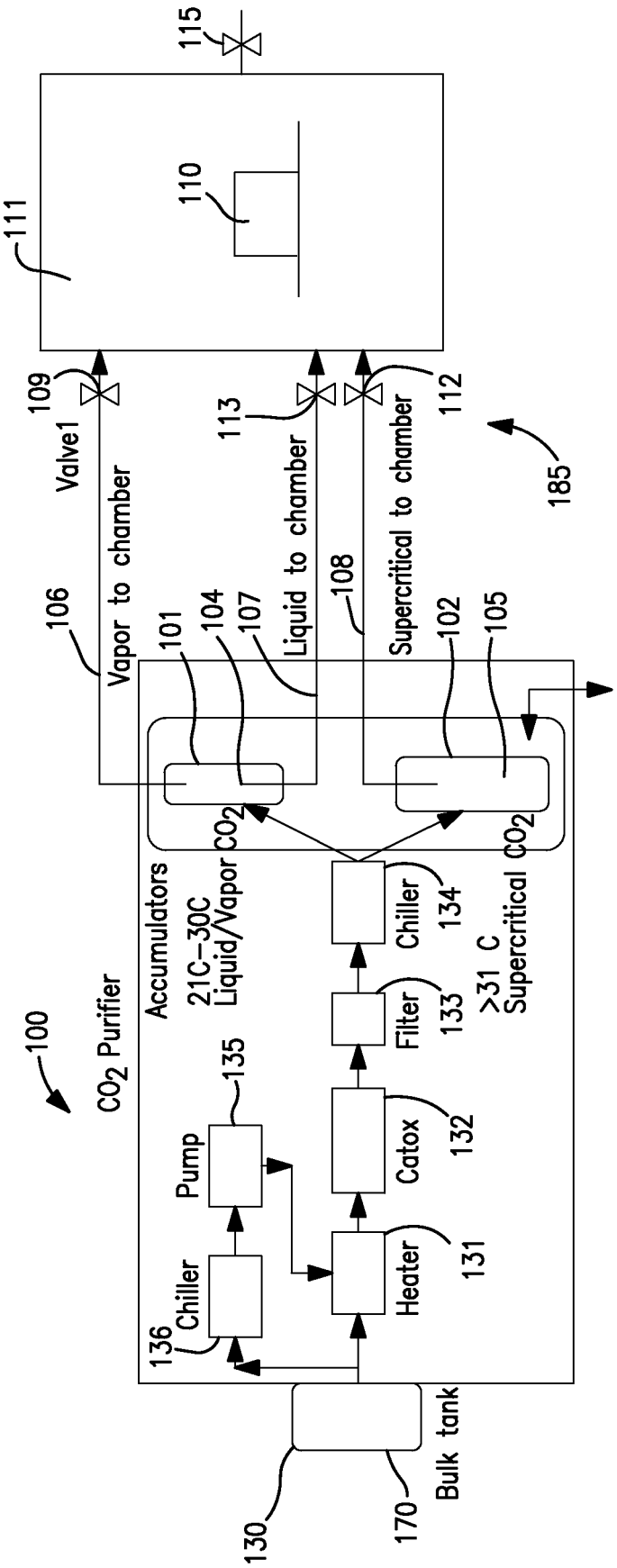

115
110
111
109
Valve1
113
112
185
106
Vapor to chamber
101
104
107
Liquid to chamber
108
Supercritical to chamber
102
105
100
$CO_2$ Purifier
Accumulators
21C–30C
Liquid/Vapor
$CO_2$
Chiller
134
>31 C
Supercritical
$CO_2$
Filter
133
Catox
132
Heater
131
Pump
135
Chiller
136
Bulk tank
130
170

