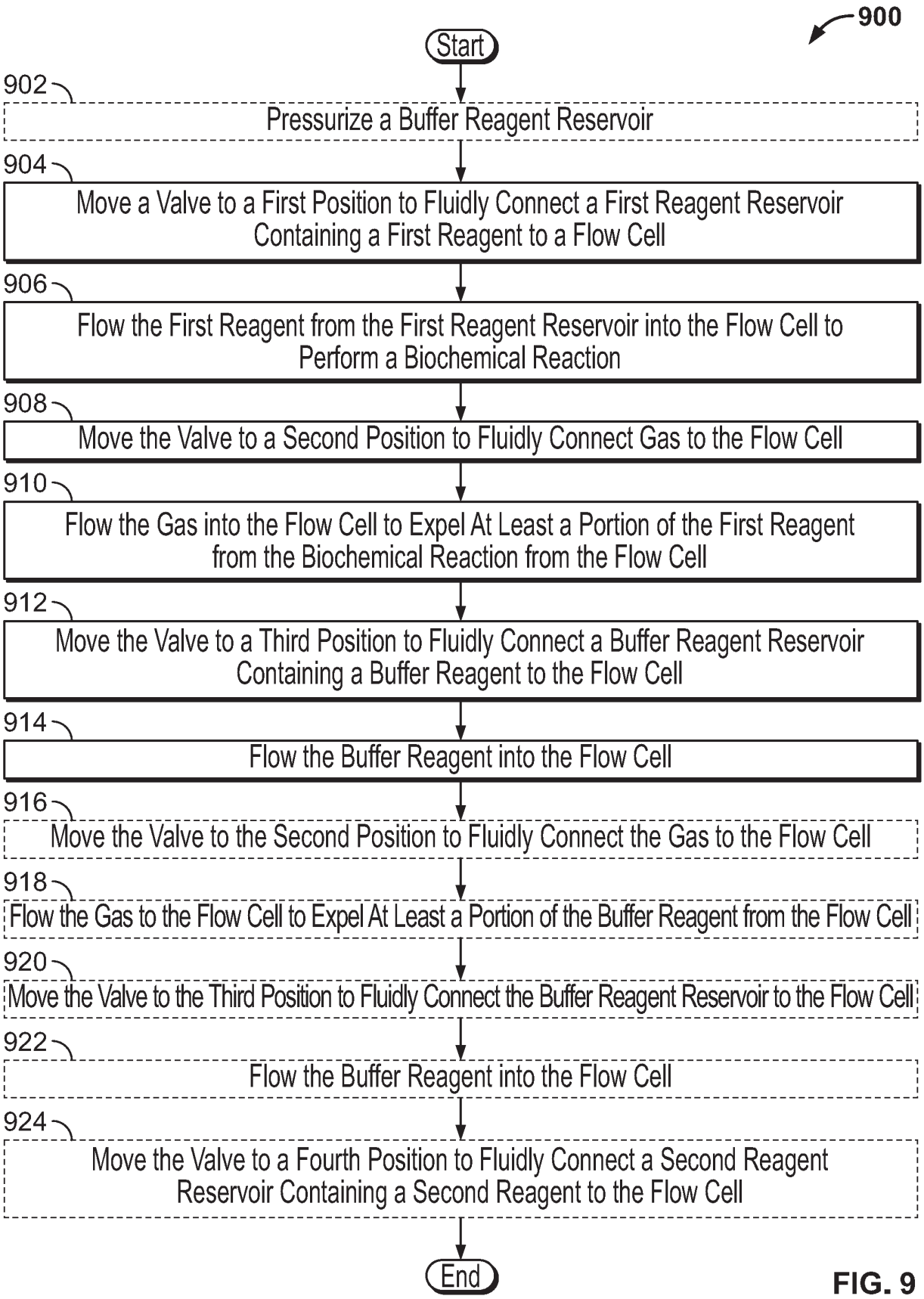

900
Start
902
Pressurize a Buffer Reagent Reservoir
904
Move a Valve to a First Position to Fluidly Connect a First Reagent Reservoir Containing a First Reagent to a Flow Cell
906
Flow the First Reagent from the First Reagent Reservoir into the Flow Cell to Perform a Biochemical Reaction
908
Move the Valve to a Second Position to Fluidly Connect Gas to the Flow Cell
910
Flow the Gas into the Flow Cell to Expel At Least a Portion of the First Reagent from the Biochemical Reaction from the Flow Cell
912
Move the Valve to a Third Position to Fluidly Connect a Buffer Reagent Reservoir Containing a Buffer Reagent to the Flow Cell
914
Flow the Buffer Reagent into the Flow Cell
916
Move the Valve to the Second Position to Fluidly Connect the Gas to the Flow Cell
918
Flow the Gas to the Flow Cell to Expel At Least a Portion of the Buffer Reagent from the Flow Cell
920
Move the Valve to the Third Position to Fluidly Connect the Buffer Reagent Reservoir to the Flow Cell
922
Flow the Buffer Reagent into the Flow Cell
924
Move the Valve to a Fourth Position to Fluidly Connect a Second Reagent Reservoir Containing a Second Reagent to the Flow Cell
End

