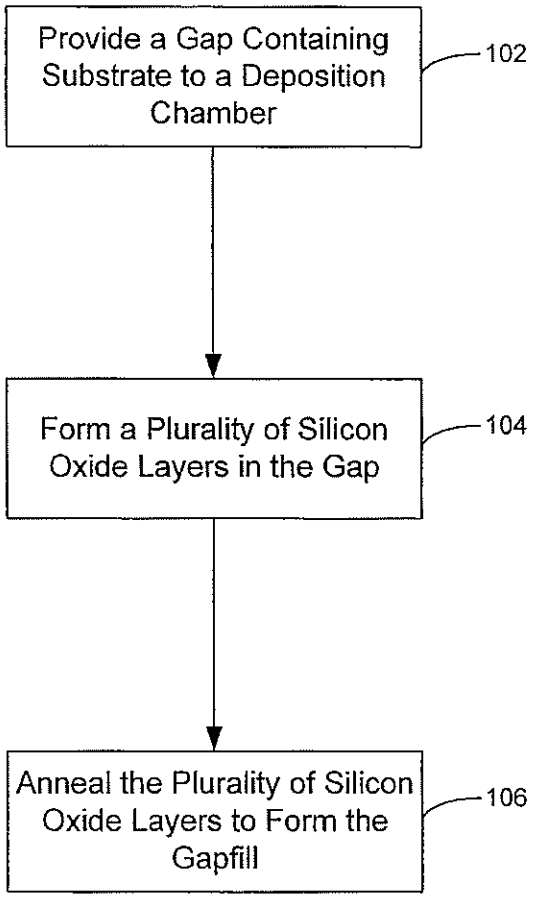

Provide a Gap Containing Substrate to a Deposition Chamber
102
Form a Plurality of Silicon Oxide Layers in the Gap
104
Anneal the Plurality of Silicon Oxide Layers to Form the Gapfill
106

