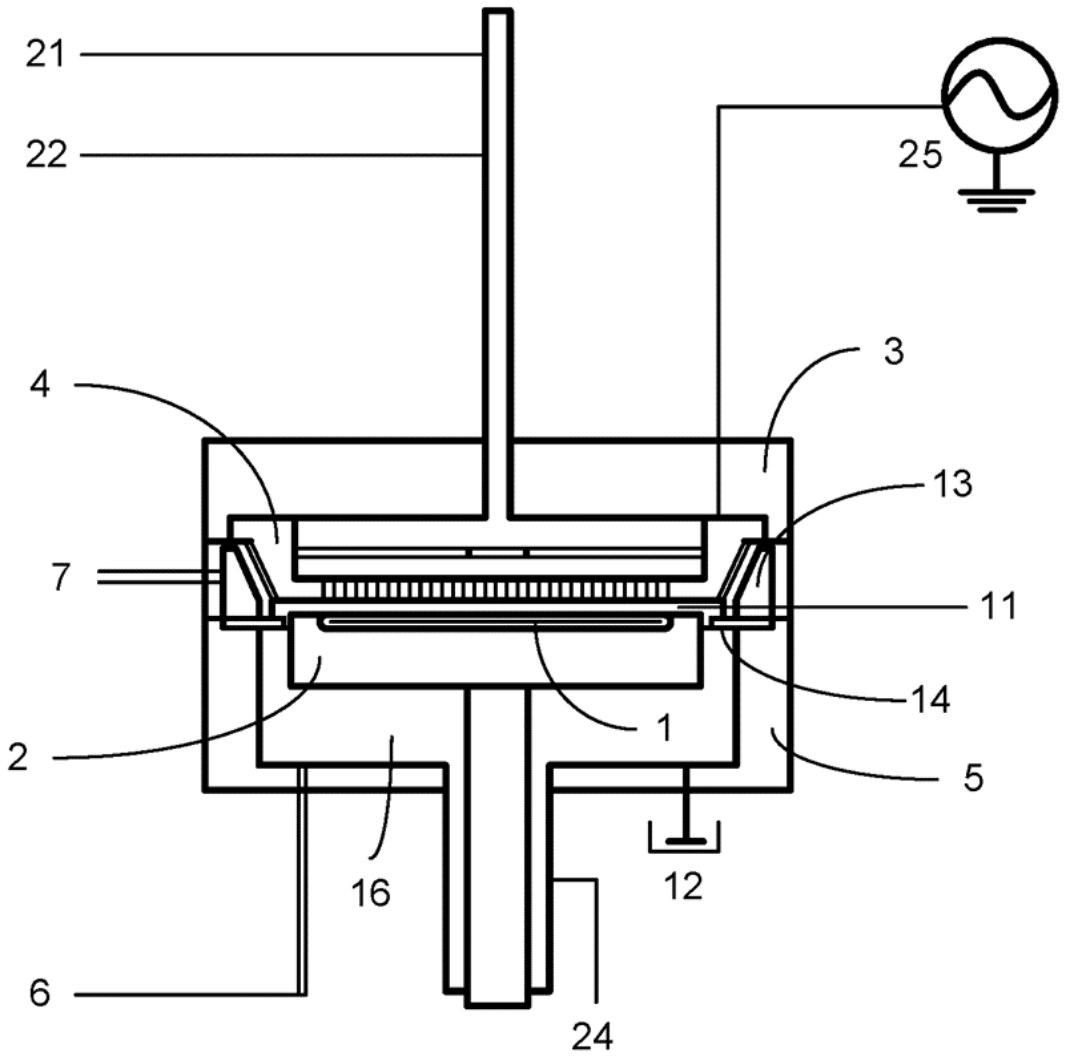


Fig. 1

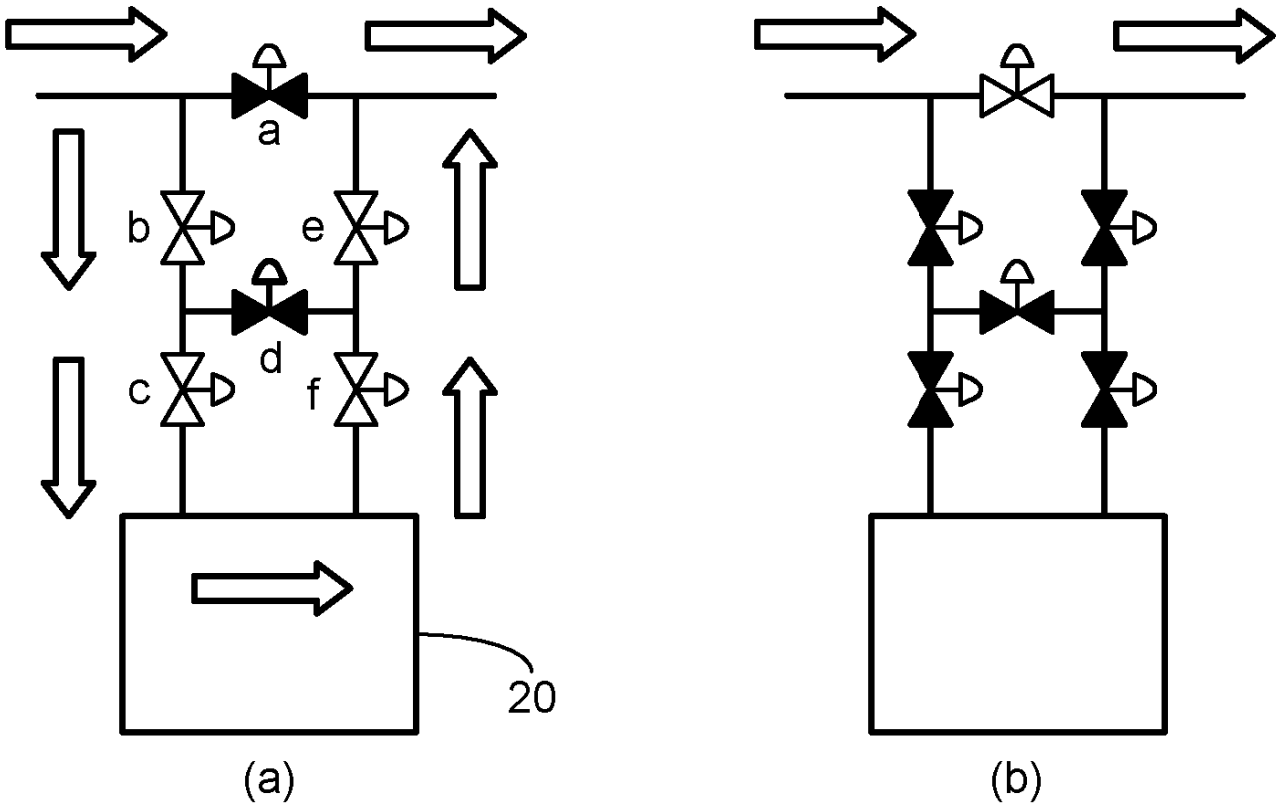


Fig. 2

