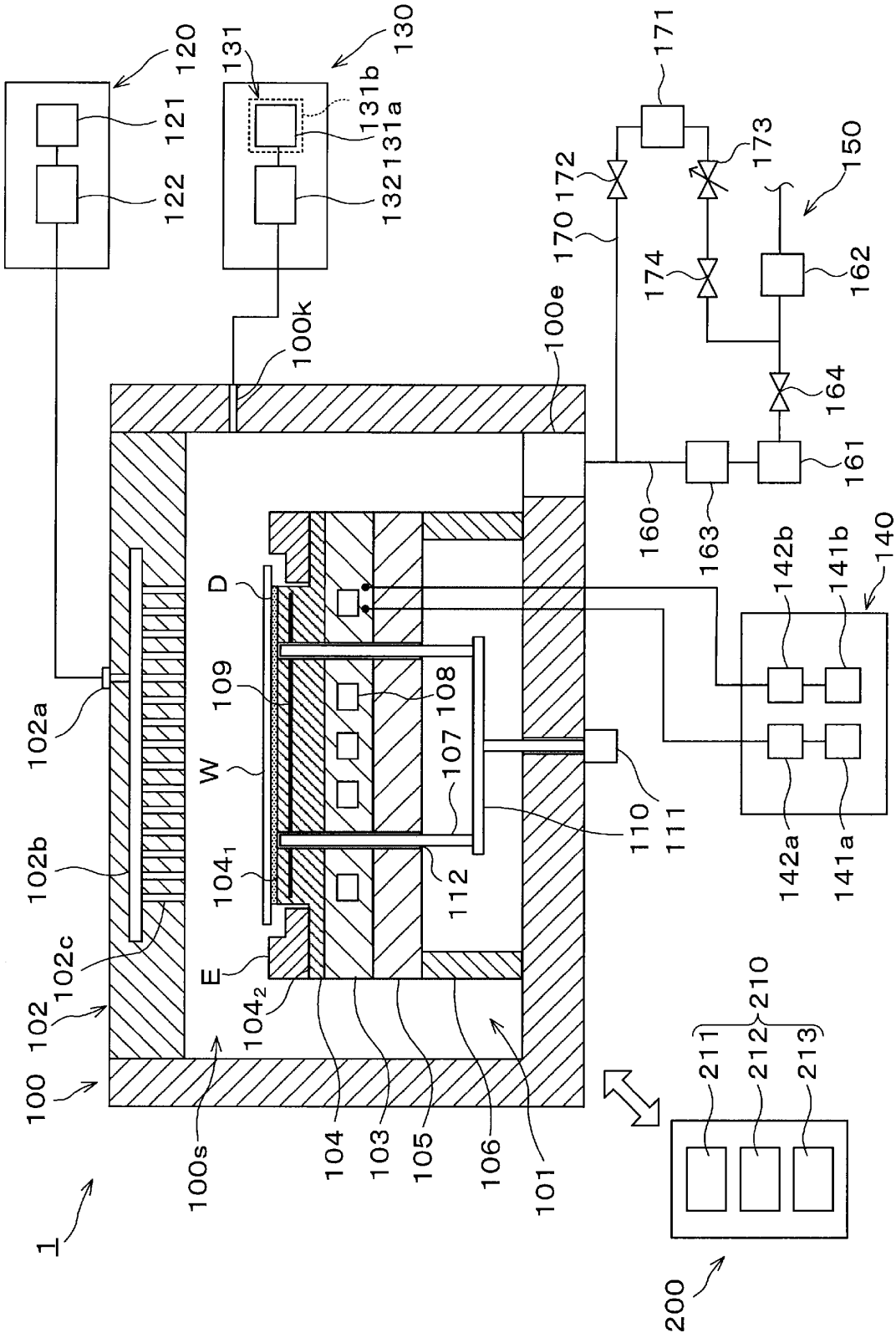
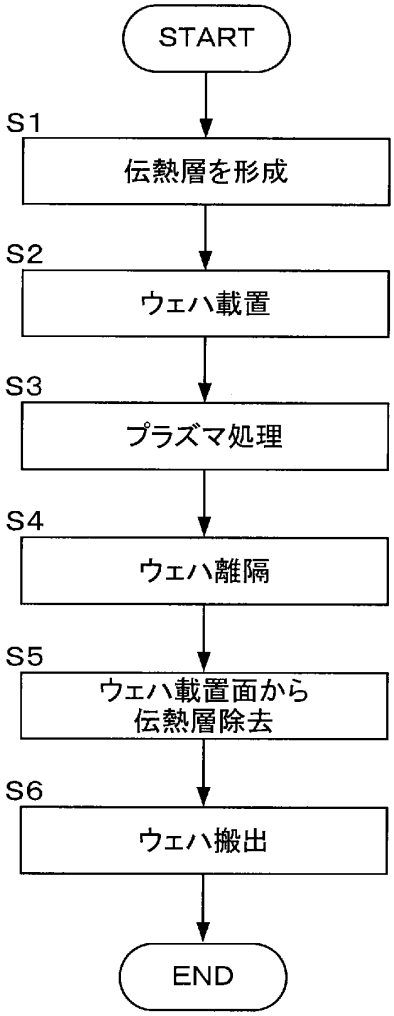
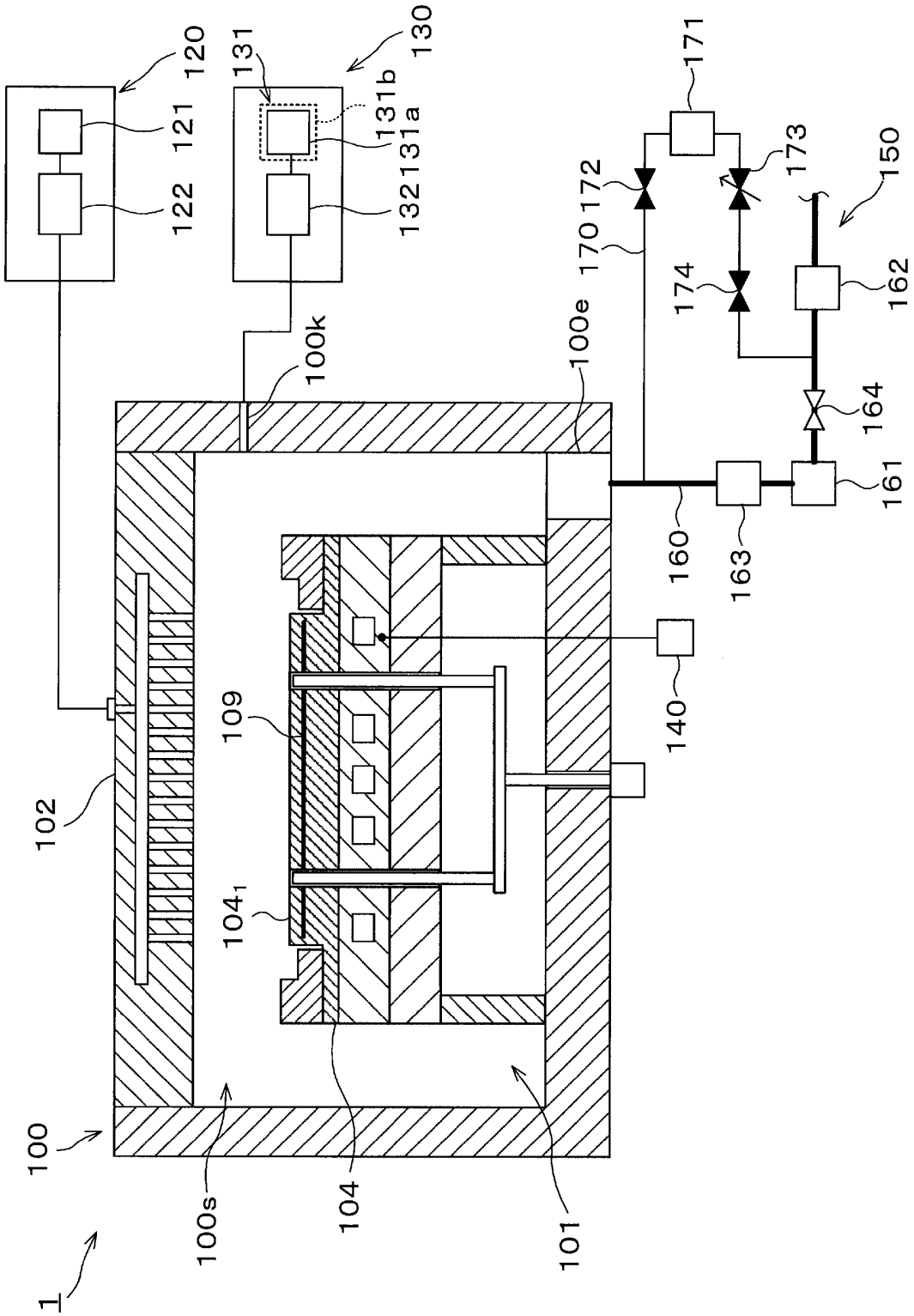
[図1]