Fig. 1

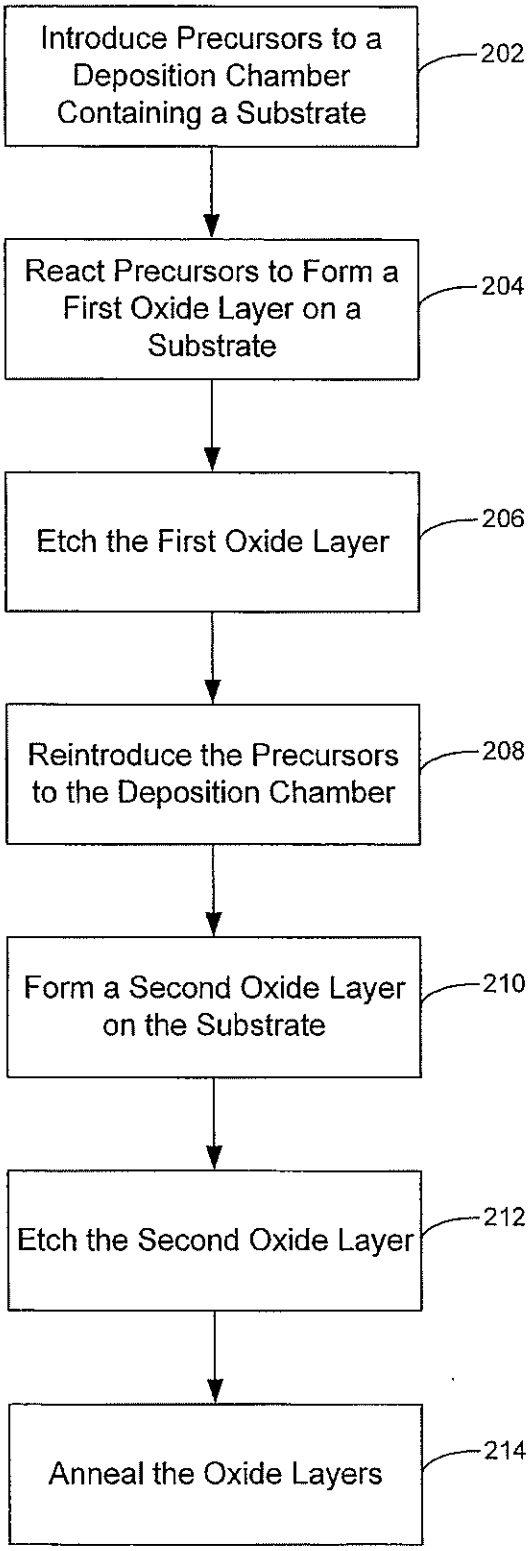

Introduce Precursors to a Deposition Chamber Containing a Substrate
202
React Precursors to Form a First Oxide Layer on a Substrate
204
Etch the First Oxide Layer
206
Reintroduce the Precursors to the Deposition Chamber
208
Form a Second Oxide Layer on the Substrate
210
Etch the Second Oxide Layer
212
Anneal the Oxide Layers
214

Fig. 2

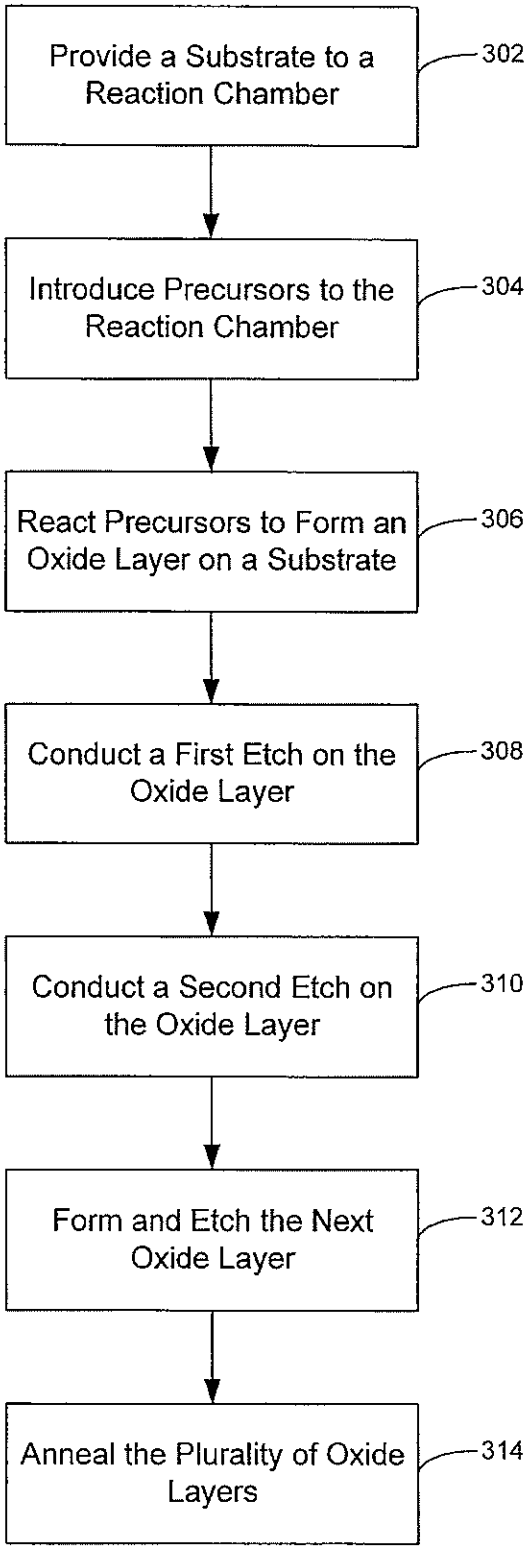

Provide a Substrate to a Reaction Chamber
302
Introduce Precursors to the Reaction Chamber
304
React Precursors to Form an Oxide Layer on a Substrate
306
Conduct a First Etch on the Oxide Layer
308
Conduct a Second Etch on the Oxide Layer
310
Form and Etch the Next Oxide Layer
312
Anneal the Plurality of Oxide Layers
314

