Fig.1

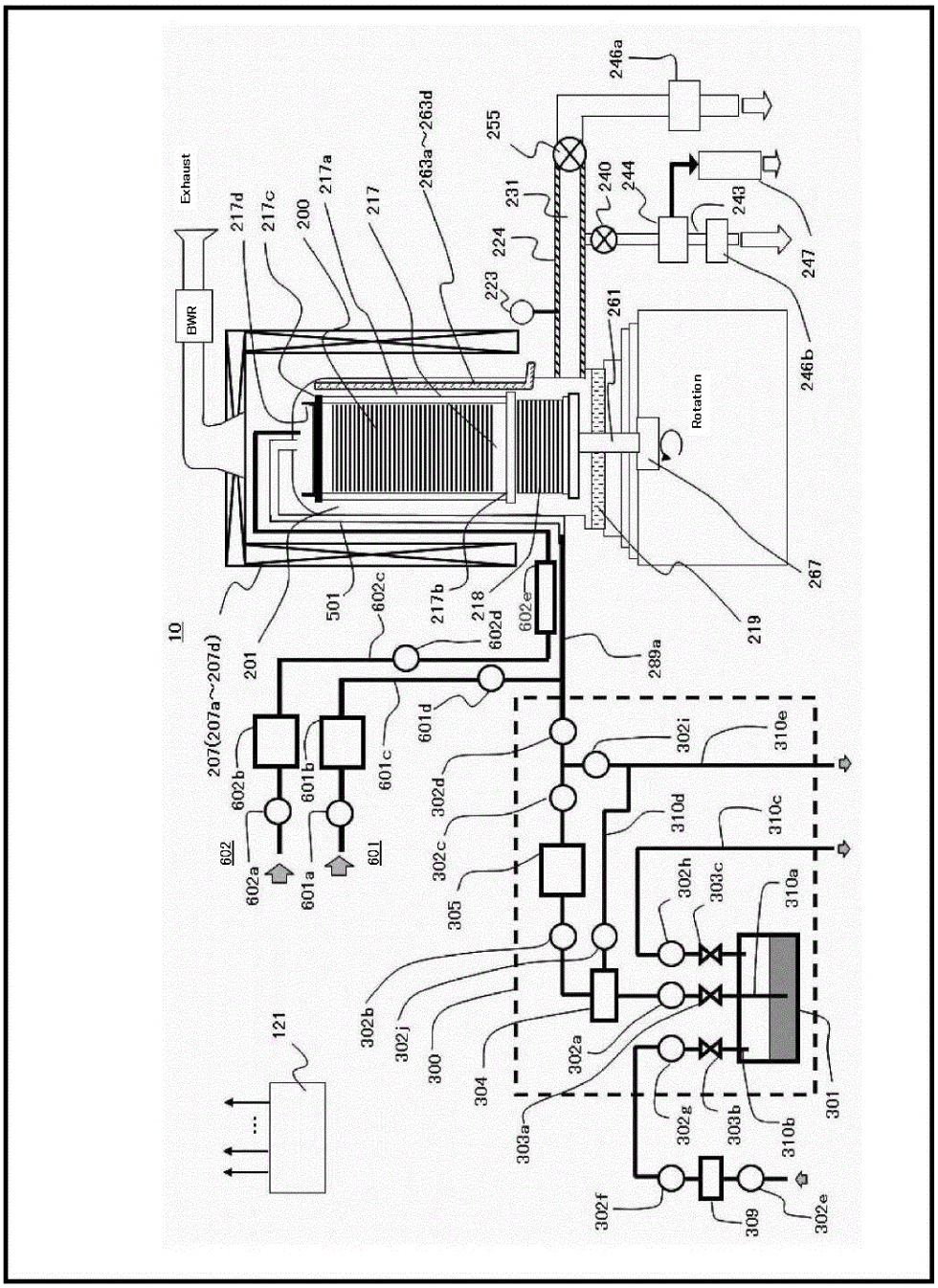

Exhaust
BWR
Rotation
10
121
...
201
207(207a~207d)
602
602a
602b
601
601a
601b
601c
601d
602c
602d
602e
501
217
217a
217b
217c
217d
218
200
263a~263d
289a
219
267
223
224
231
255
240
244
246a
246b
247
243
261
300
301
302a
302b
302c
302d
302e
302f
302g
302h
302i
302j
303a
303b
303c
304
305
309
310a
310b
310c
310d
310e

