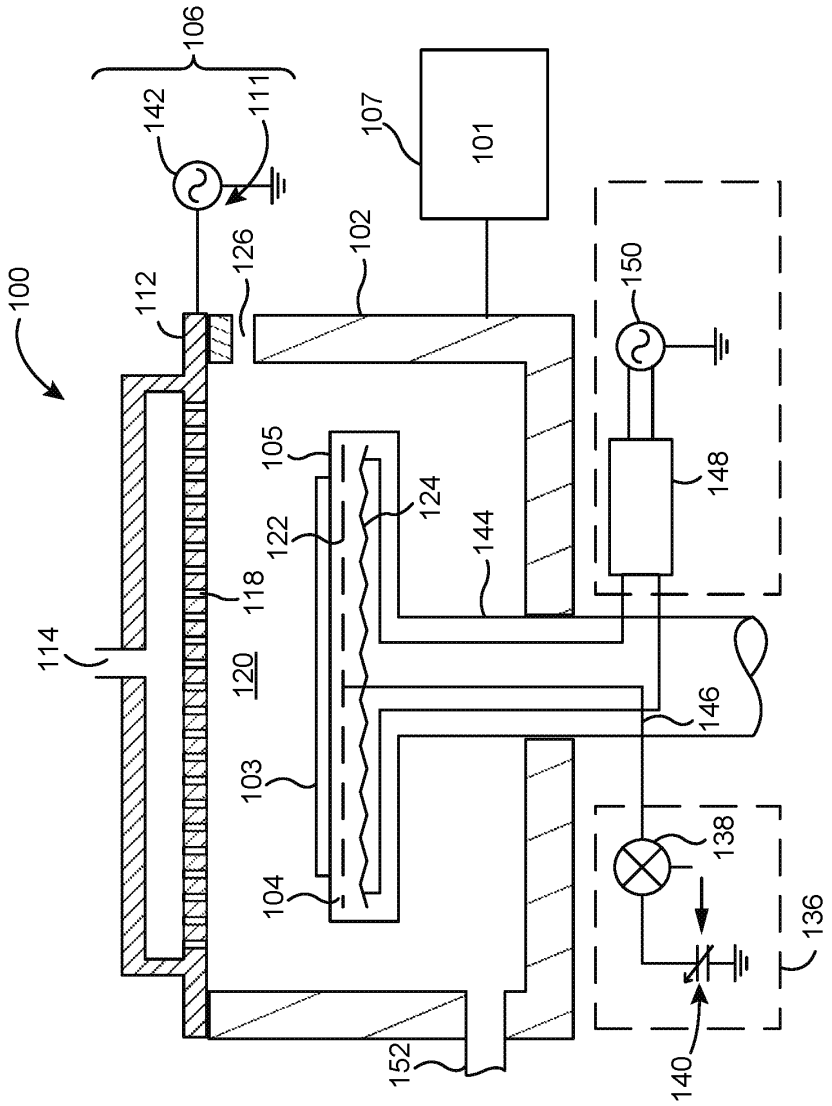
100
106
142
111
107
101
102
126
112
150
105
124
122
144
148
118
114
120
146
103
138
104
136
152
140