Fig. 3

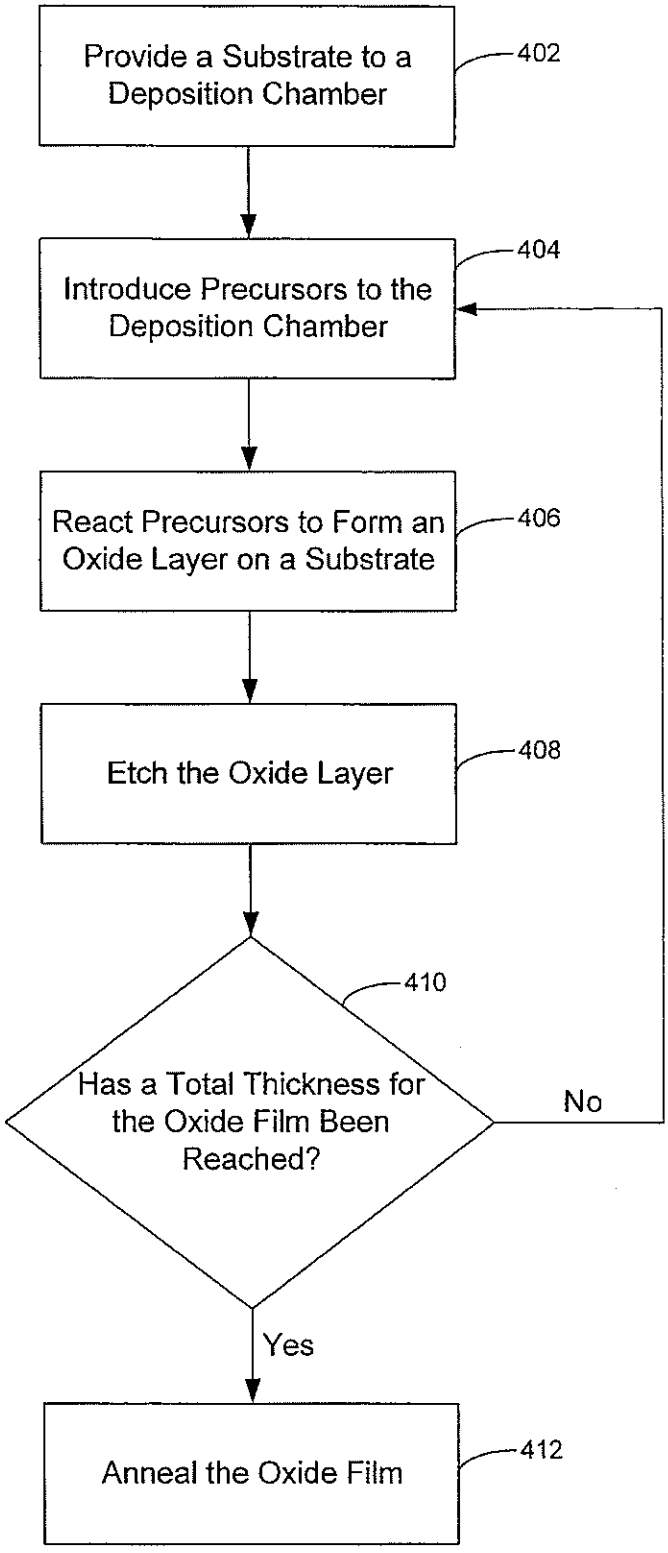

Provide a Substrate to a Deposition Chamber
402
Introduce Precursors to the Deposition Chamber
404
React Precursors to Form an Oxide Layer on a Substrate
406
Etch the Oxide Layer
408
Has a Total Thickness for the Oxide Film Been Reached?
410
No
Yes
Anneal the Oxide Film
412