Fig.2

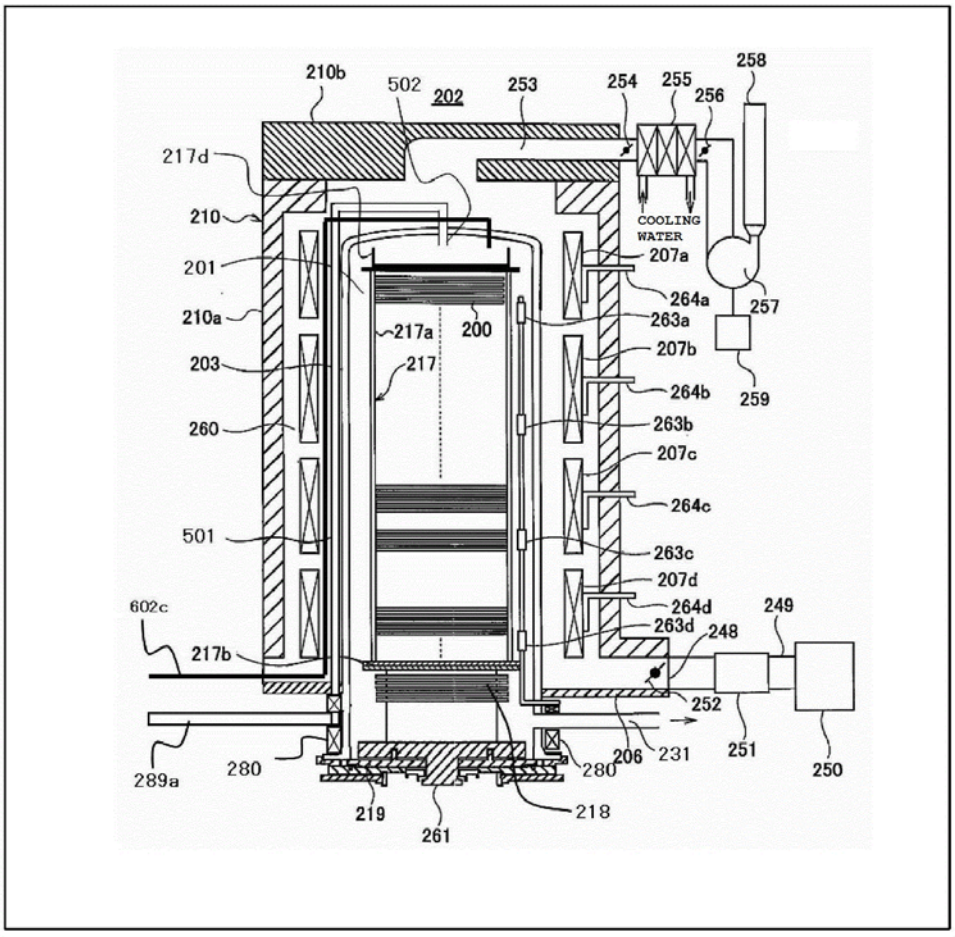

210b
502
202
253
254
255
256
258
217d
210
201
210a
203
260
501
602c
217b
289a
280
219
261
218
280
206
231
252
248
249
251
250
257
259
COOLING WATER
207a
264a
263a
207b
264b
263b
207c
264c
263c
207d
264d
263d
217a
200
217