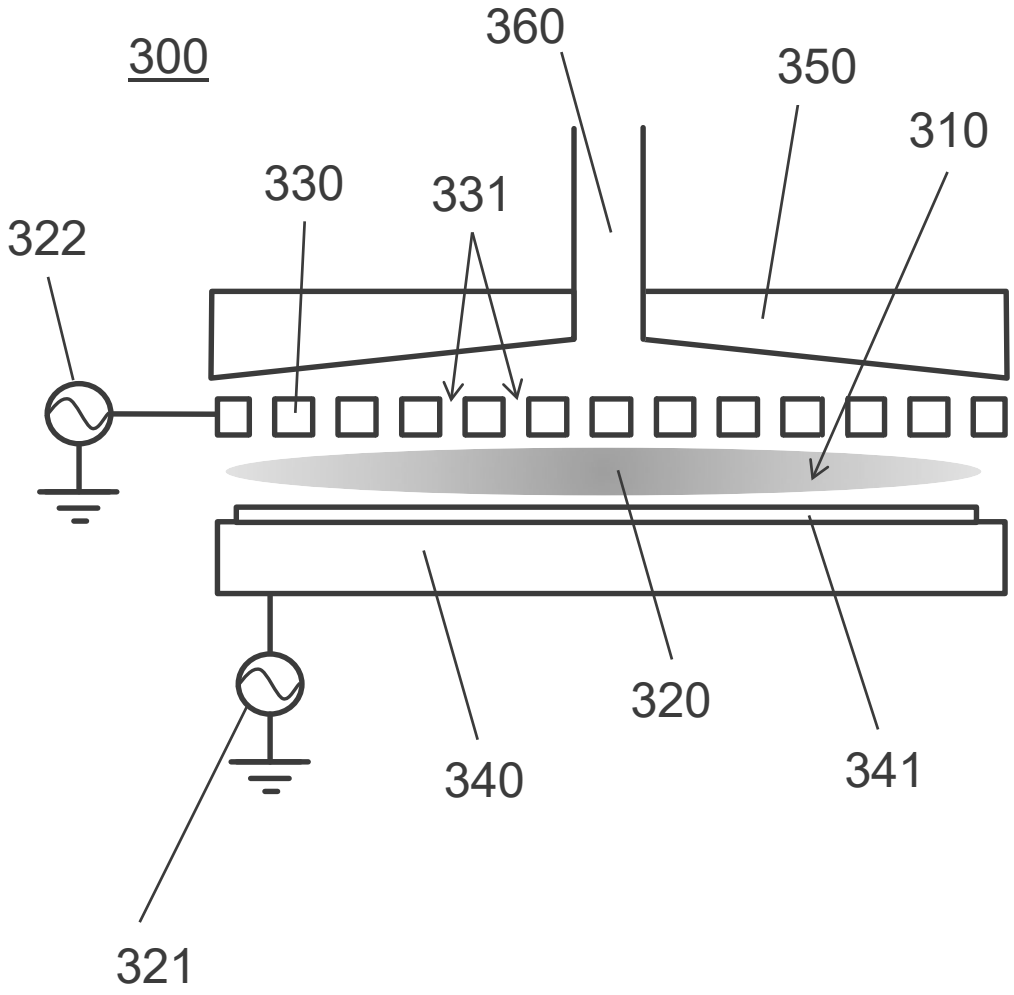


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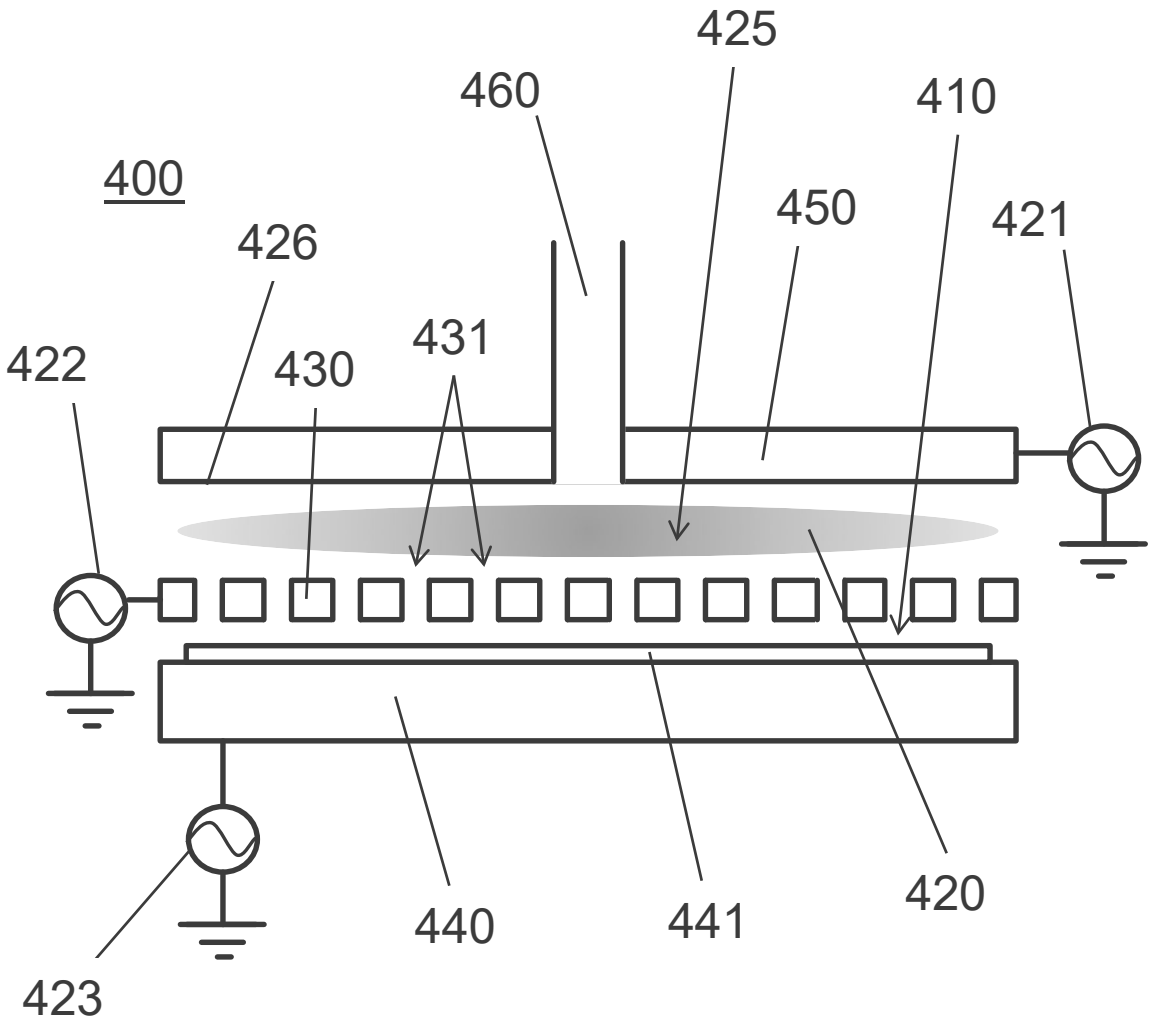