1
100
100s
100k
100e
101
102
102a
102b
102c
103
104
104₁
104₂
105
106
107
108
109
110
111
112
120
121
122
130
131
131a
131b
132
140
141a
141b
142a
142b
150
160
161
162
163
164
170
171
172
173
174
200
210
211
212
213
D
E
W

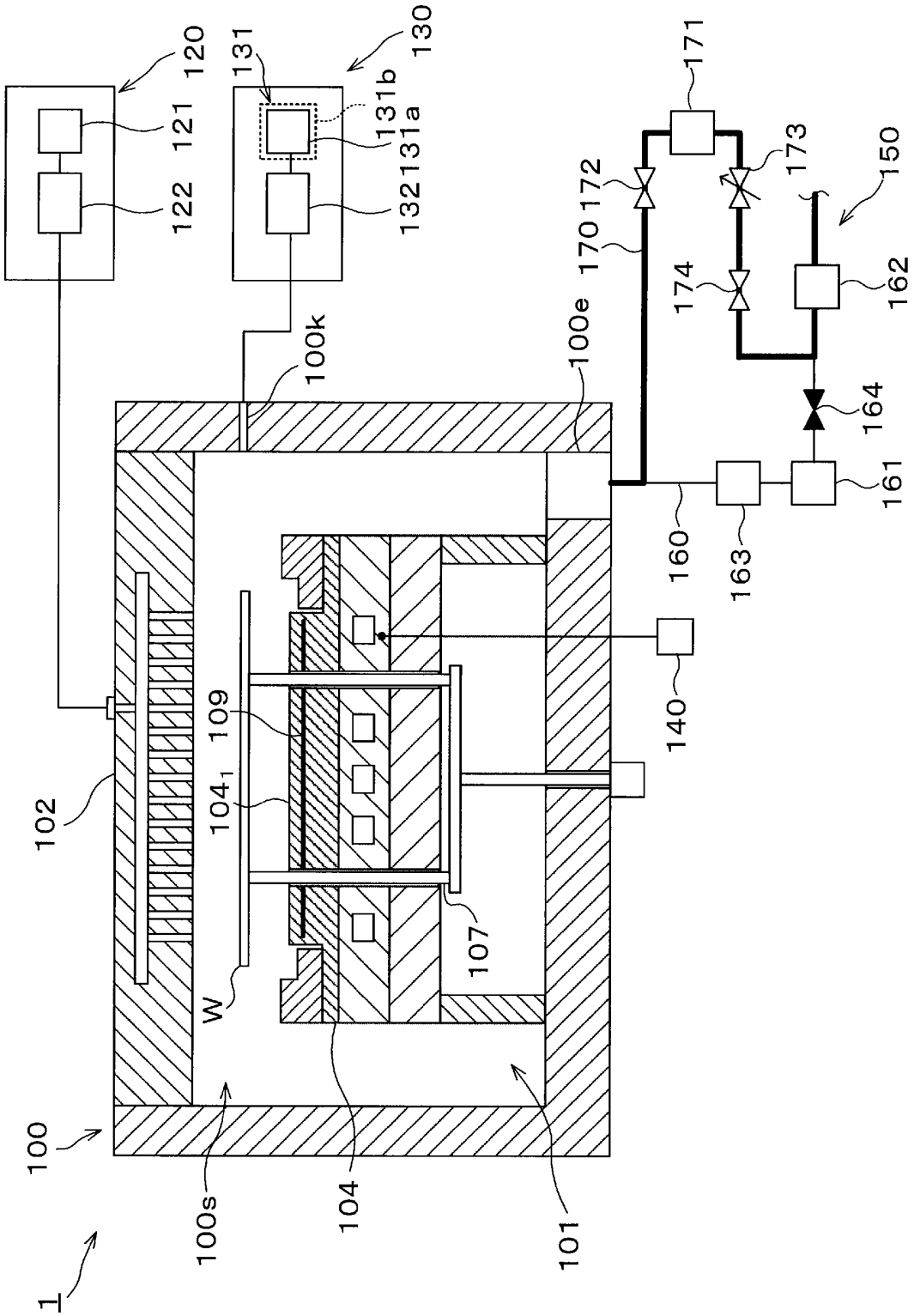
[図2]


START
S1
伝熱層を形成
S2
ウェハ載置
S3
プラズマ処理
S4
ウェハ離隔
S5
ウェハ載置面から
伝熱層除去
S6
ウェハ搬出
END

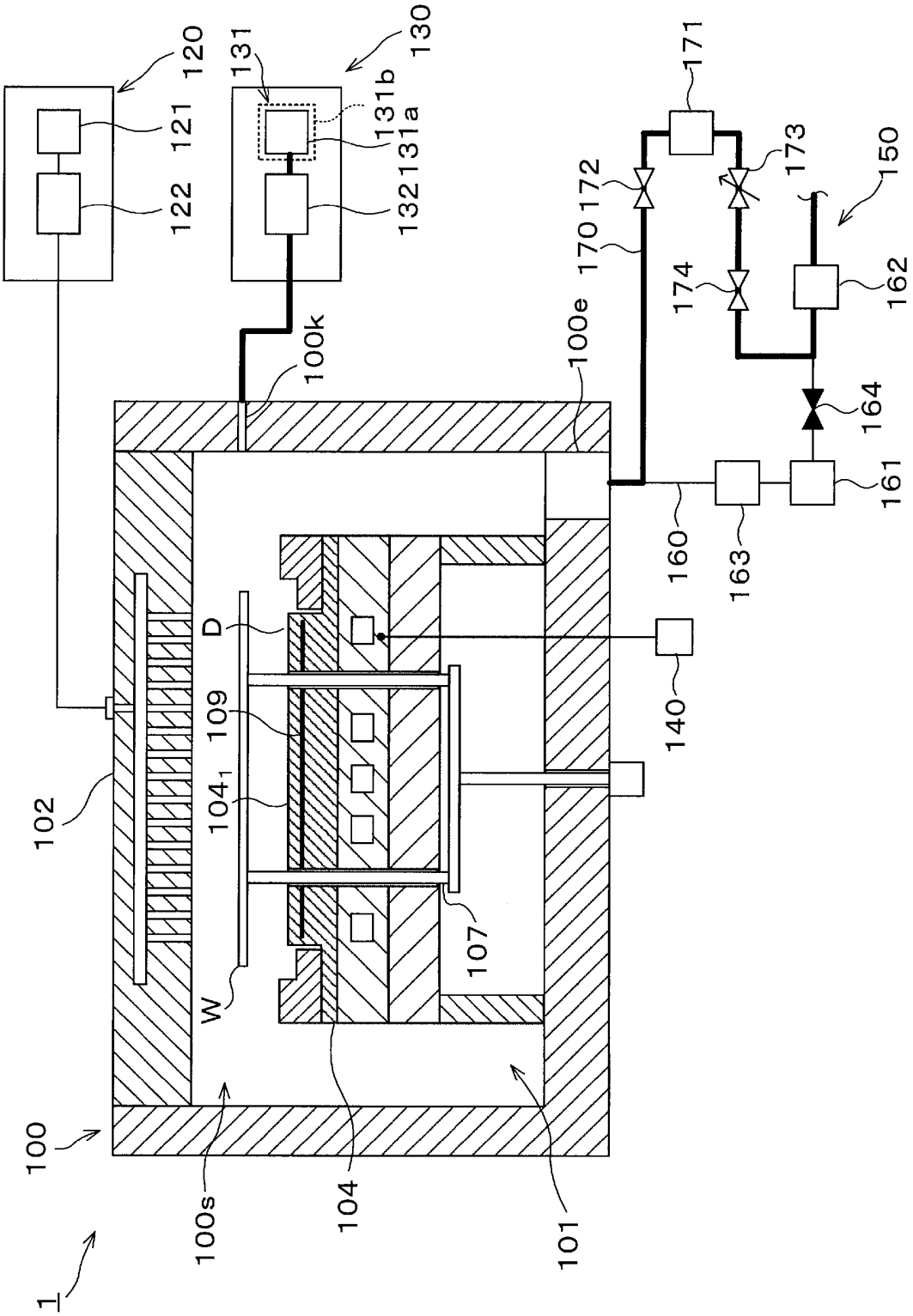
[図3]