FIG. 1

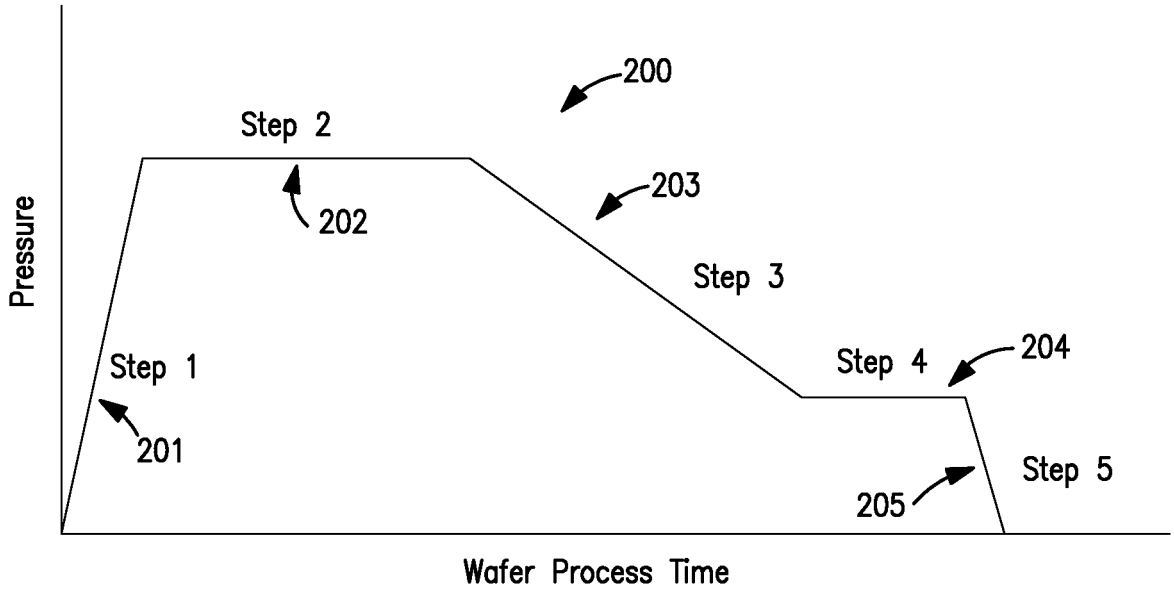

200
Step 2
202
203
Step 3
Step 4
204
Step 1
201
205
Step 5
Pressure
Wafer Process Time

FIG. 2

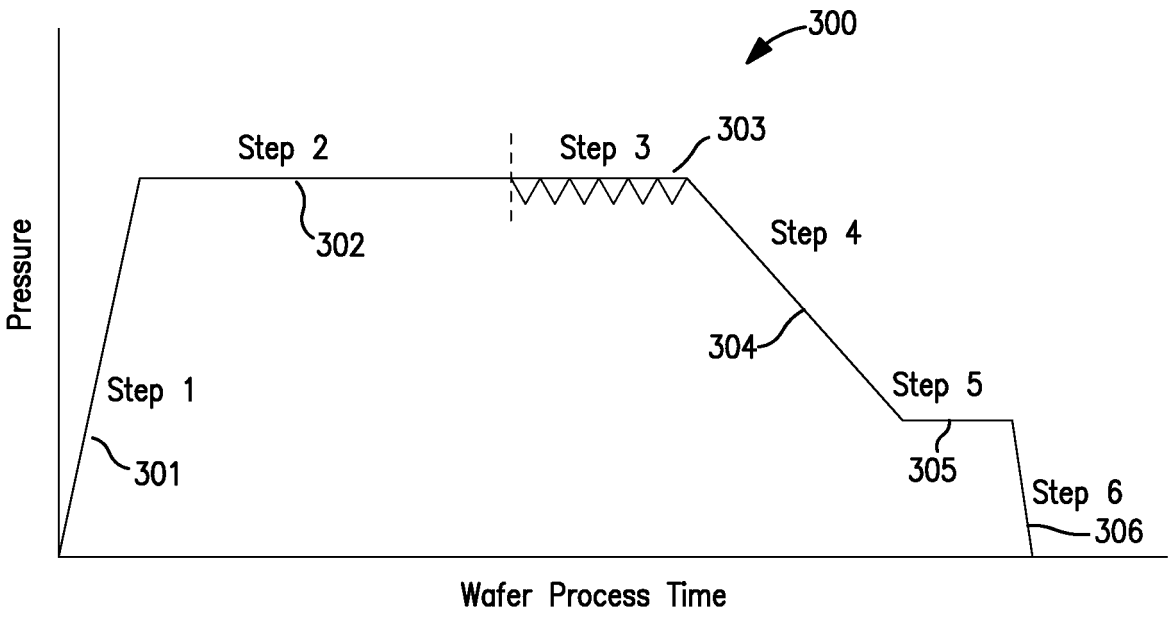

300
Step 2
Step 3
303
302
Step 4
304