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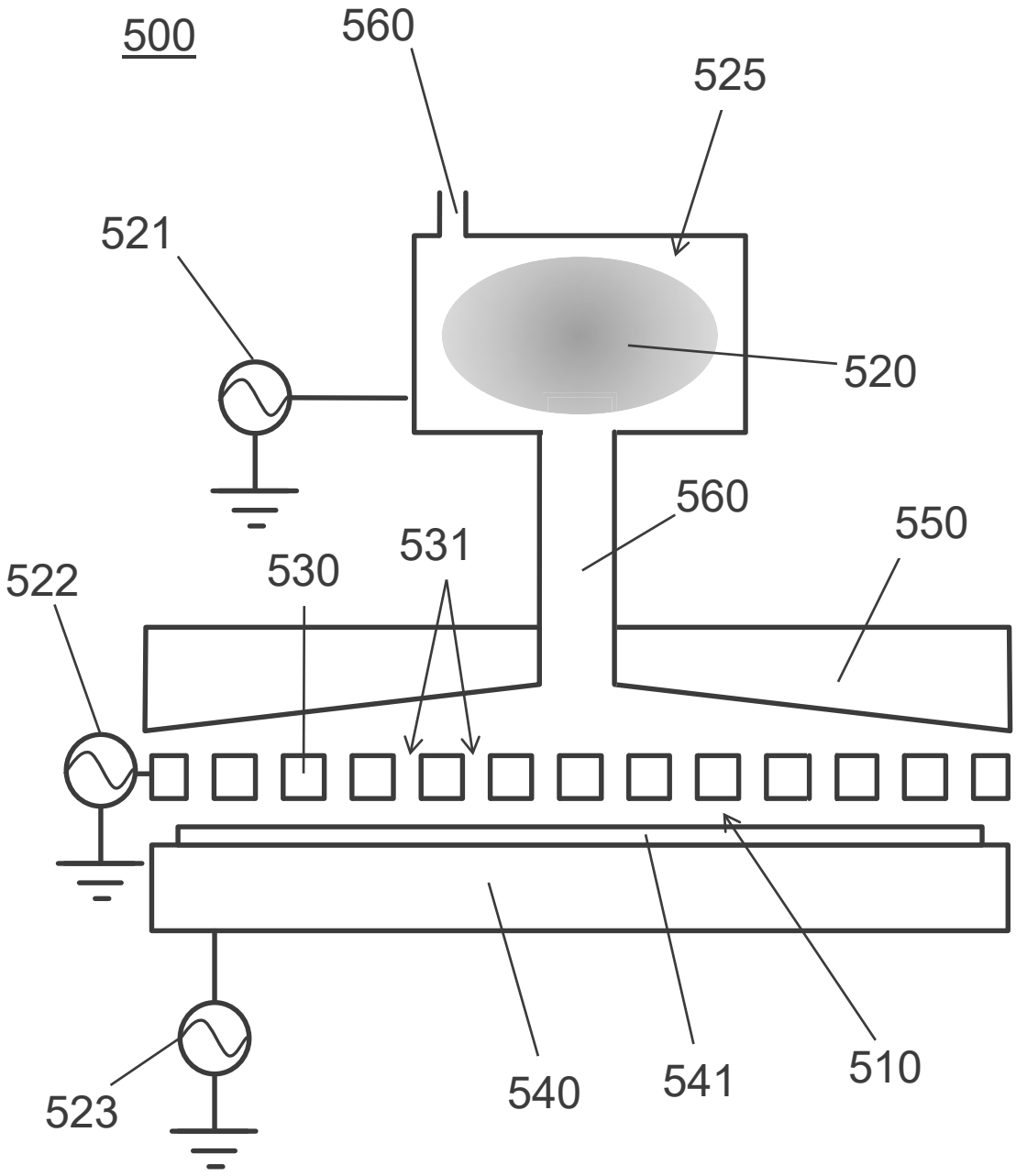