FIG. 9

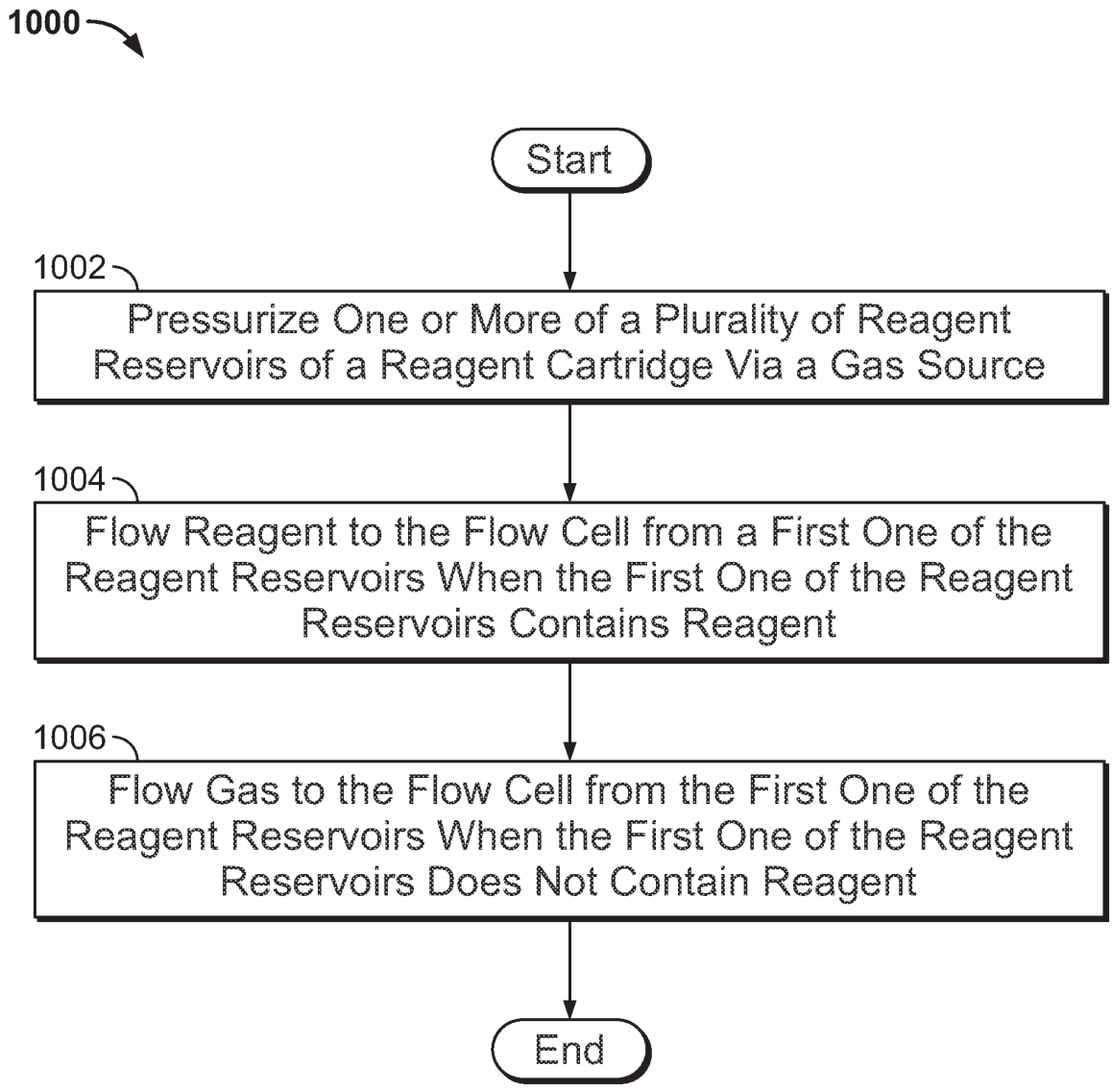

1000
Start
1002
Pressurize One or More of a Plurality of Reagent Reservoirs of a Reagent Cartridge Via a Gas Source
1004
Flow Reagent to the Flow Cell from a First One of the Reagent Reservoirs When the First One of the Reagent Reservoirs Contains Reagent
1006
Flow Gas to the Flow Cell from the First One of the Reagent Reservoirs When the First One of the Reagent Reservoirs Does Not Contain Reagent
End

FIG. 10