Step 1
301
Step 5
305
Step 6
306
Pressure
Wafer Process Time

FIG. 3

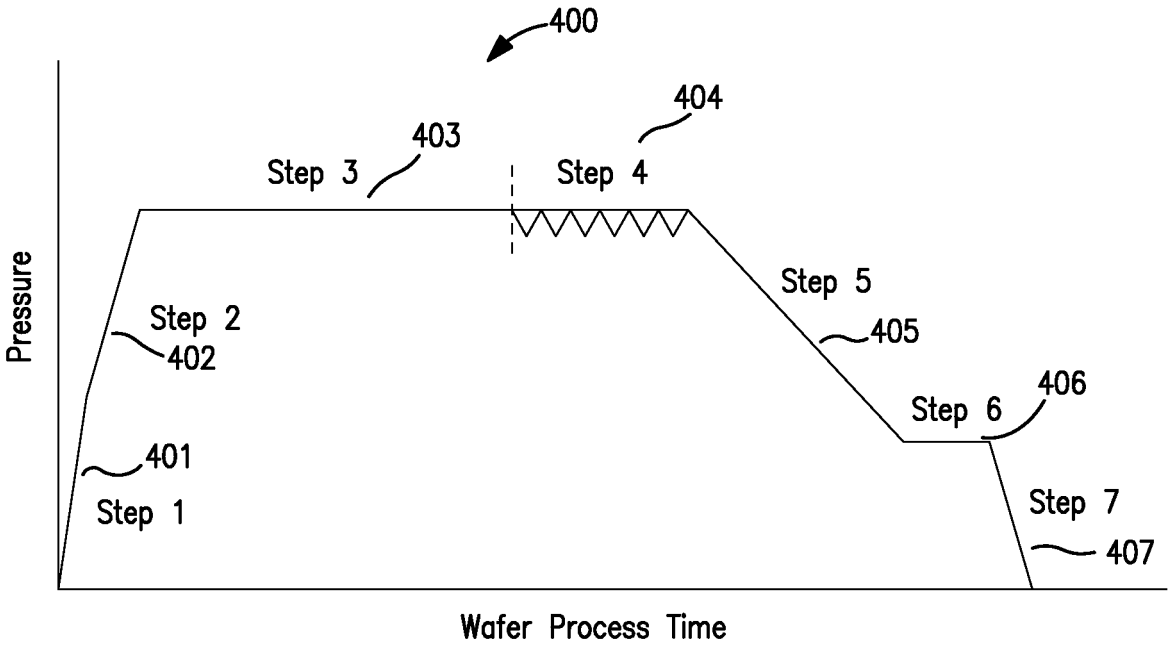

400
404
403
Step 3
Step 4
Step 5
405
Step 2
402
406
Step 6
401
Step 1
Step 7
407
Pressure
Wafer Process Time