Fig. 5

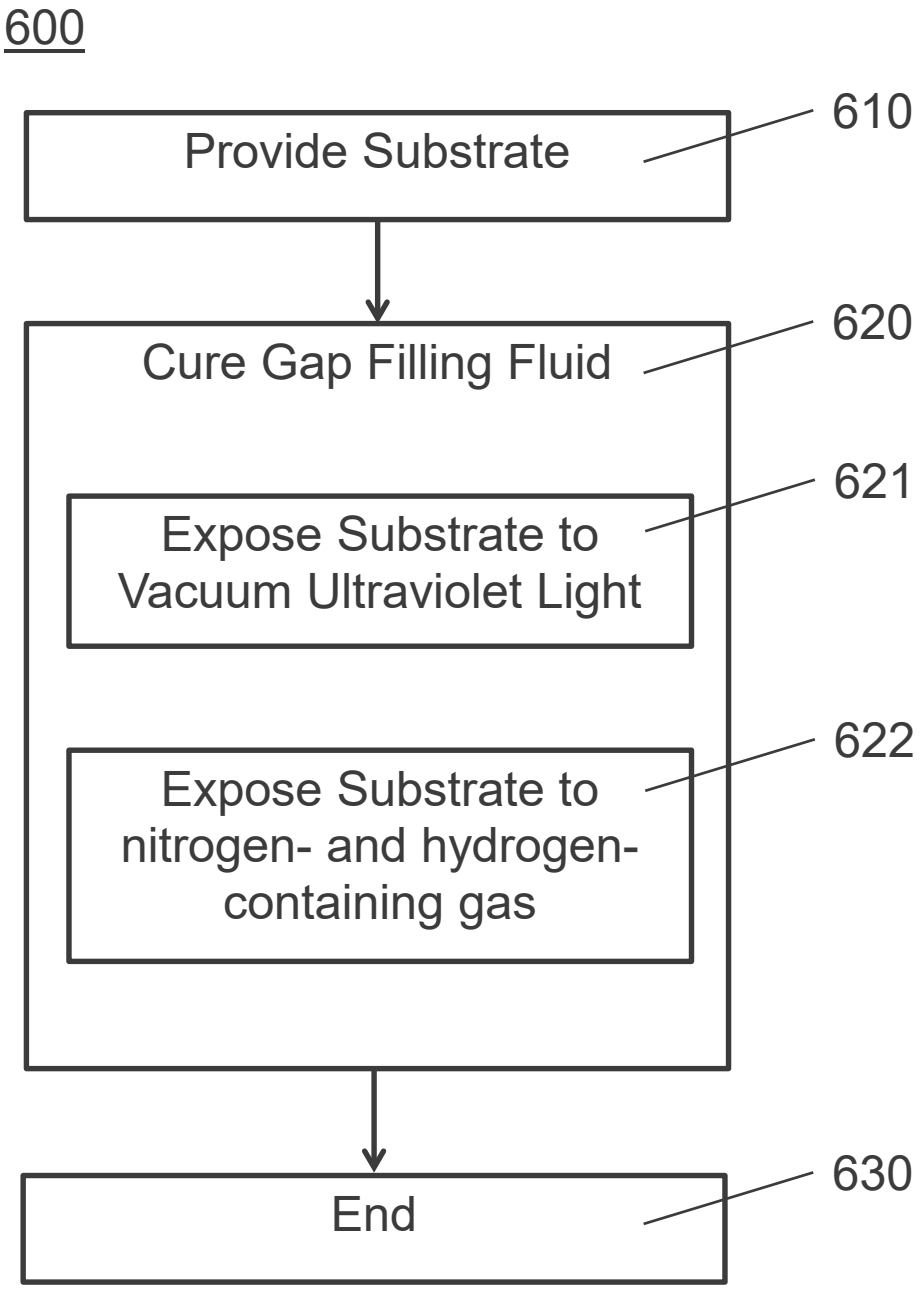

600
Provide Substrate
610
Cure Gap Filling Fluid
620
Expose Substrate to Vacuum Ultraviolet Light
621
Expose Substrate to nitrogen- and hydrogen-containing gas
622
End
630