Fig. 4

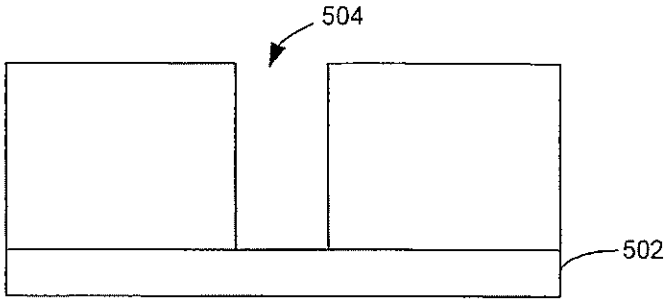


Fig. 5A

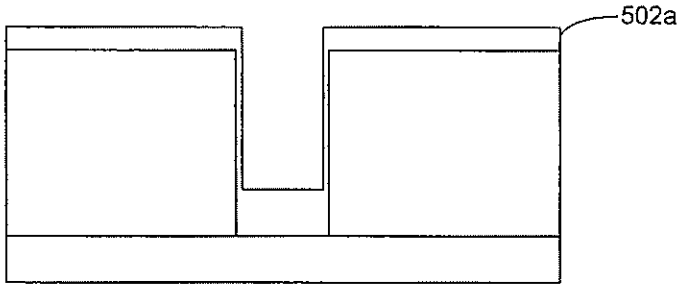


Fig. 5B

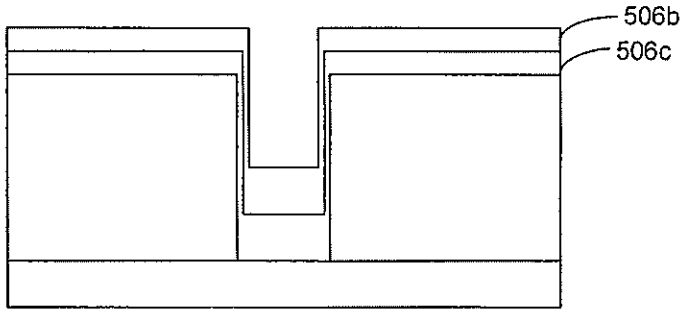


Fig. 5C