FIG. 4

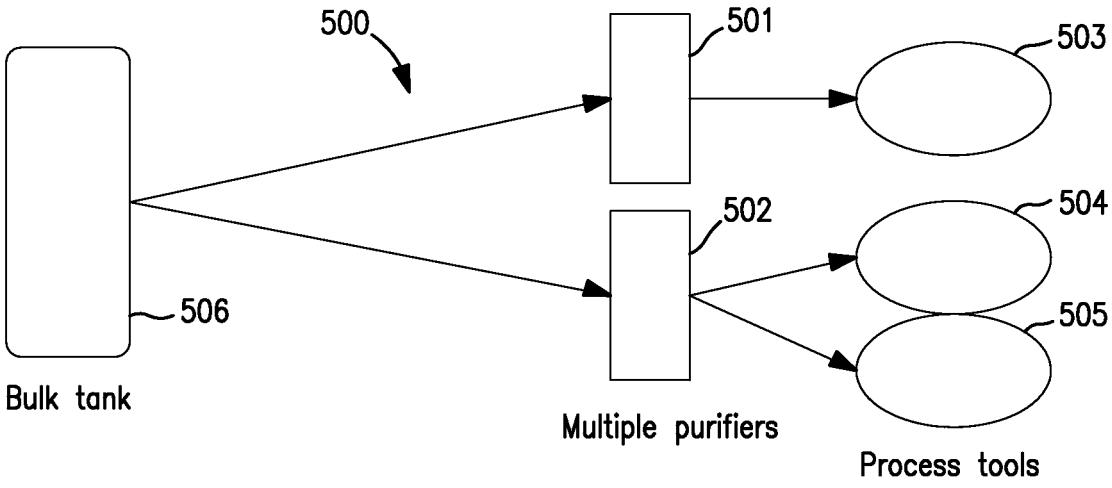

500
501
503
502
504
505
506
Bulk tank
Multiple purifiers
Process tools

FIG. 5

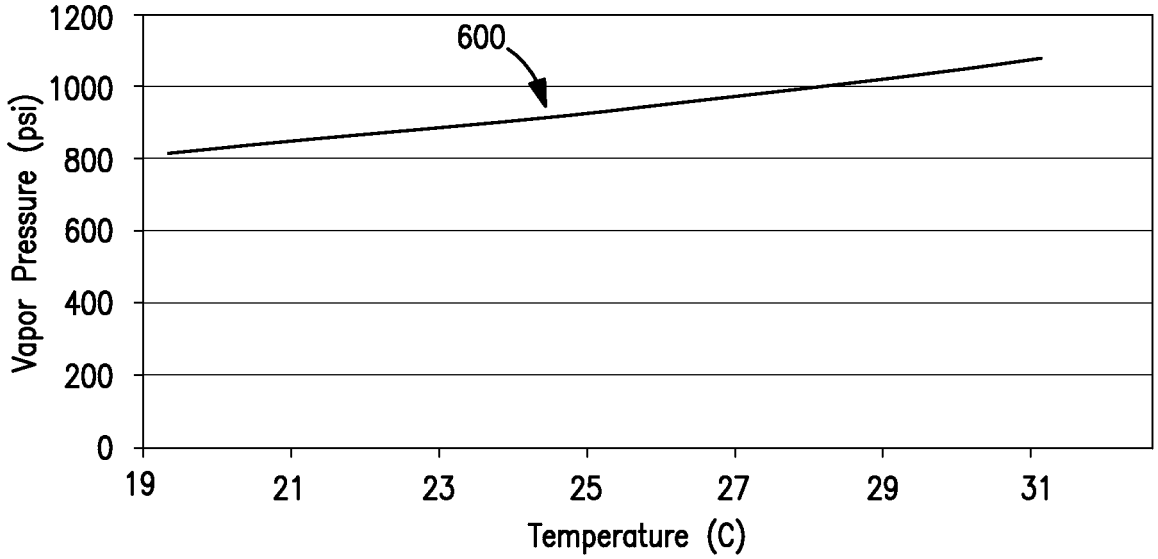

1200
1000
800
600
400
200
0
Vapor Pressure (psi)
600
19
21
23
25
27
29
31
Temperature (C)

FIG. 6