Fig. 6

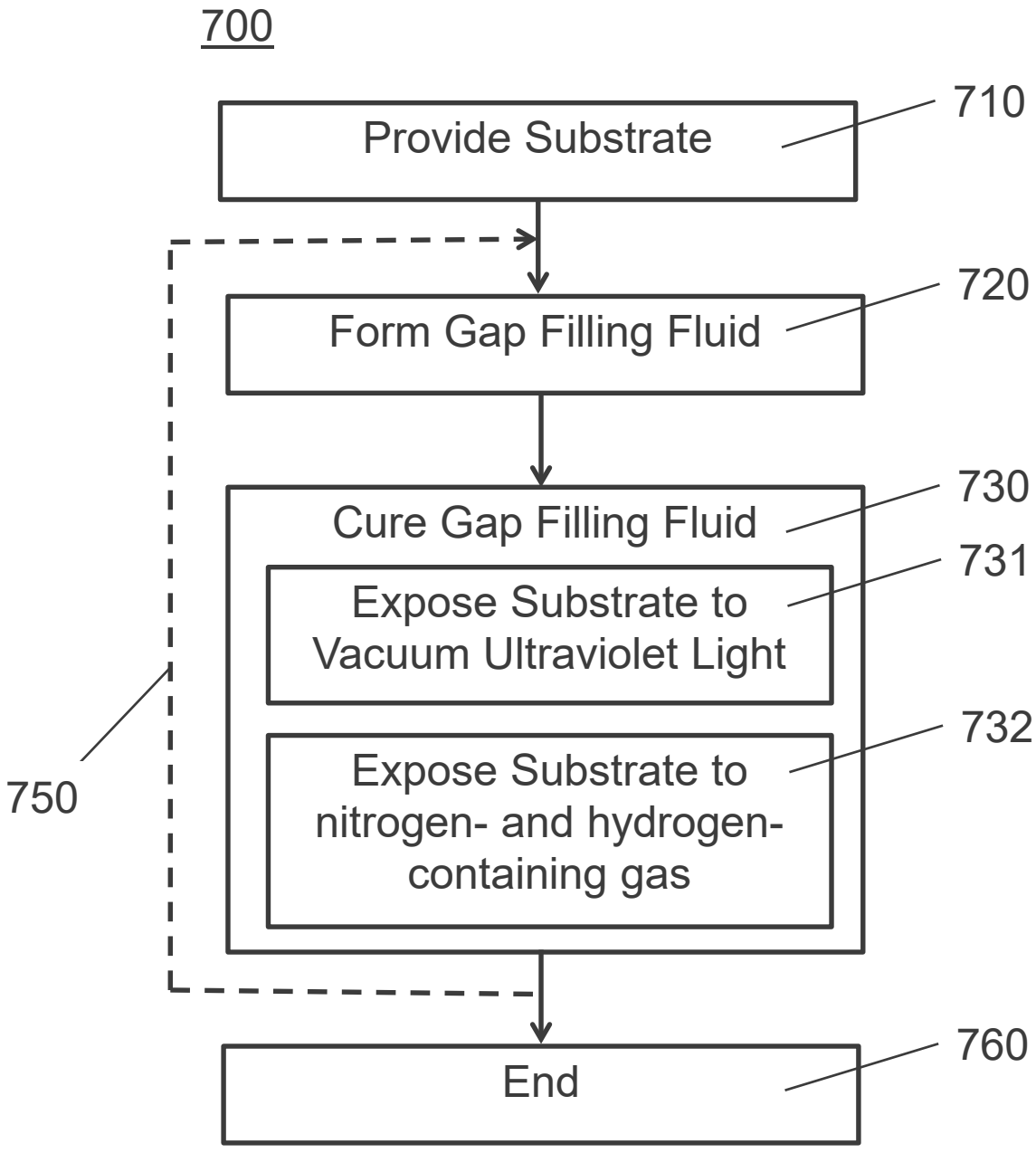

700
Provide Substrate
710
Form Gap Filling Fluid
720
Cure Gap Filling Fluid
730
Expose Substrate to Vacuum Ultraviolet Light
731
Expose Substrate to nitrogen- and hydrogen-containing gas
732
750
End
760