FIG. 1

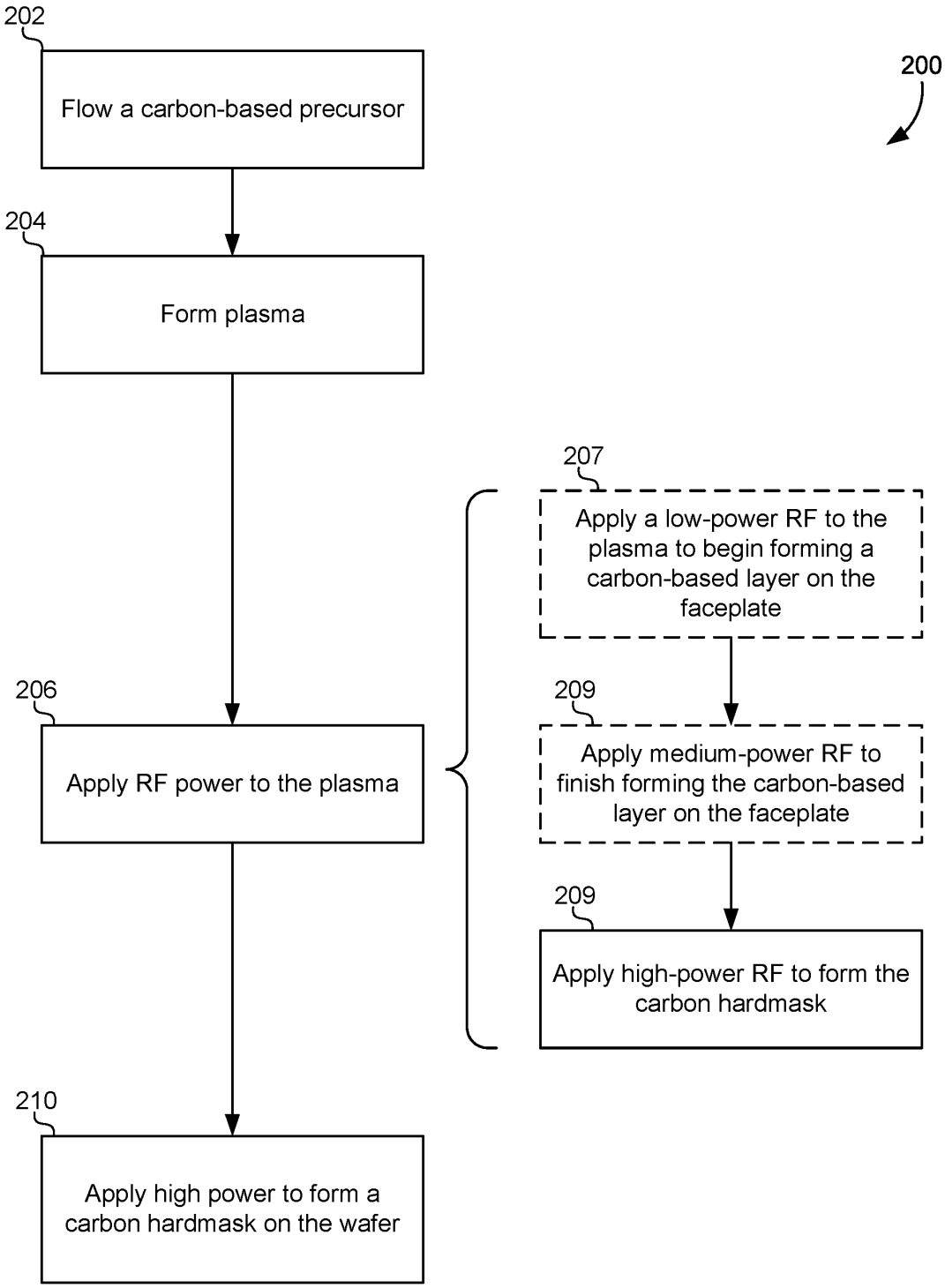
202
Flow a carbon-based precursor
200
204
Form plasma
207
Apply a low-power RF to the plasma to begin forming a carbon-based layer on the faceplate
206
209
Apply RF power to the plasma
Apply medium-power RF to finish forming the carbon-based layer on the faceplate
209
Apply high-power RF to form the carbon hardmask
210
Apply high power to form a carbon hardmask on the wafer