Fig.3

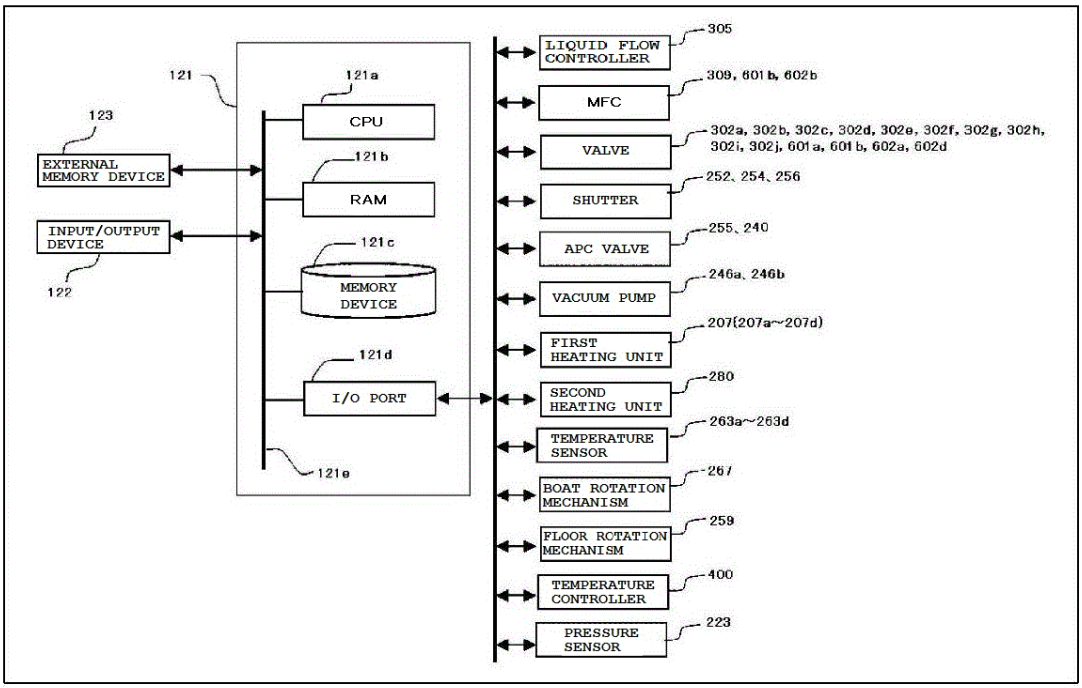

121
121a
CPU
121b
RAM
121c
MEMORY DEVICE
121d
I/O PORT
121e
123
EXTERNAL MEMORY DEVICE
INPUT/OUTPUT DEVICE
122
LIQUID FLOW CONTROLLER
305
MFC
309, 601b, 602b
VALVE
302a, 302b, 302c, 302d, 302e, 302f, 302g, 302h, 302i, 302j, 601a, 601b, 602a, 602d
SHUTTER
252、254、256
APC VALVE
255、240
VACUUM PUMP
246a, 246b
FIRST HEATING UNIT
207(207a~207d)
SECOND HEATING UNIT
280
TEMPERATURE SENSOR
263a~263d
BOAT ROTATION MECHANISM
267
FLOOR ROTATION MECHANISM
259
TEMPERATURE CONTROLLER
400
PRESSURE SENSOR
223