Fig. 7

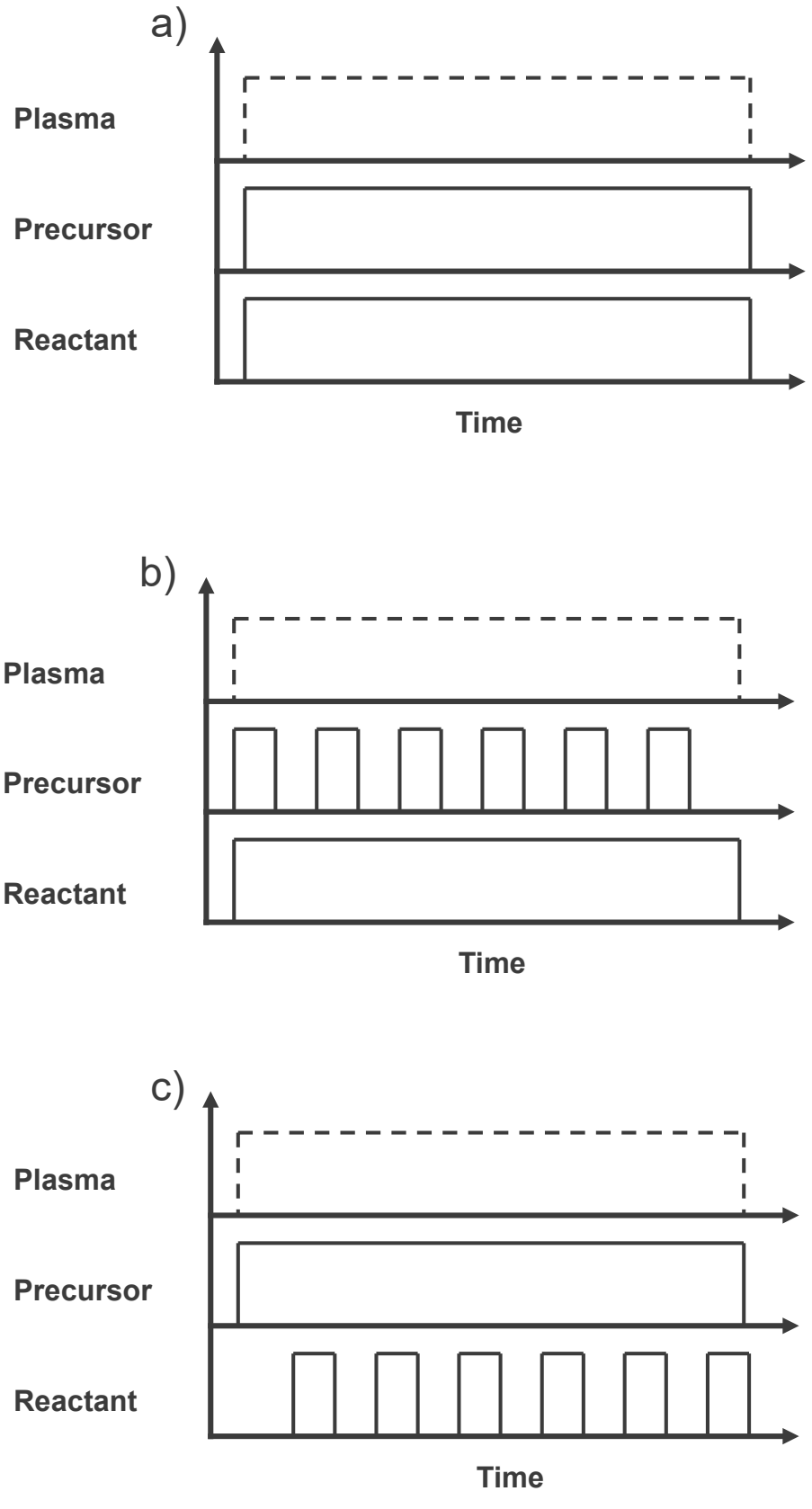

a)
Plasma
Precursor
Reactant
Time
b)
Plasma
Precursor
Reactant
Time
c)
Plasma
Precursor
Reactant
Time