120
121
122
131
131b
131a
132
130
171
173
150
172
170
174
162
100k
100e
164
161
160
163
140
109
102
104_1
100
100s
104
101
1

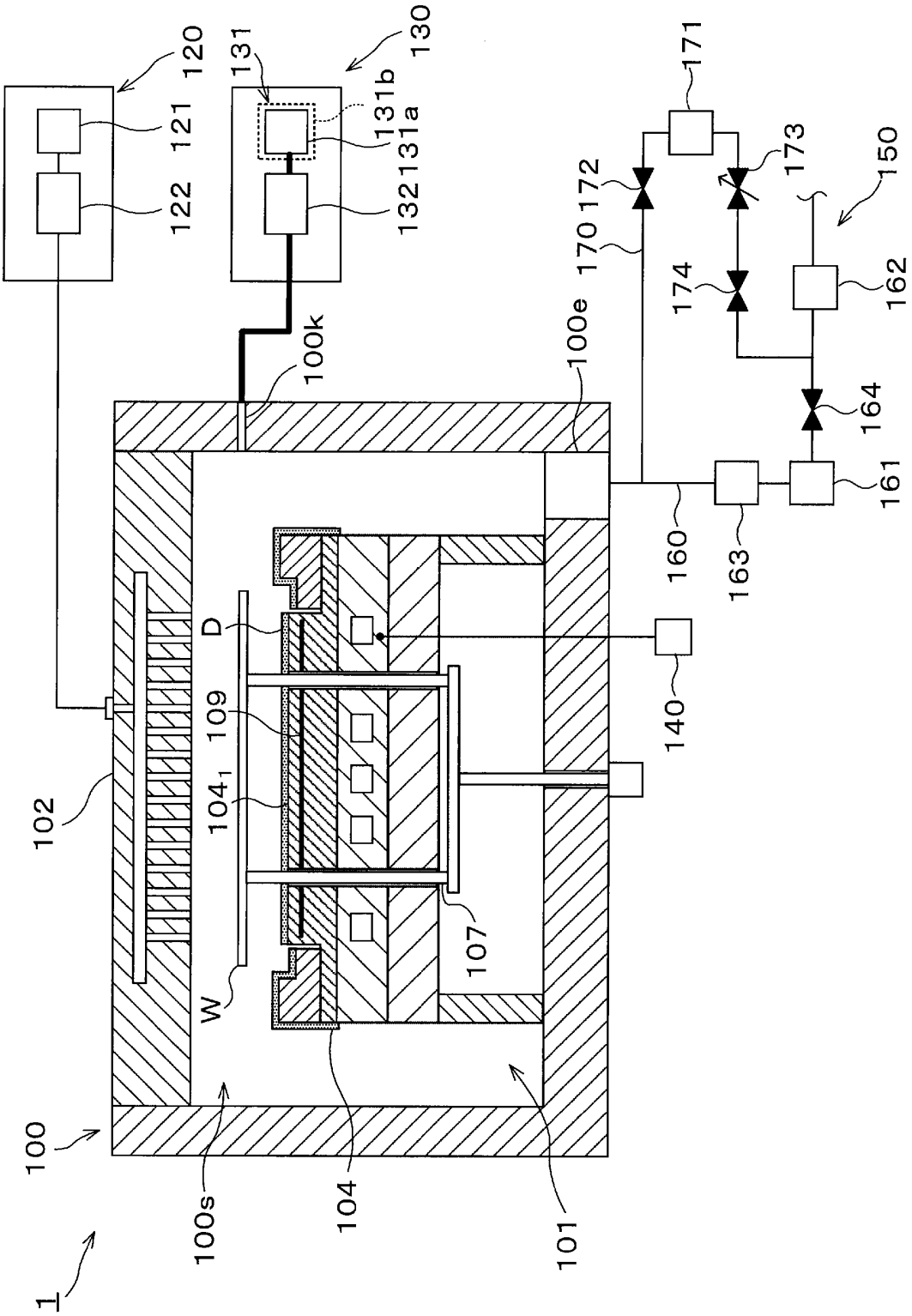
[図4]


120
121
122
131
131b
131a
132
130
171
173
150
172
170
174
162
100k
100e
164
161
160
163
140
109
102
104₁
107
W
100
100s
104
101
1

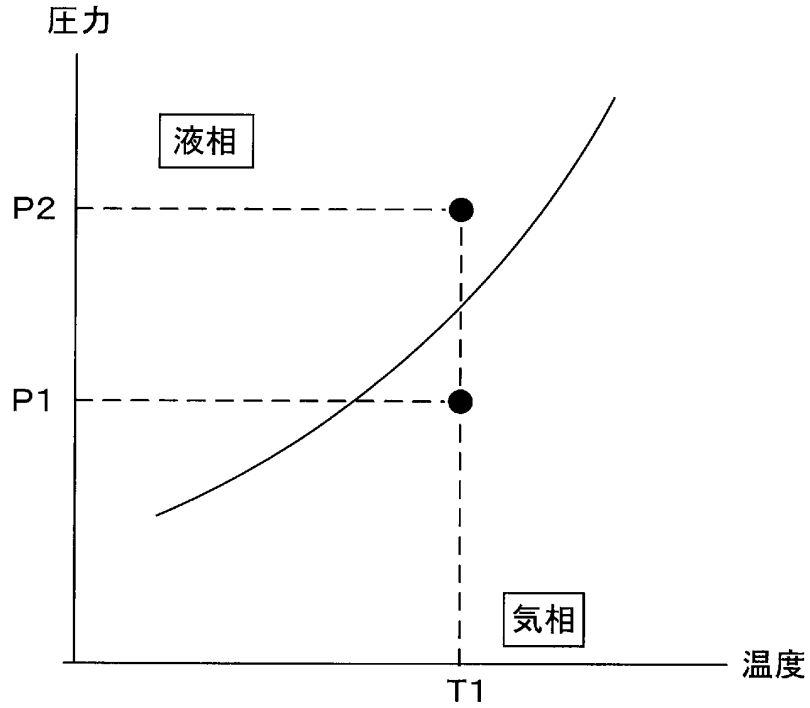
[図5]


120
121
122
131
131b
131a
132
130
171
173
150
172
170
174
162
100k
100e
164
161
160
163
140
D
109
104
1
102
107
W
100
100s
104
101
1