Fig.4

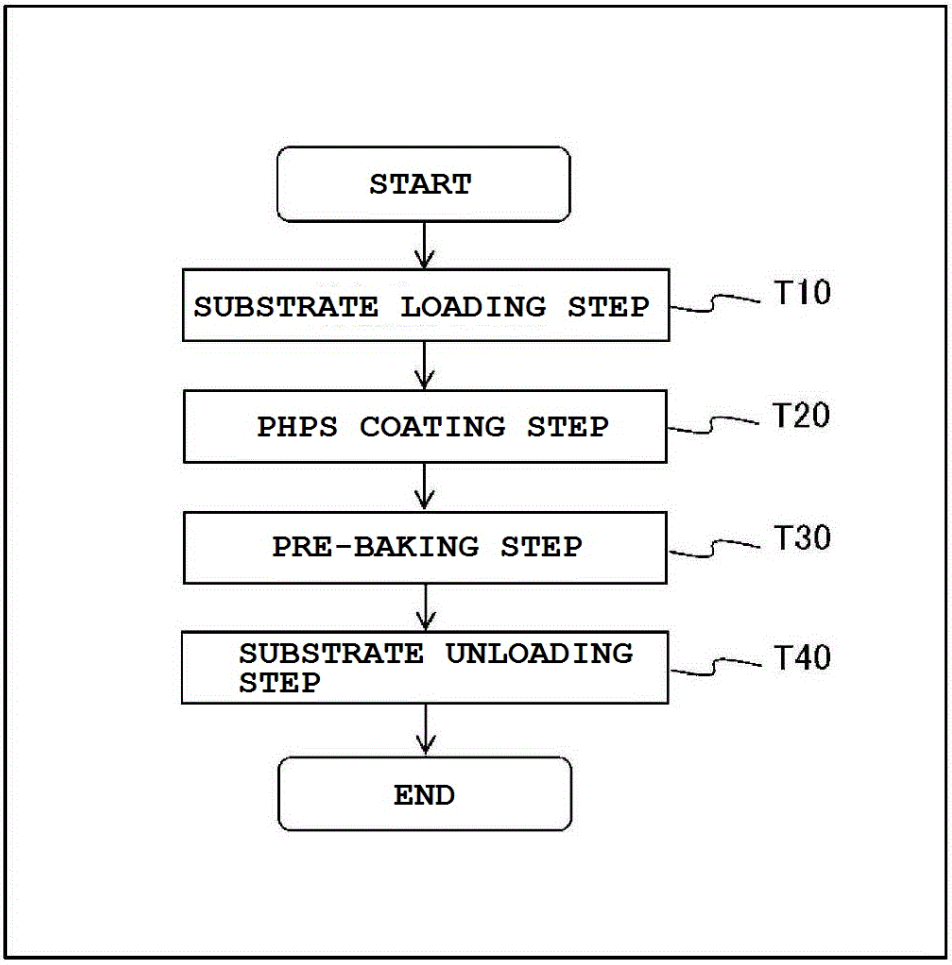

START
SUBSTRATE LOADING STEP
T10
PHPS COATING STEP
T20
PRE-BAKING STEP
T30
SUBSTRATE UNLOADING STEP
T40
END

Fig.5

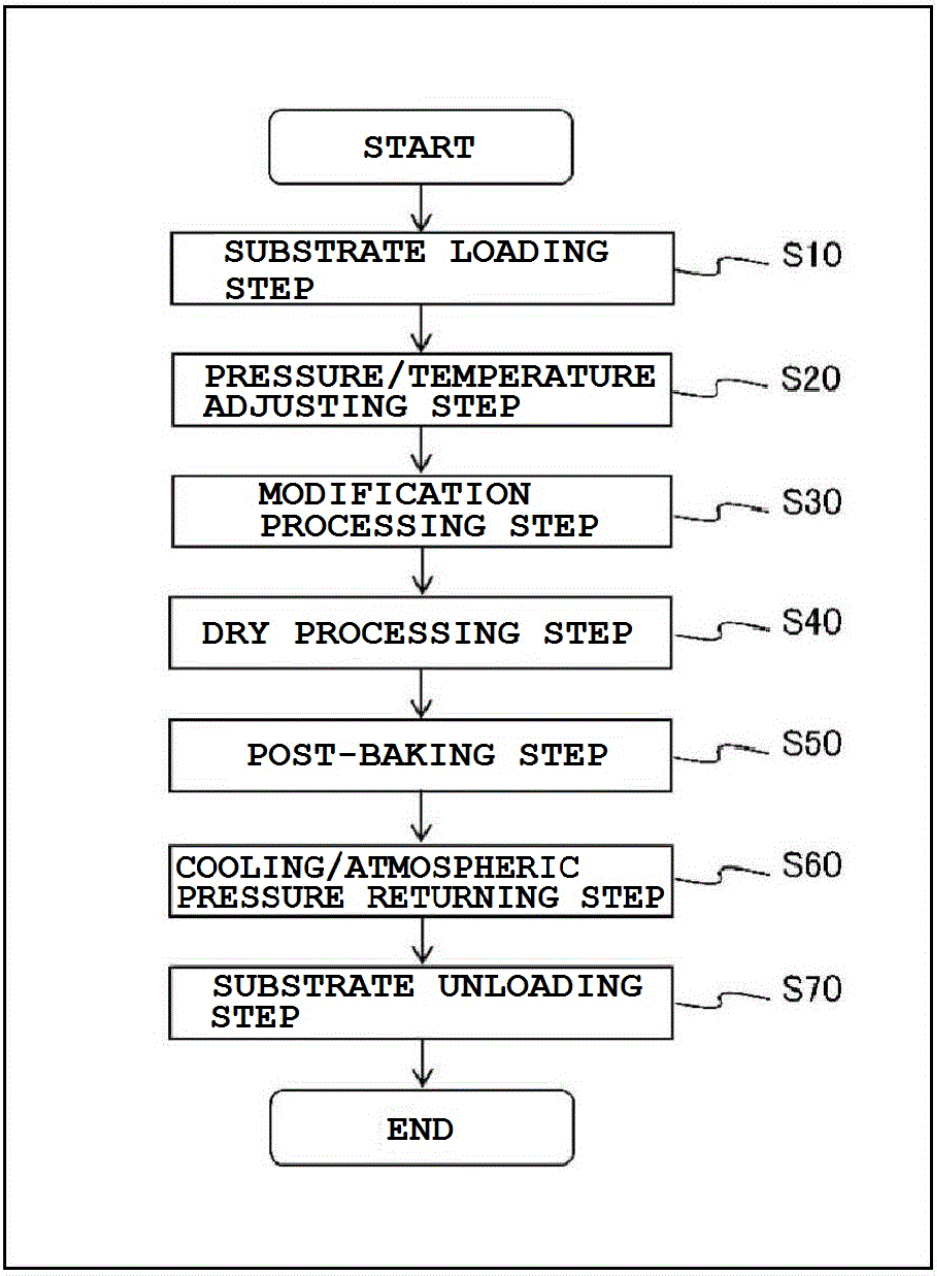

START
SUBSTRATE LOADING STEP
S10
PRESSURE/TEMPERATURE ADJUSTING STEP
S20
MODIFICATION PROCESSING STEP
S30
DRY PROCESSING STEP
S40
POST-BAKING STEP
S50
COOLING/ATMOSPHERIC PRESSURE RETURNING STEP
S60
SUBSTRATE UNLOADING STEP
S70
END