Fig. 8

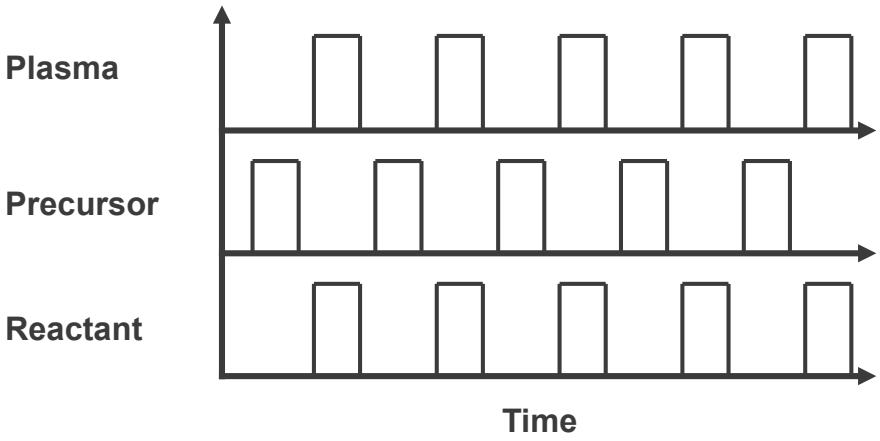


Fig. 9

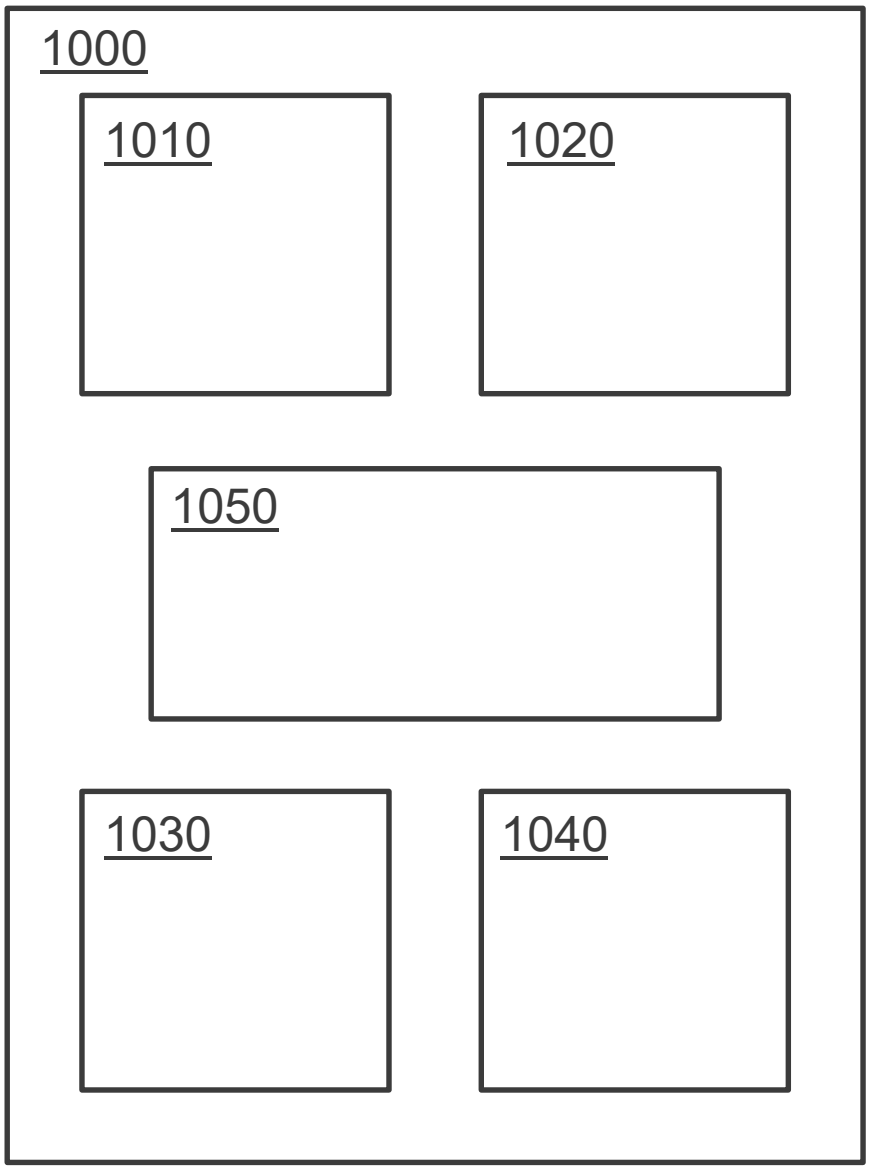
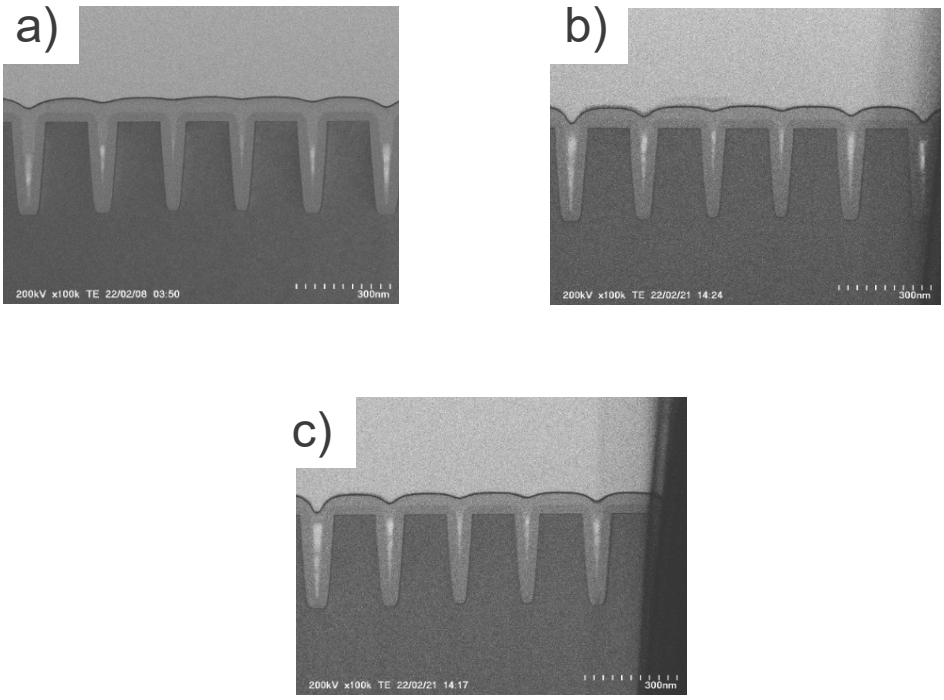


Fig. 10


a)
200kV x100k TE 22/02/08 03:50
300nm
b)
200kV x100k TE 22/02/21 14:24
300nm
c)
200kV x100k TE 22/02/21 14.17
300nm