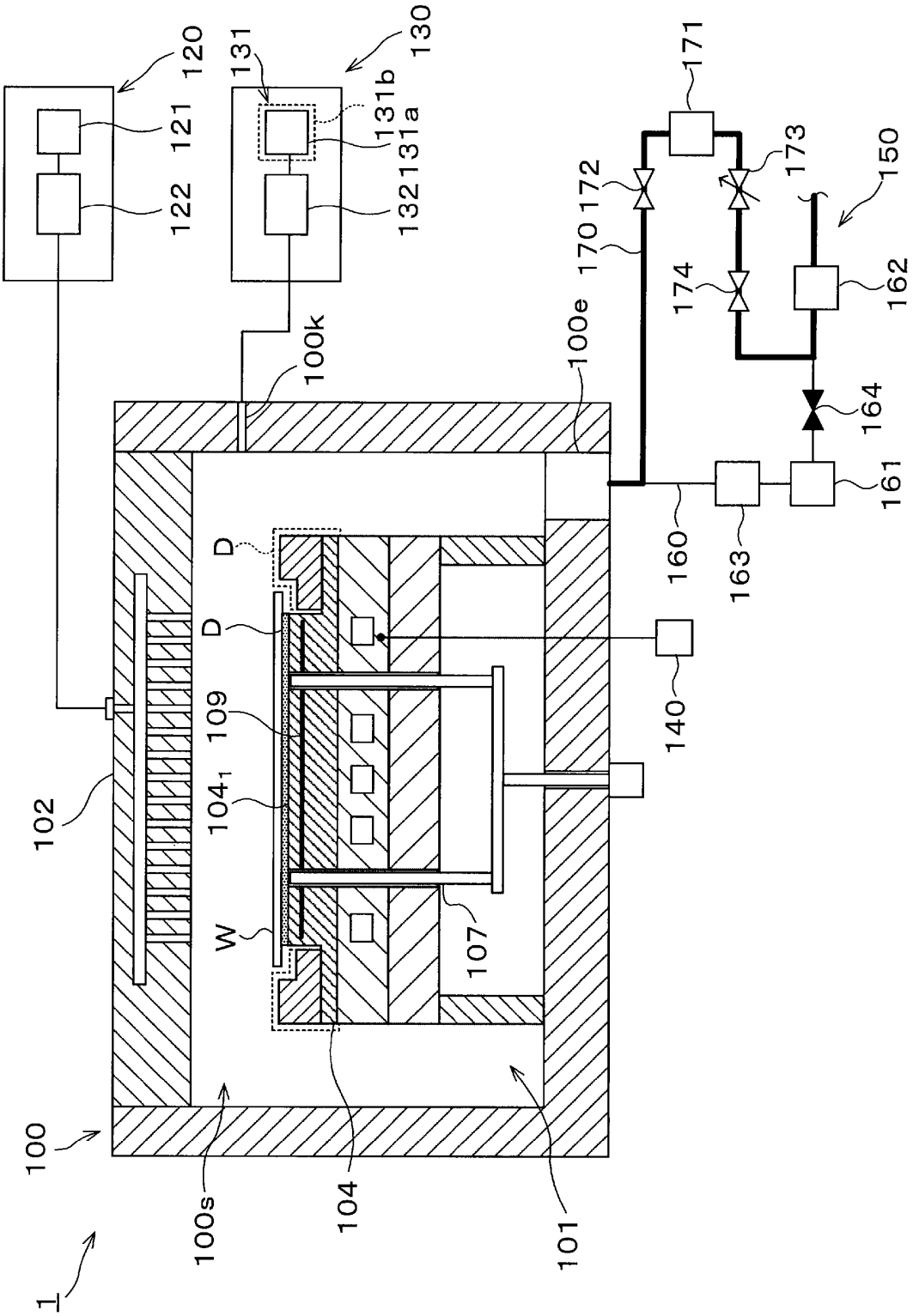
[図6]


120
121
122
131
131b
131a
132
130
171
173
150
172
170
174
162
100k
100e
164
161
160
163
D
140
109
102
104₁
107
W
100
100s
104
101
1

[図7]



[図8]


120
121
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131b
131a
132
130
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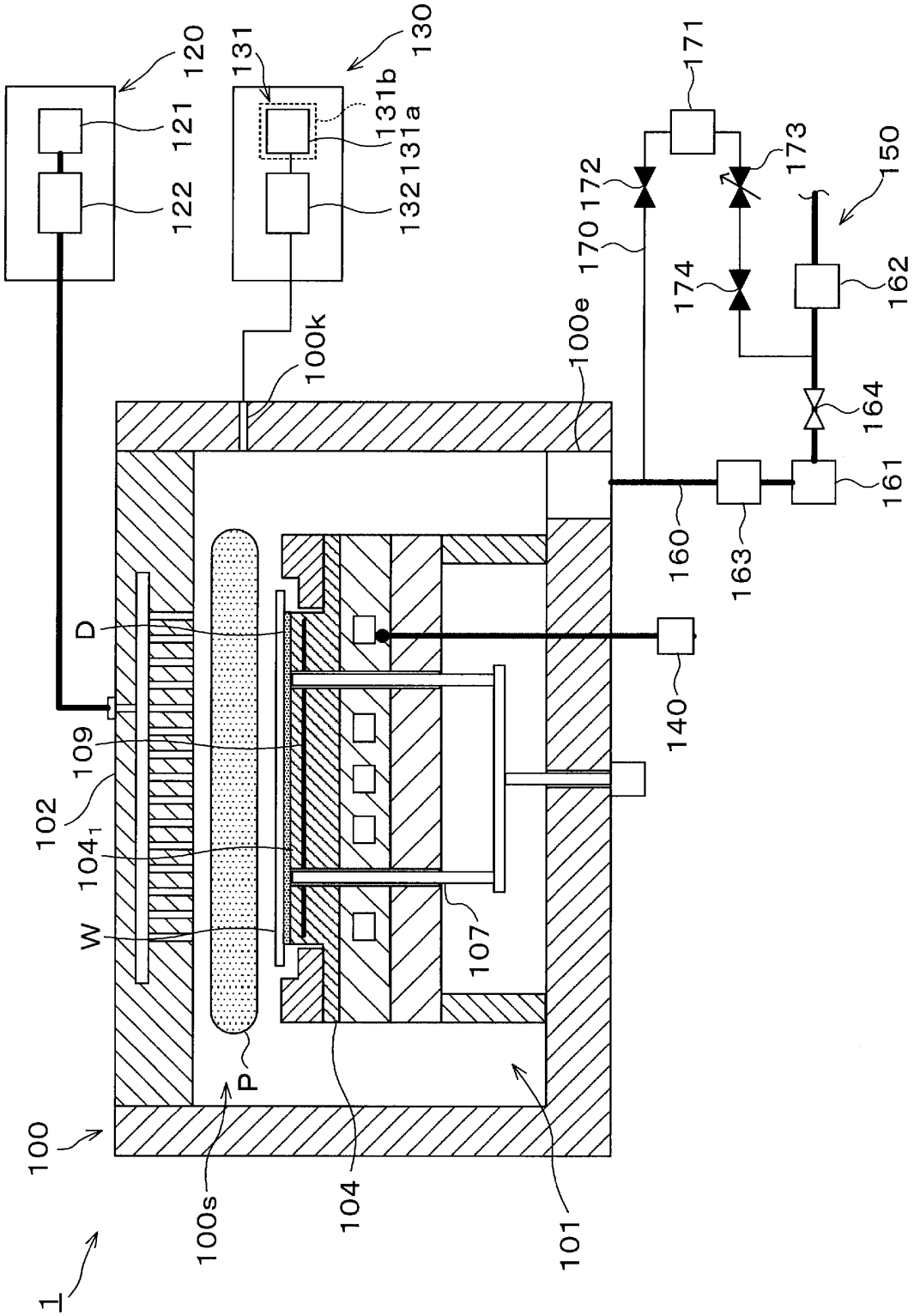
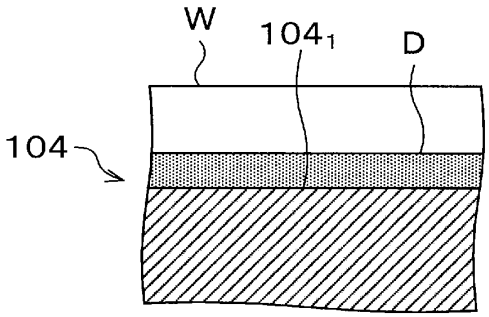
173
150
172
170
174
162
100k
100e
164
161
160
163
D
D
140
109
102
104₁
W
107
100
100s
104
101
1

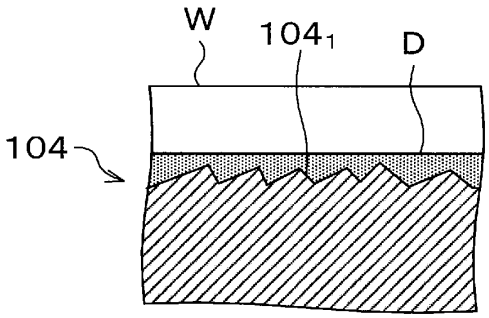
[図9]


120
121
122
131
131b
131a
132
130
171
173
150
172
170
174
162
100k
100e
164
161
160
163
D
140
109
102
104₁
W
107
P
100
100s
104
101
1