FIG. 2

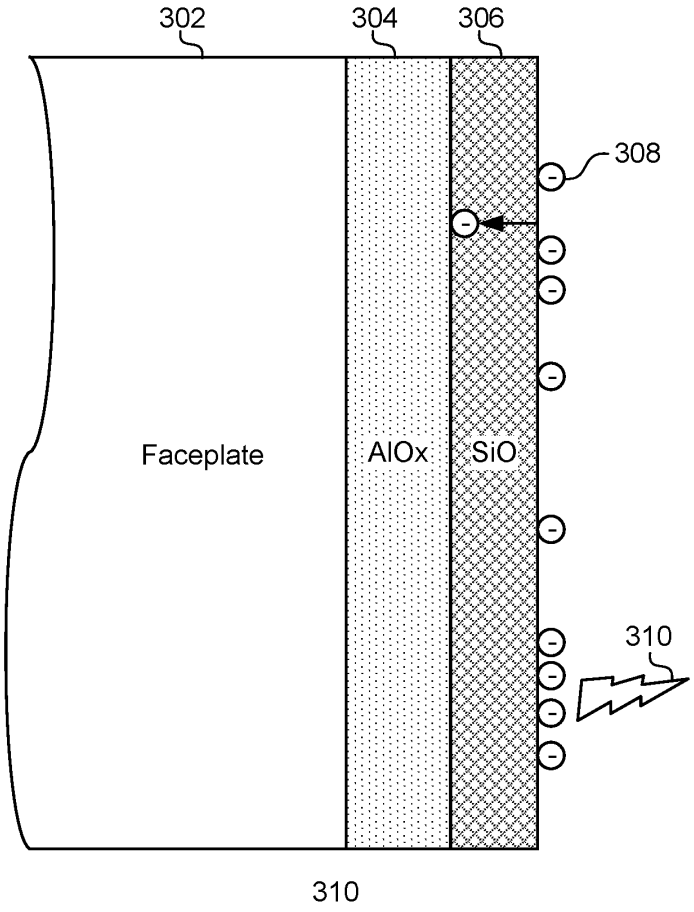

FIG. 3

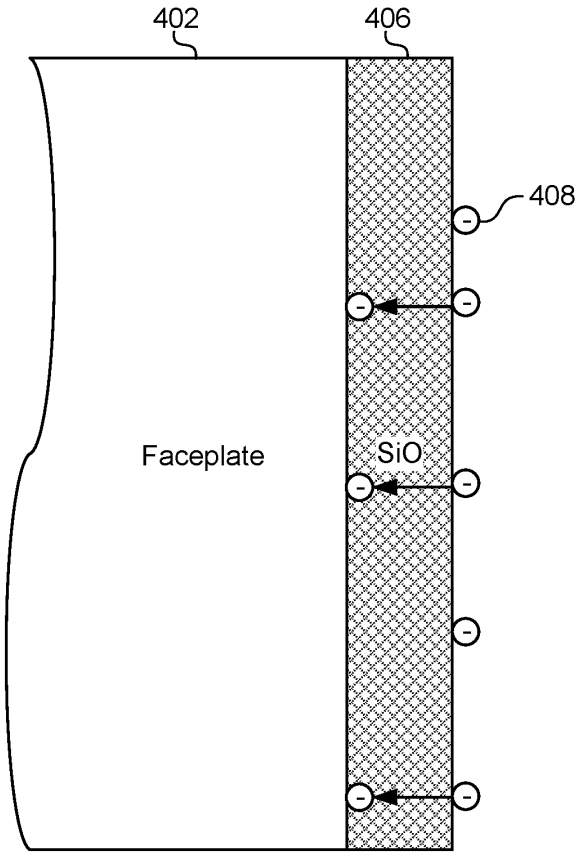

FIG. 4

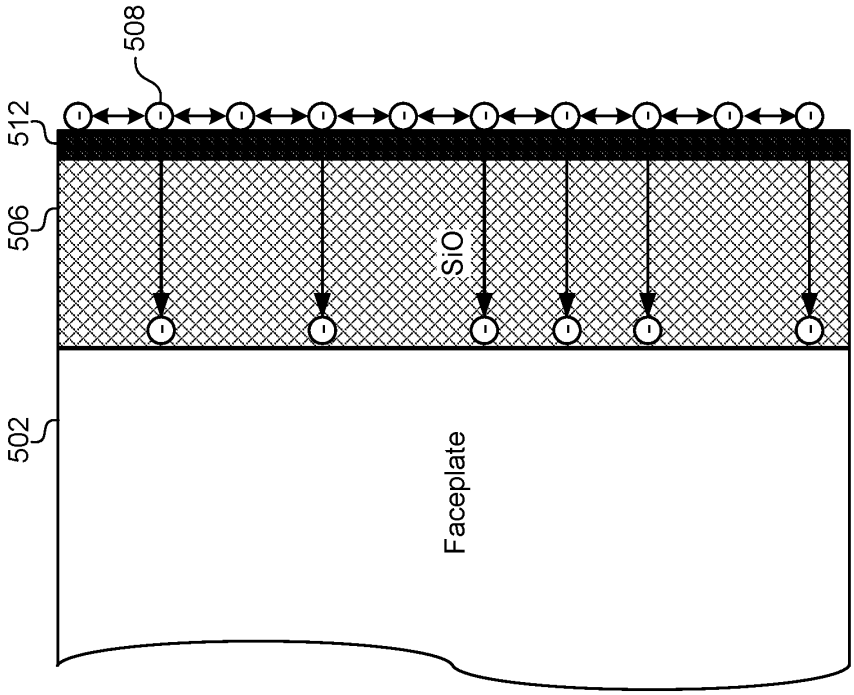

FIG. 5B