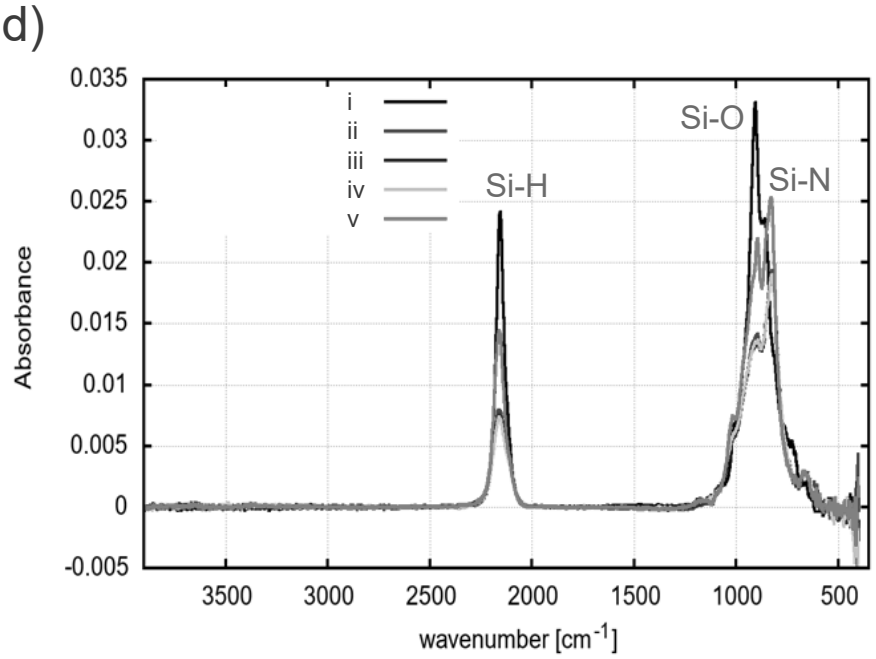

d)
Absorbance
0.035
0.03
0.025
0.02
0.015
0.01
0.005
0
-0.005
3500
3000
2500
2000
1500
1000
500
wavenumber [cm-1]
i
ii
iii
iv
v
Si-H
Si-O
Si-N

Fig. 11

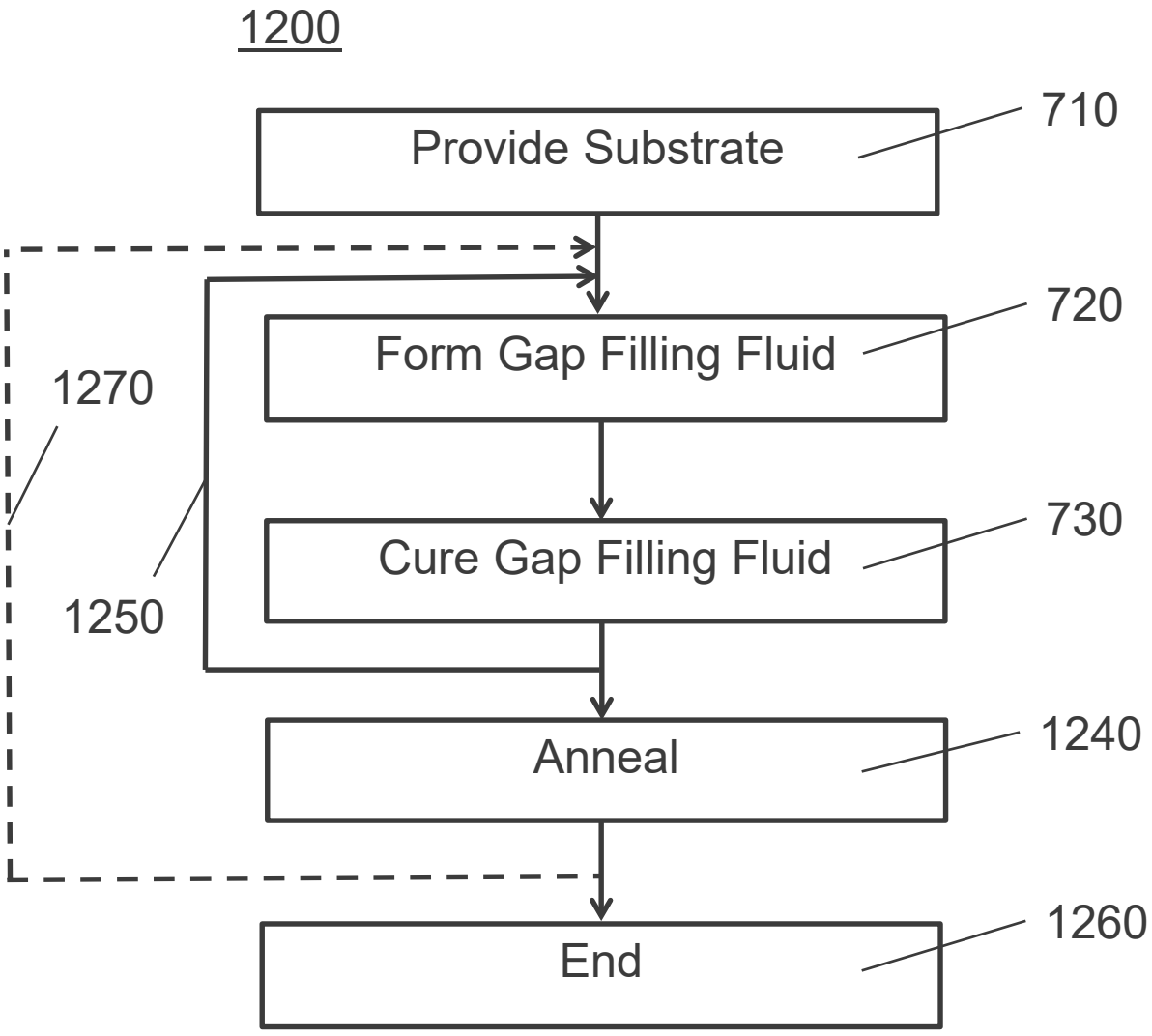

1200
Provide Substrate
710
Form Gap Filling Fluid
720
1270
Cure Gap Filling Fluid
730
1250
Anneal
1240
End
1260

Fig. 12