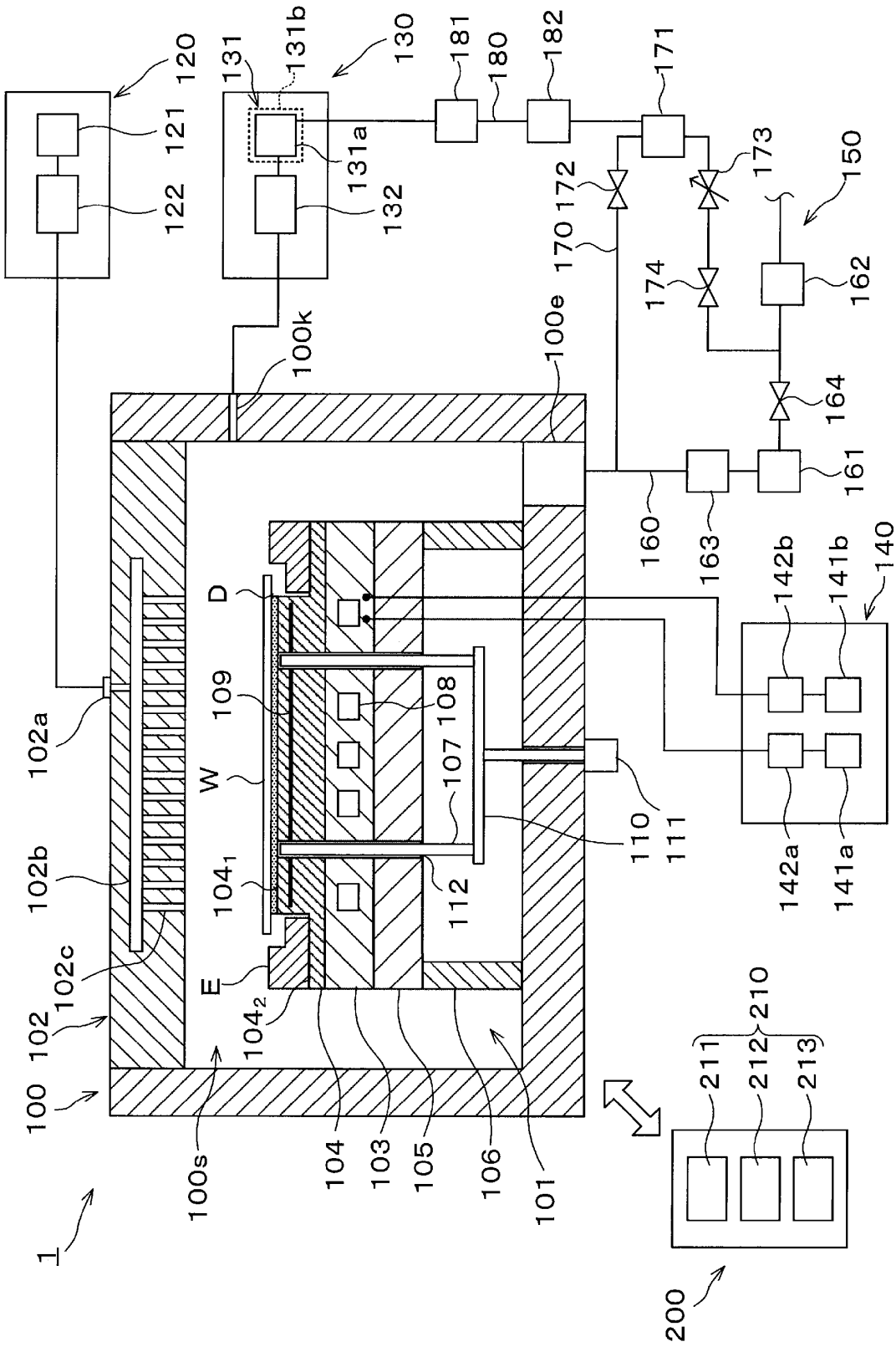
[図10]



[図11]



[図12]


120
121
122
131
131b
131a
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130
181
180
182
171
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170
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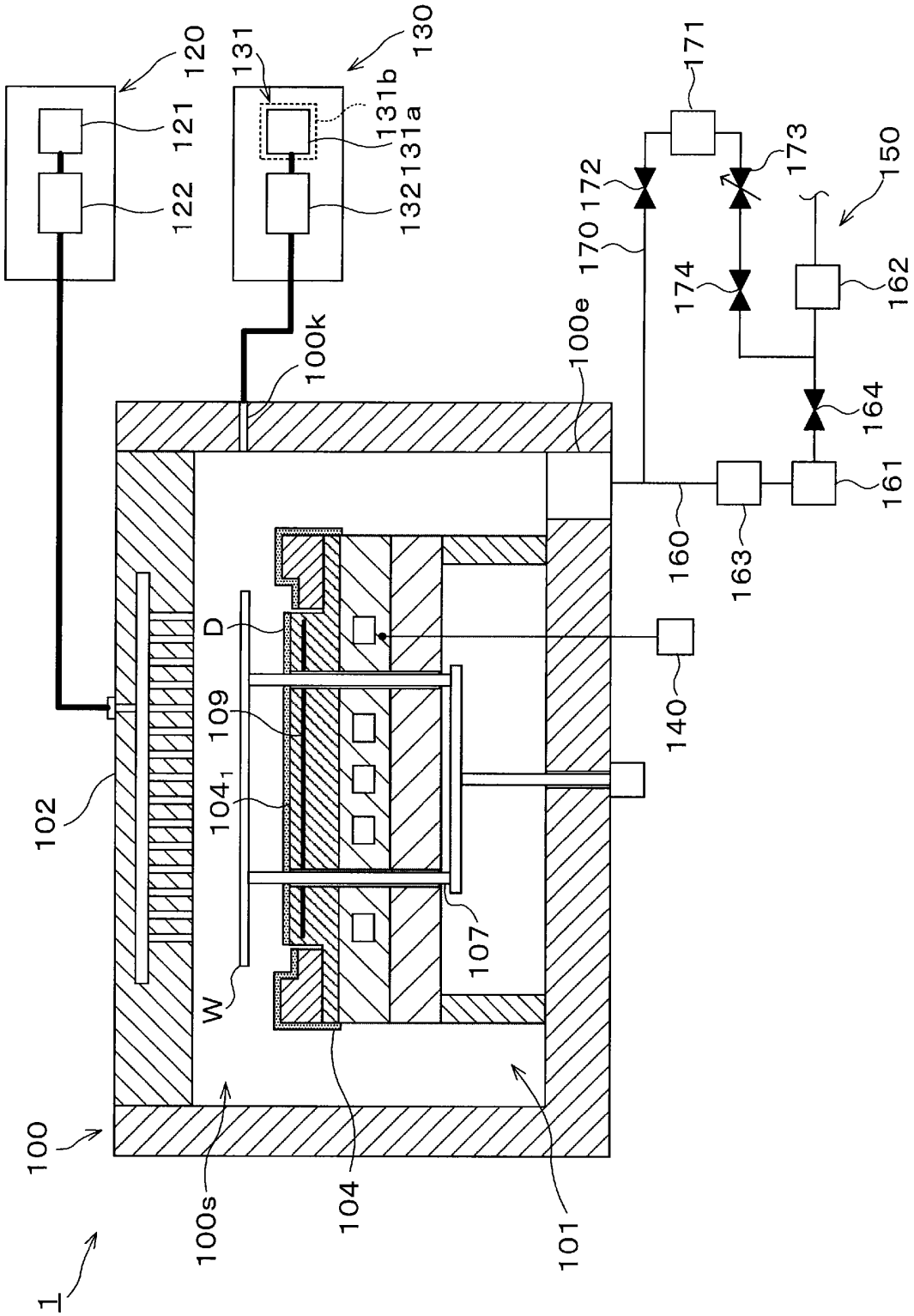
162
164
161
160
163
100e
100k
140
142b
141b
142a
141a
D
109
108
107
W
102a
102b
102c
102
100
104_1
104_2
E
112
110
111
100s
104
103
105
106
101
1
210
211
212
213
200

[図13]