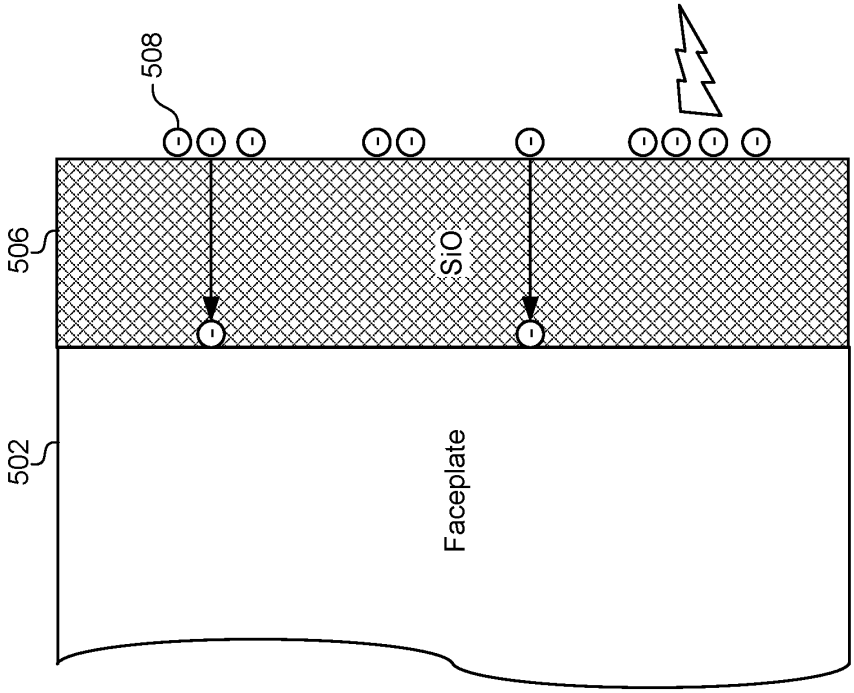

FIG. 5A

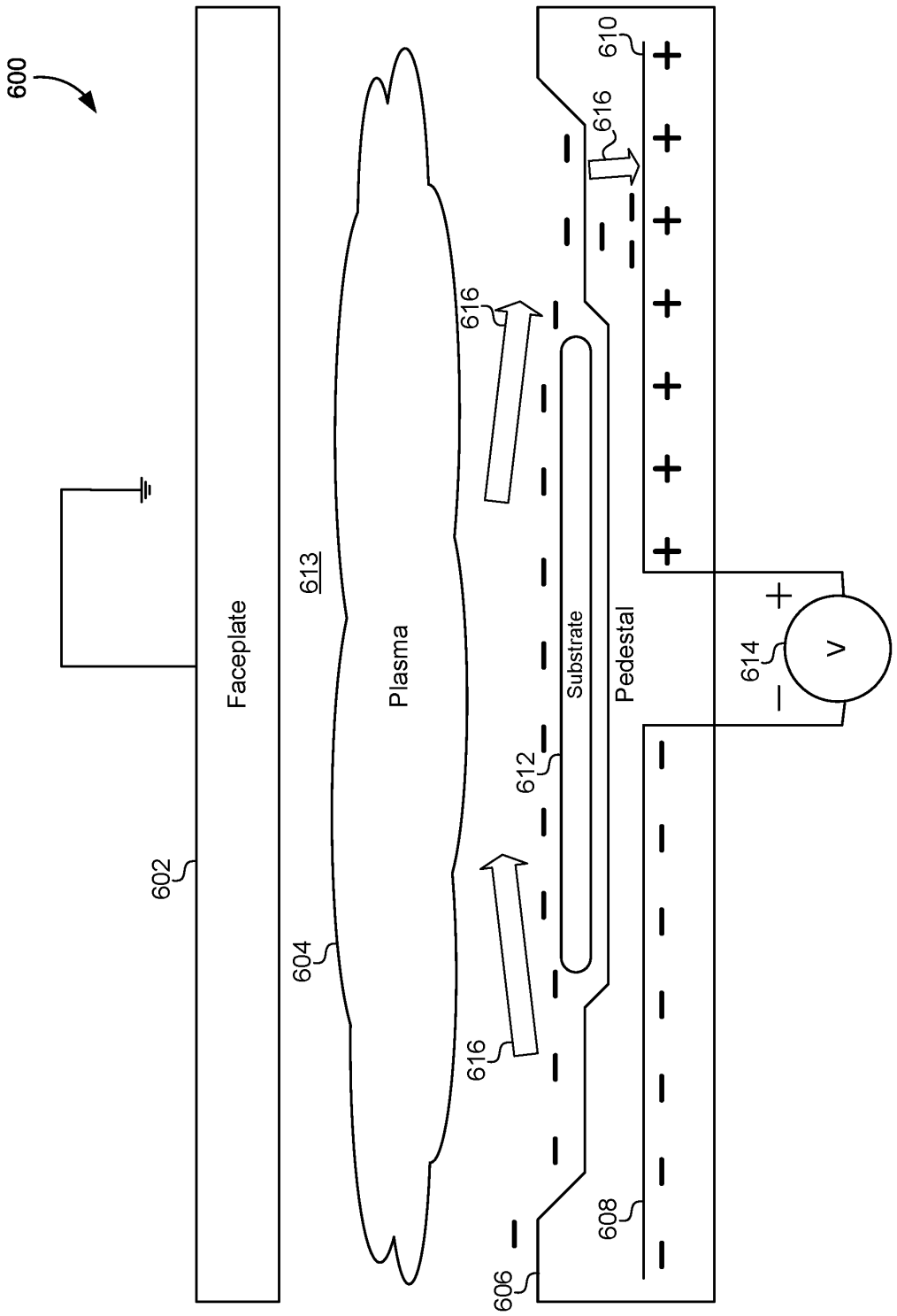
600
Faceplate
602
613
Plasma
604
606
608
610
612
614
616
Substrate
Pedestal
V

FIG. 6