Fig.6

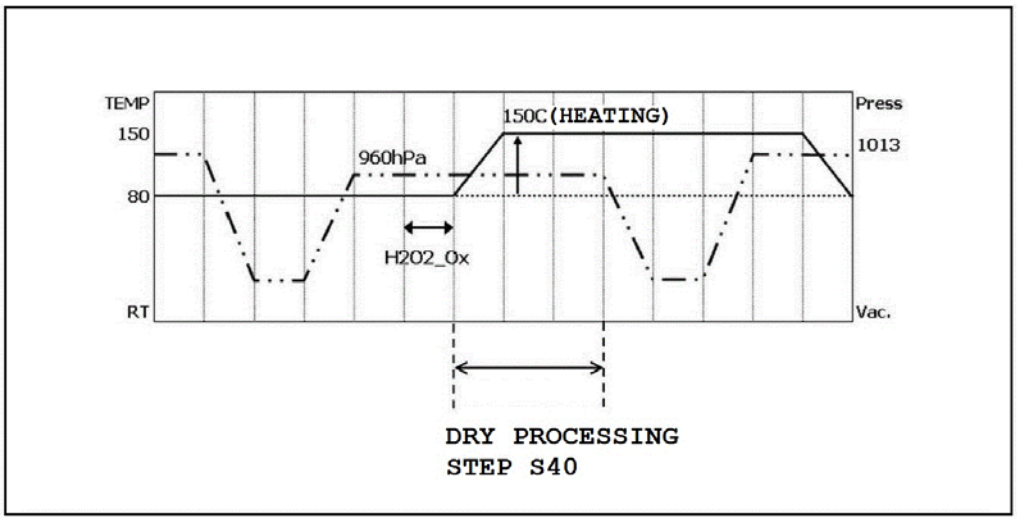

TEMP
150
80
RT
Press
1013
Vac.
150C(HEATING)
960hPa
H2O2_Ox
DRY PROCESSING
STEP S40

Fig.7

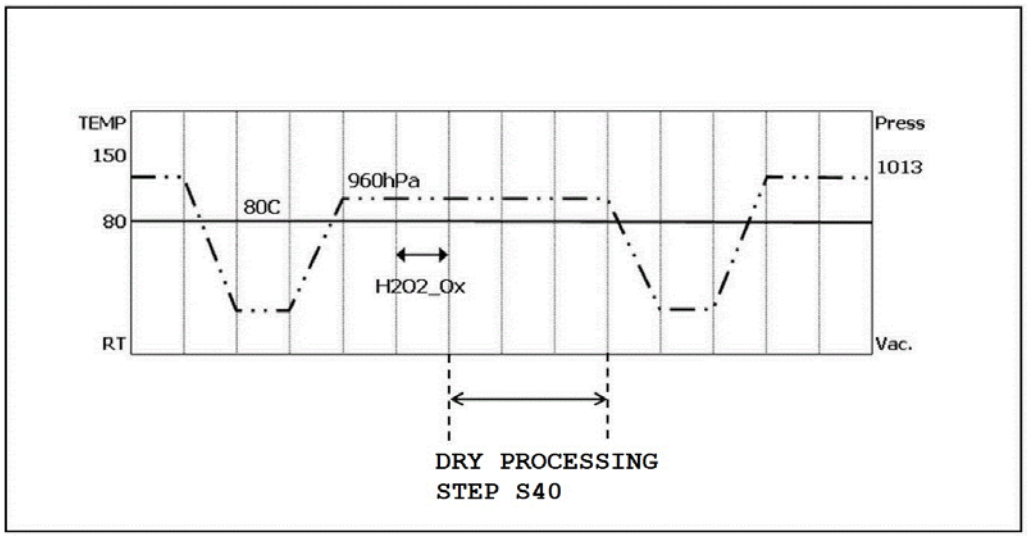

TEMP
150
80
RT
Press
1013
Vac.
80C
960hPa
H2O2_Ox
DRY PROCESSING
STEP S40

Fig.8

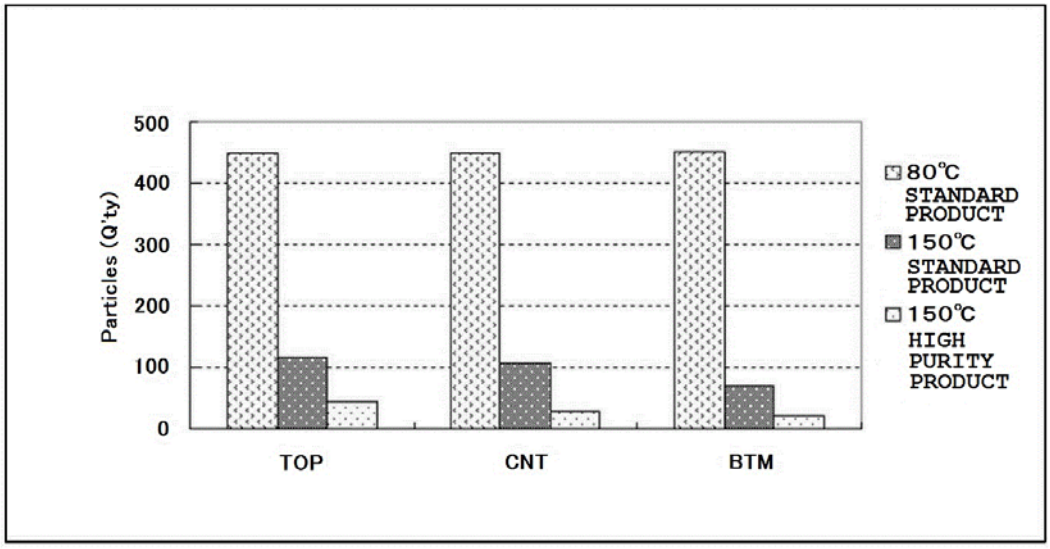
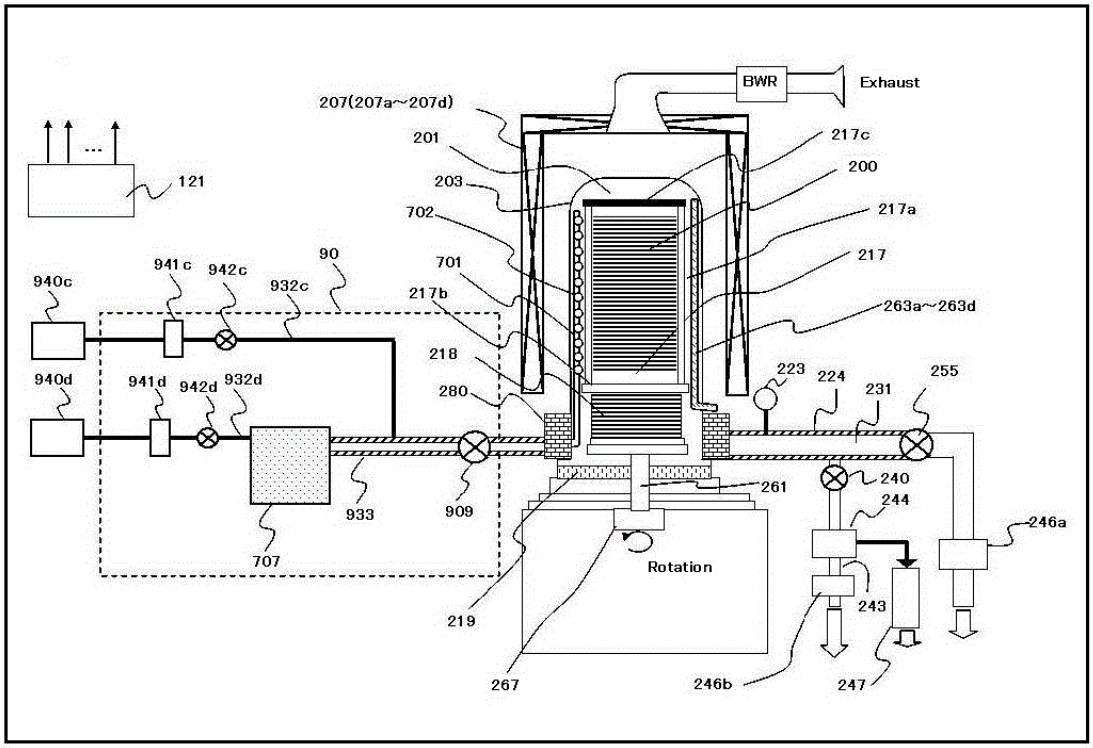

500
400
300
200
100
0
Particles (Q'ty)
TOP
CNT
BTM
80℃ STANDARD PRODUCT
150℃ STANDARD PRODUCT
150℃ HIGH PURITY PRODUCT

Fig.9


BWR
Exhaust
207(207a~207d)
201
203
702
701
217b
218
280
217c
200
217a
217
263a~263d
223
224
231
255
240
244
246a
243
247
246b
261
267
219
Rotation
909
933
707
90
932c
941c
942c
940c
941d
942d
932d
940d
121