120
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131b
131a
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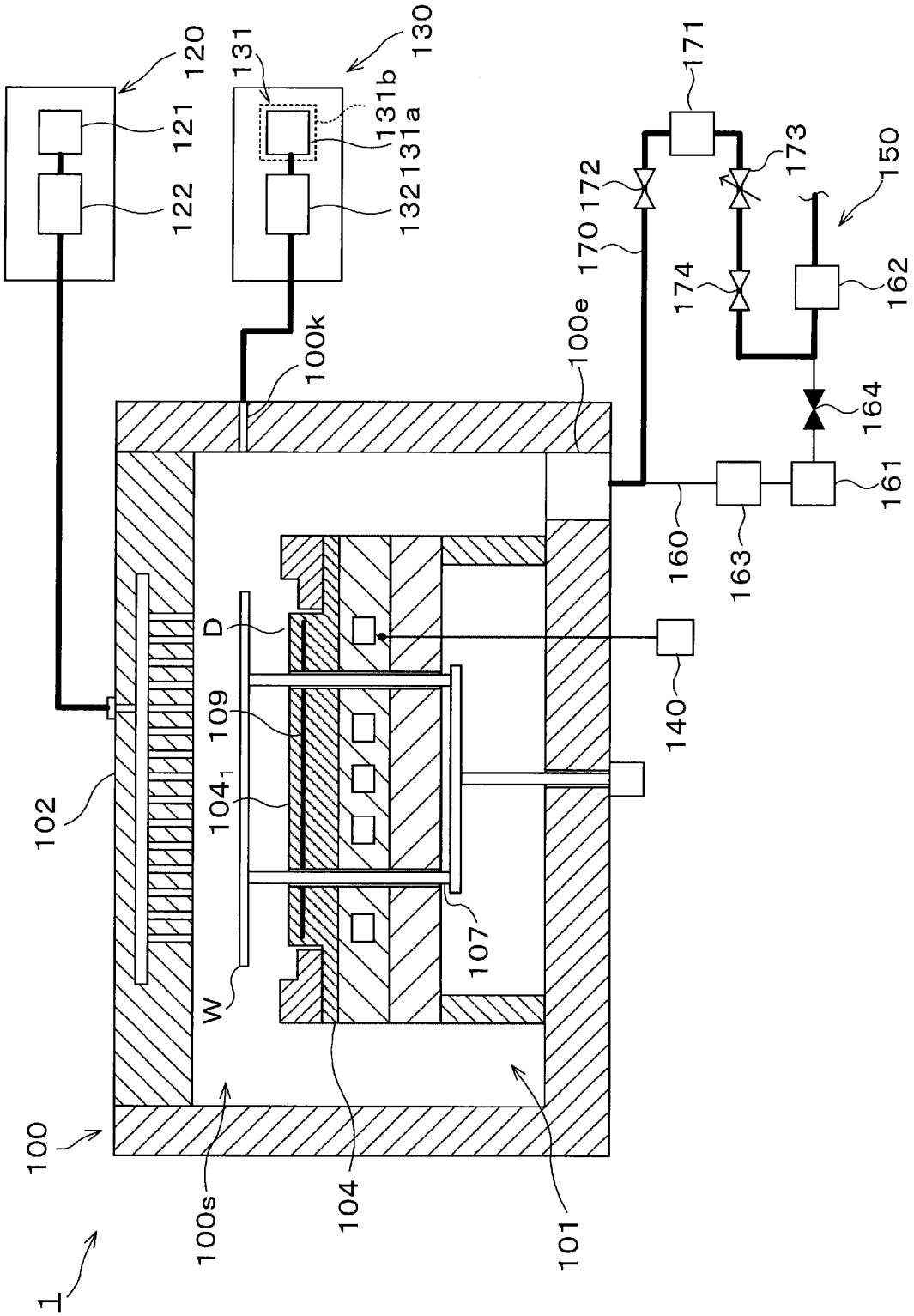
171
173
150
172
170
174
162
100k
100e
164
161
160
163
D
140
109
102
104₁
107
W
100
100s
104
101
1

[図14]


120
121
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131b
131a
132
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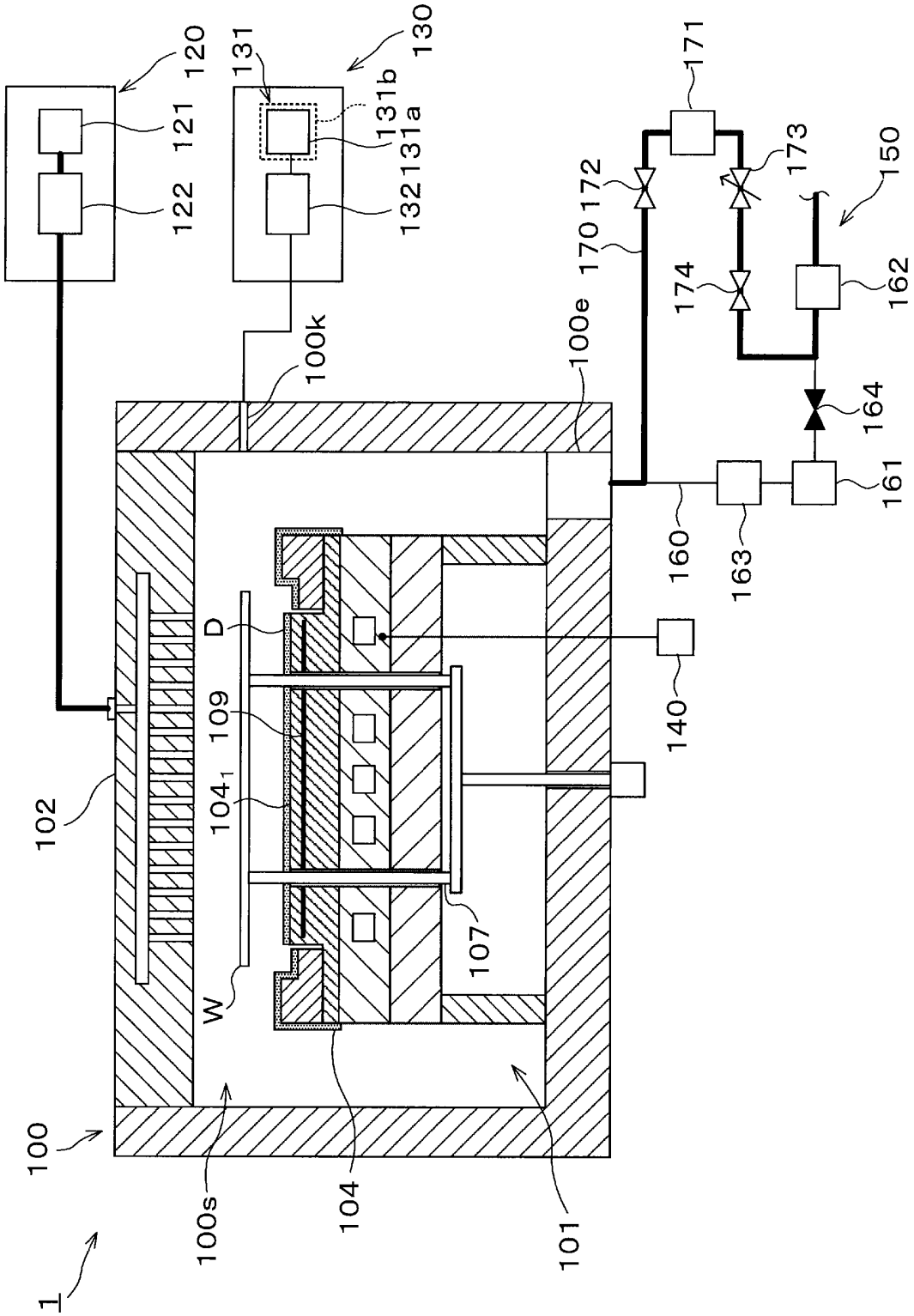
171
173
150
172
170
174
162
100k
100e
164
161
160
163
D
140
109
102
104₁
107
W
100
100s
104
101
1

[図15]