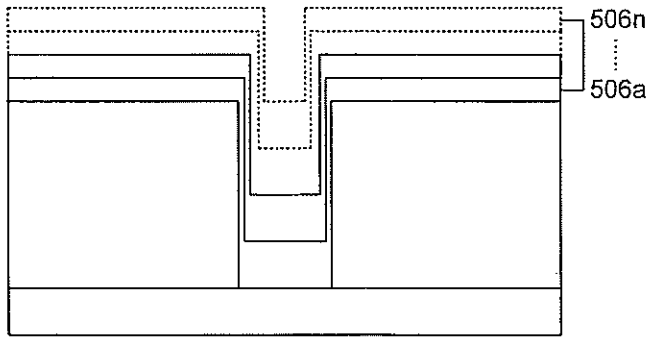


Fig. 5D

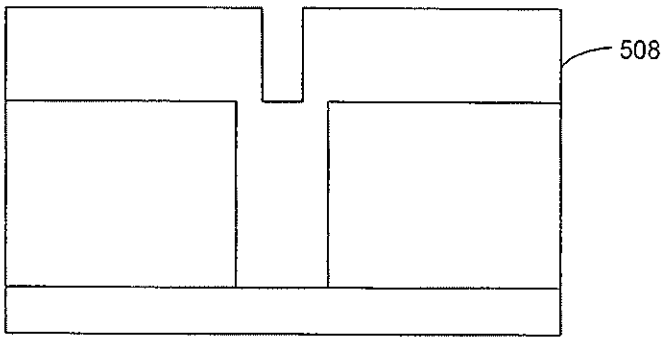


Fig. 5E

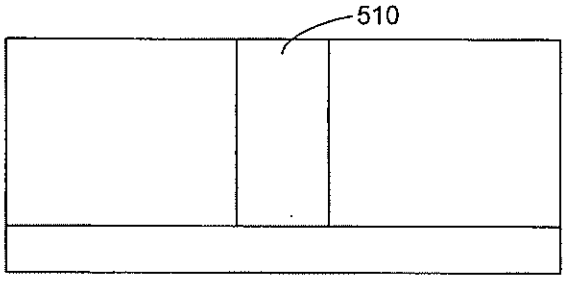


Fig. 5F

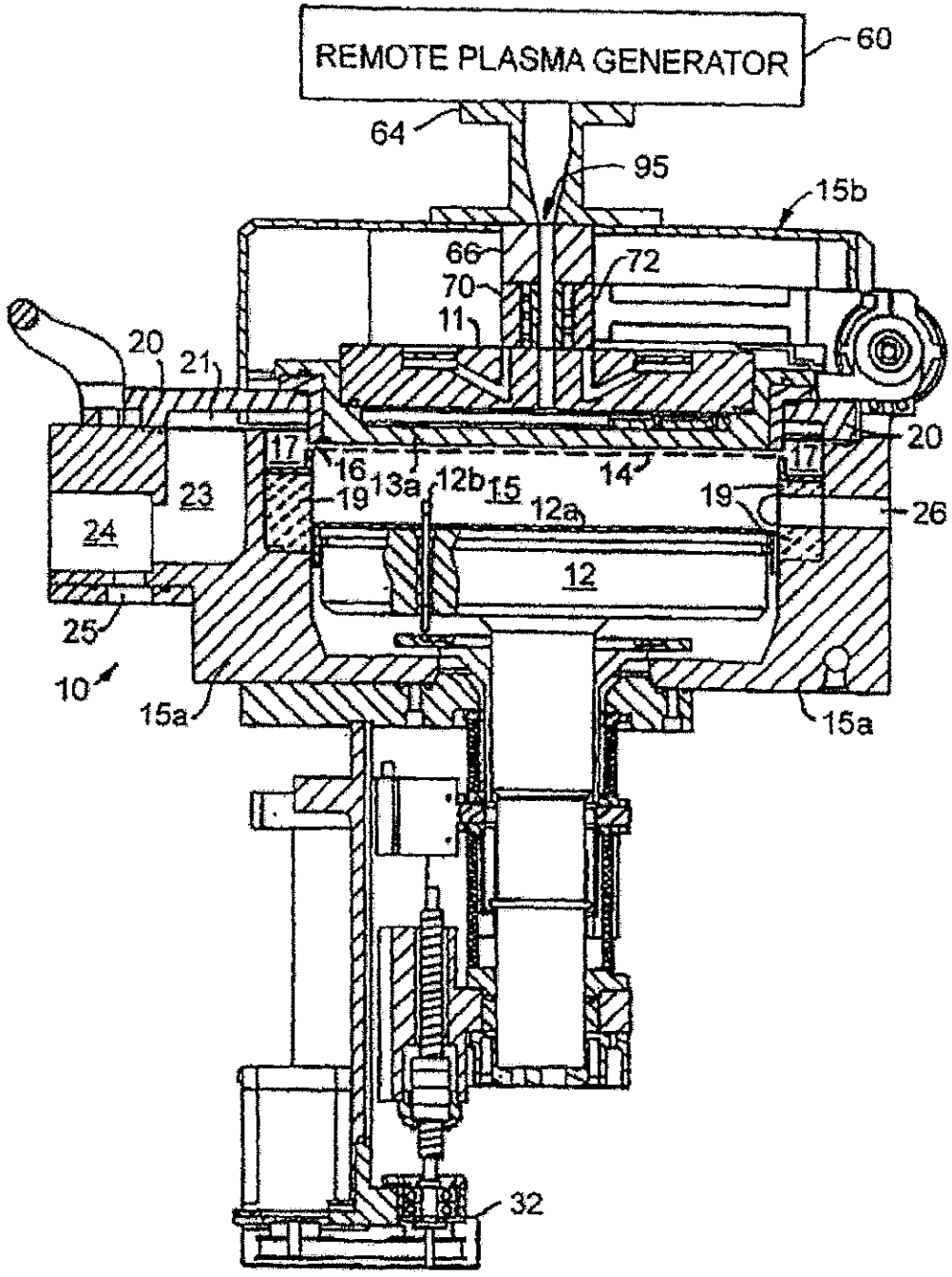