120
121
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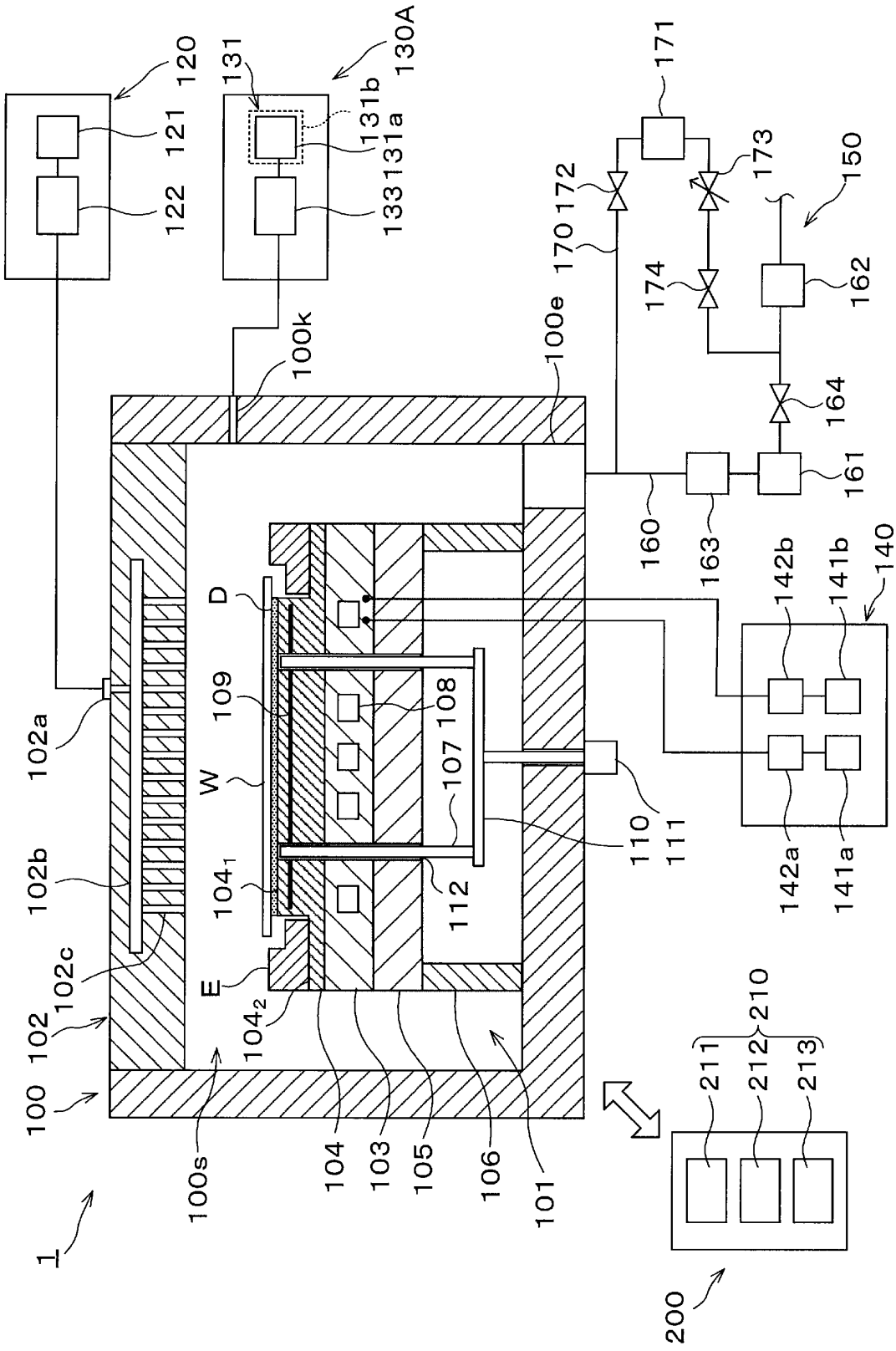
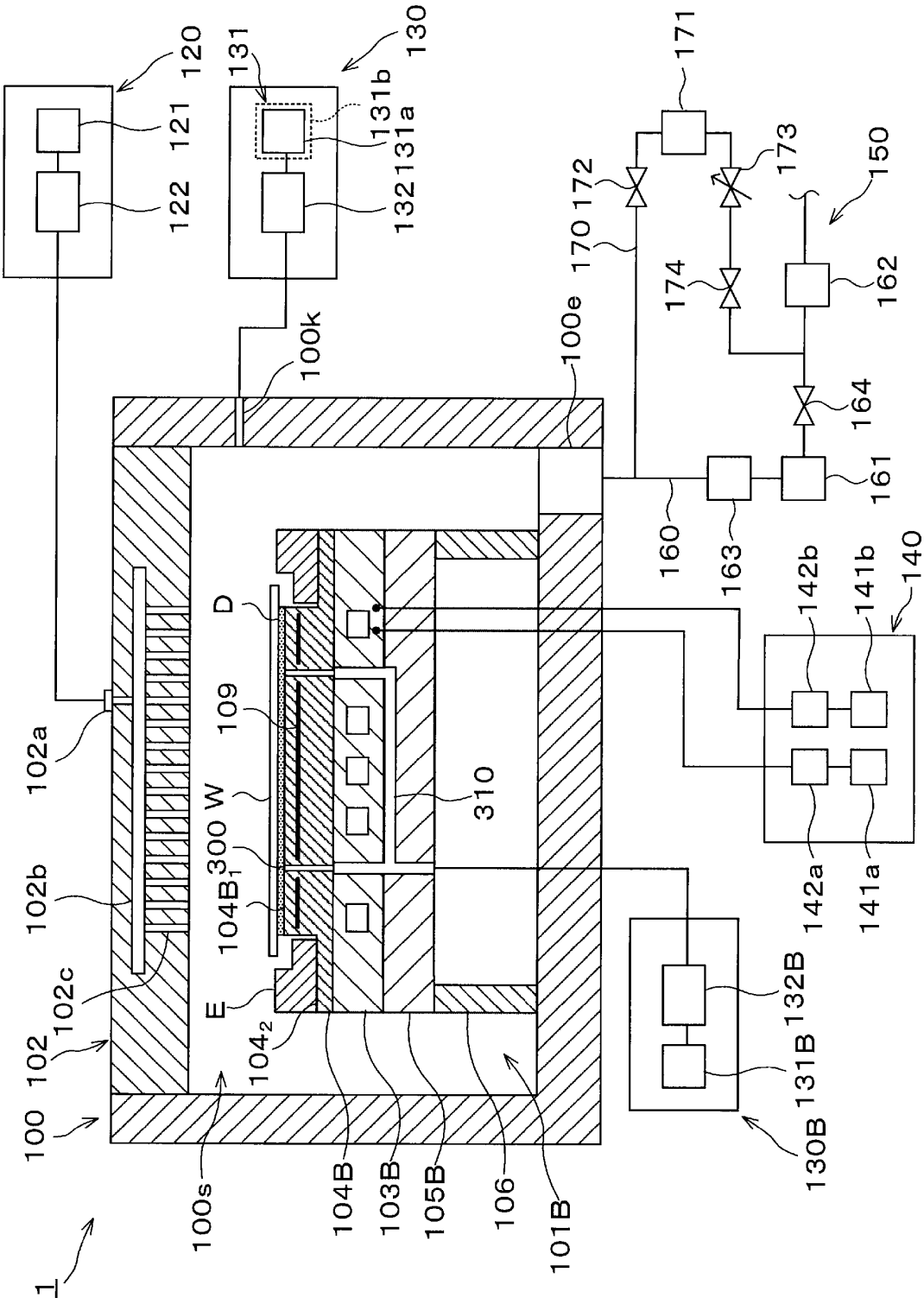
131b
131a
132
130
171
173
150
172
170
174
162
100k
100e
164
161
160
163
D
140
109
102
104₁
107
W
100
100s
104
101
1

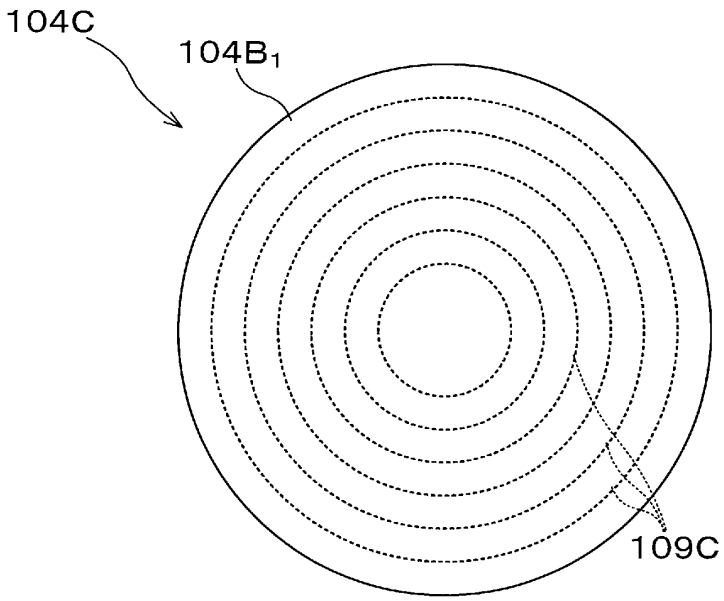
[図16]


120
121
122
131
131b
131a
133
130A
171
172
170
173
150
174
162
164
161
160
163
100k
100e
D
109
108
107
W
102a
102b
102c
102
100
104_1
104_2
E
112
110
111
142b
141b
140
142a
141a
100s
104
103
105
106
101
1
210
211
212
213
200

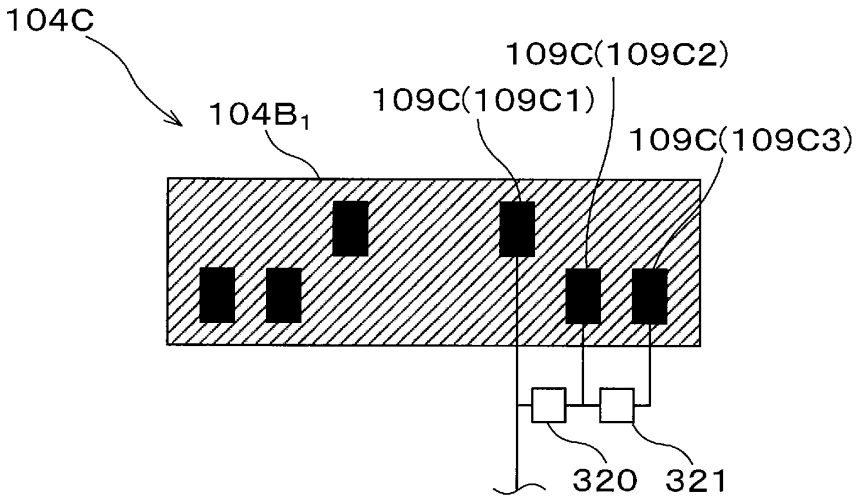
[図17]


120
121
122
131
130
131b
131a
132
171
172
173
150
170
174
162
100k
100e
164
161
160
163
142b
141b
140
D
109
102a
310
300 W
104B1
102b
102c
E
104₂
102
100
100s
104B
103B
105B
106
101B
132B
131B
130B
142a
141a
1

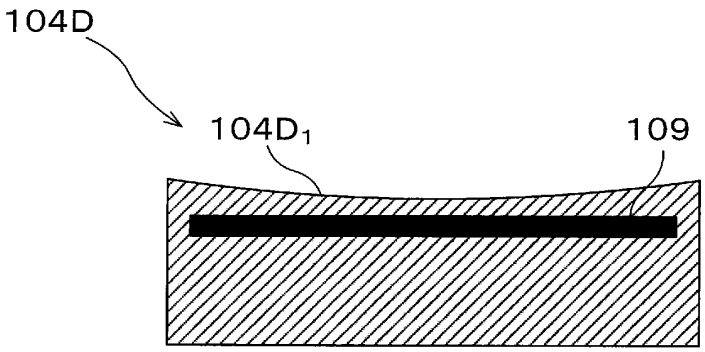
[図18]


104C
104B1
109C

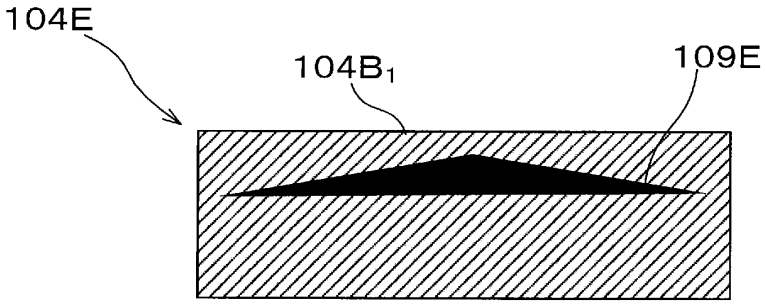
[図19]


104C
104B1
109C(109C2)
109C(109C1)
109C(109C3)
320
321

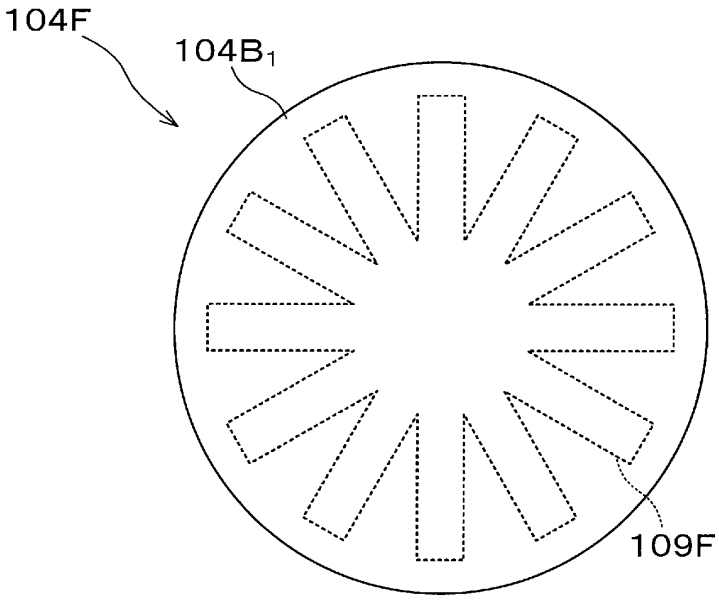
[図20]



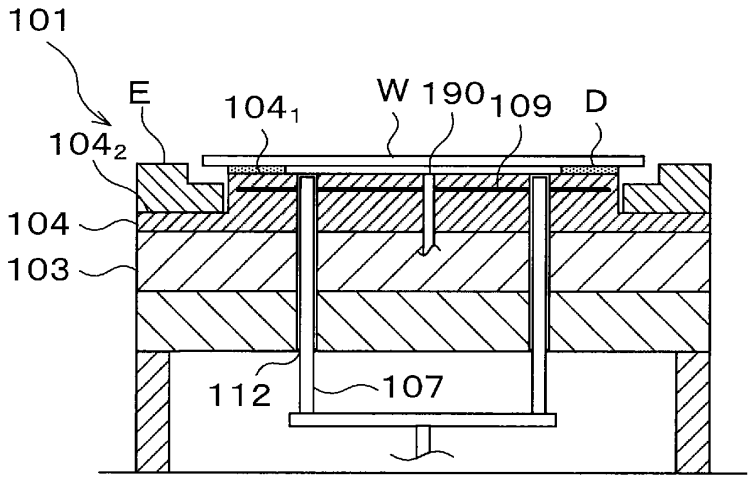
[図21]



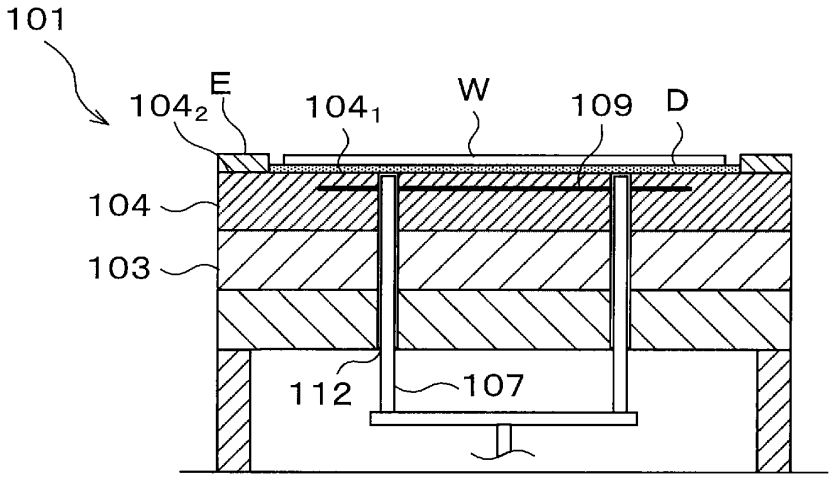
[図22]



[図23]


101
E
104_1
W
190
109
D
104_2
104
103
112
107

[図24]


101
104_2
E
104_1
W
109
D
104
103
112
107

[図25]