REMOTE PLASMA GENERATOR
60
64
95
15b
66
72
70
11
20
21
17
16
19
13a
12b
15
14
12a
19
17
20
26
23
24
12
25
10
15a
15a
32

Fig. 6A

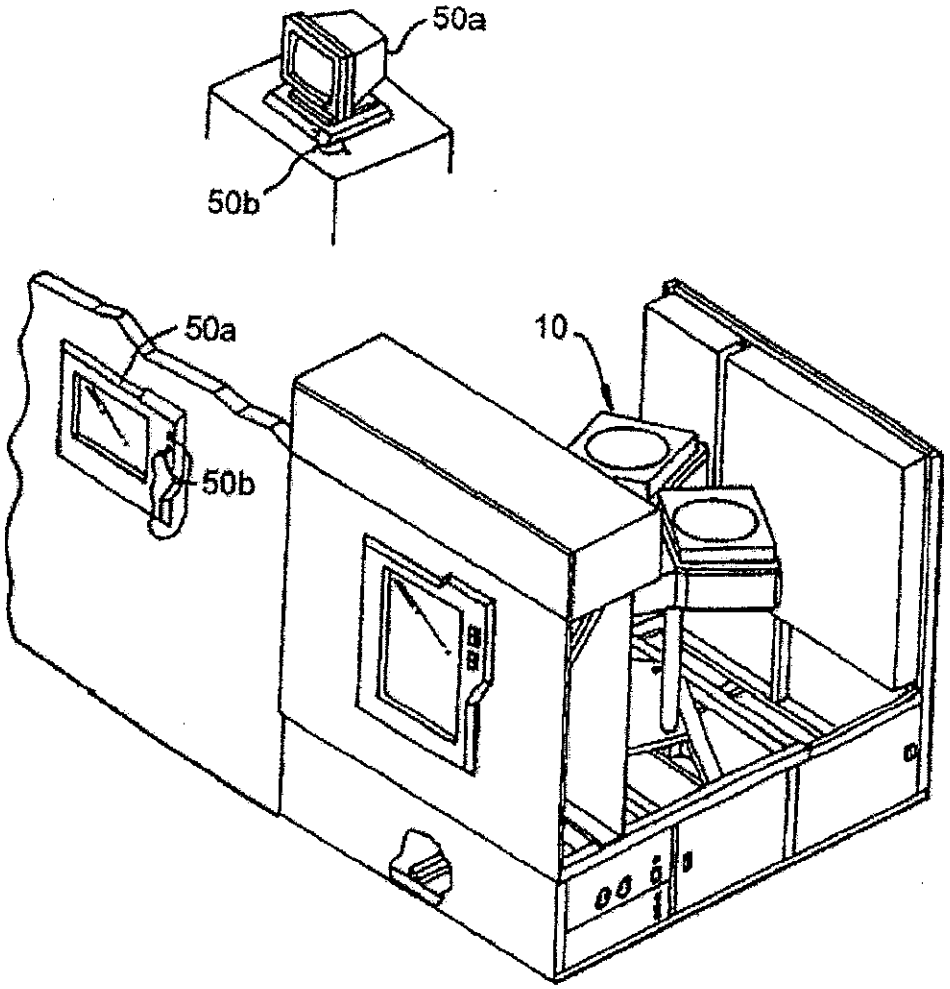


Fig. 6B