Fig. 1

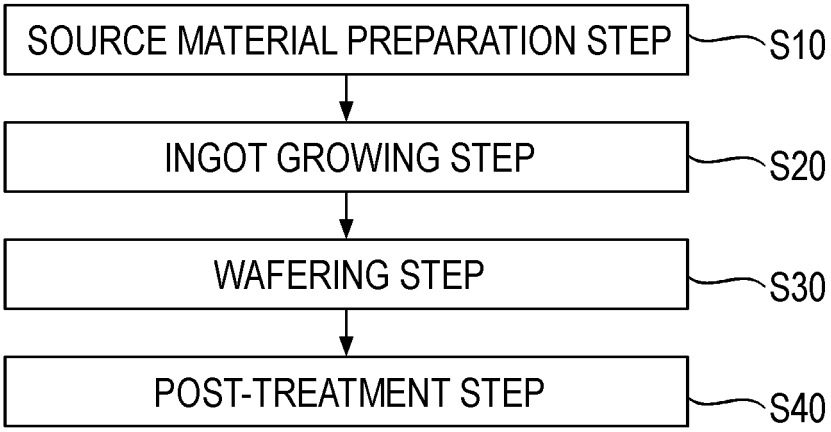

SOURCE MATERIAL PREPARATION STEP
S10
INGOT GROWING STEP
S20
WAFERING STEP
S30
POST-TREATMENT STEP
S40

Fig. 2

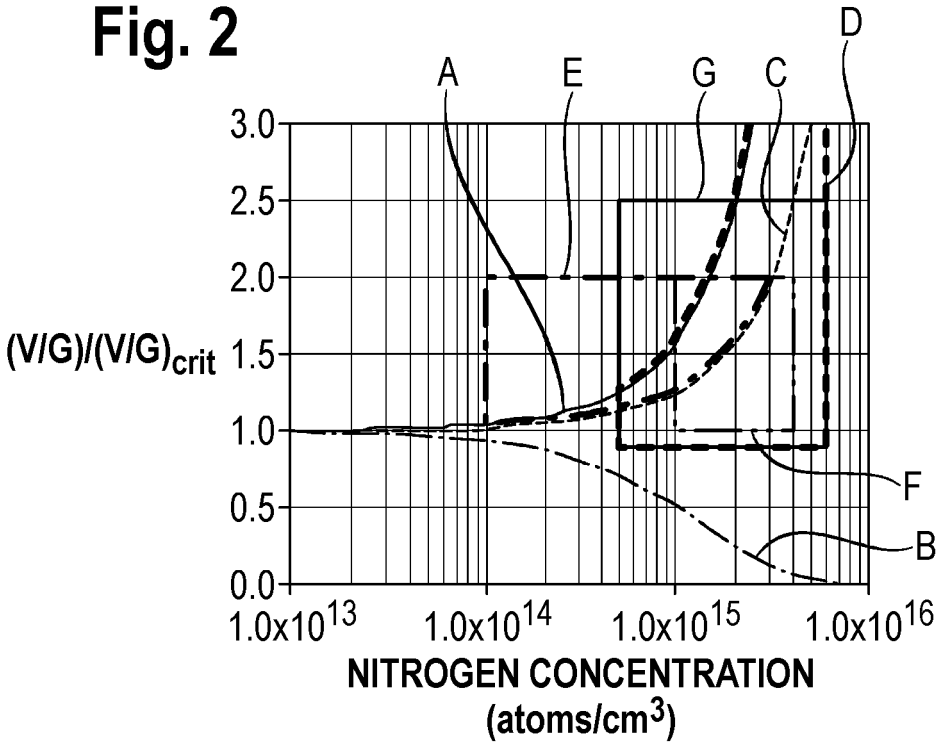

A
E
G
C
D
F
B
3.0
2.5
2.0
1.5
1.0
0.5
0.0
(V/G)/(V/G)crit
1.0x10^13
1.0x10^14
1.0x10^15
1.0x10^16
NITROGEN CONCENTRATION
(atoms/cm^3)

Fig. 3

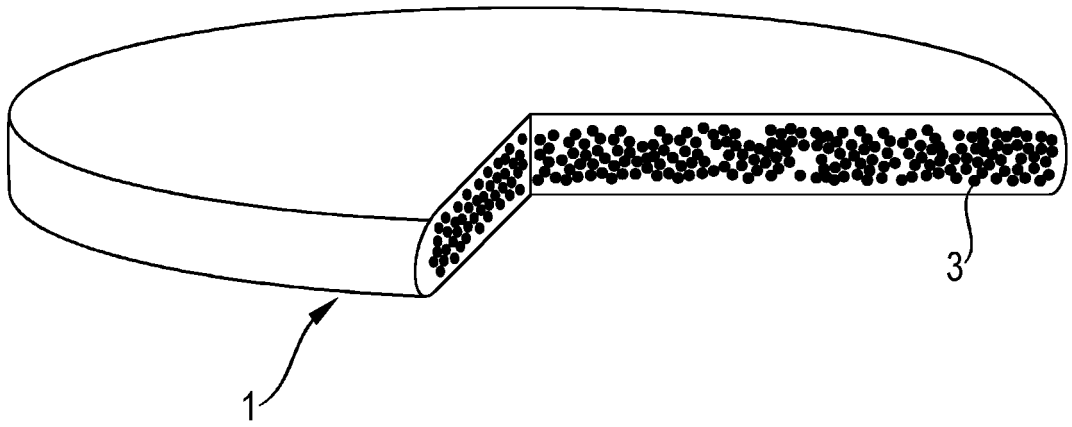


Fig. 4

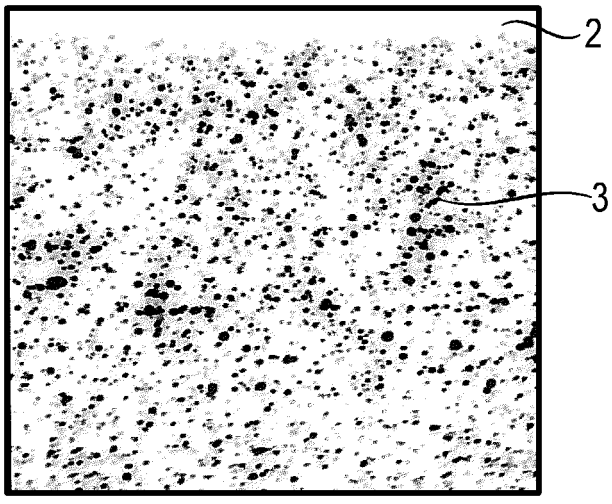
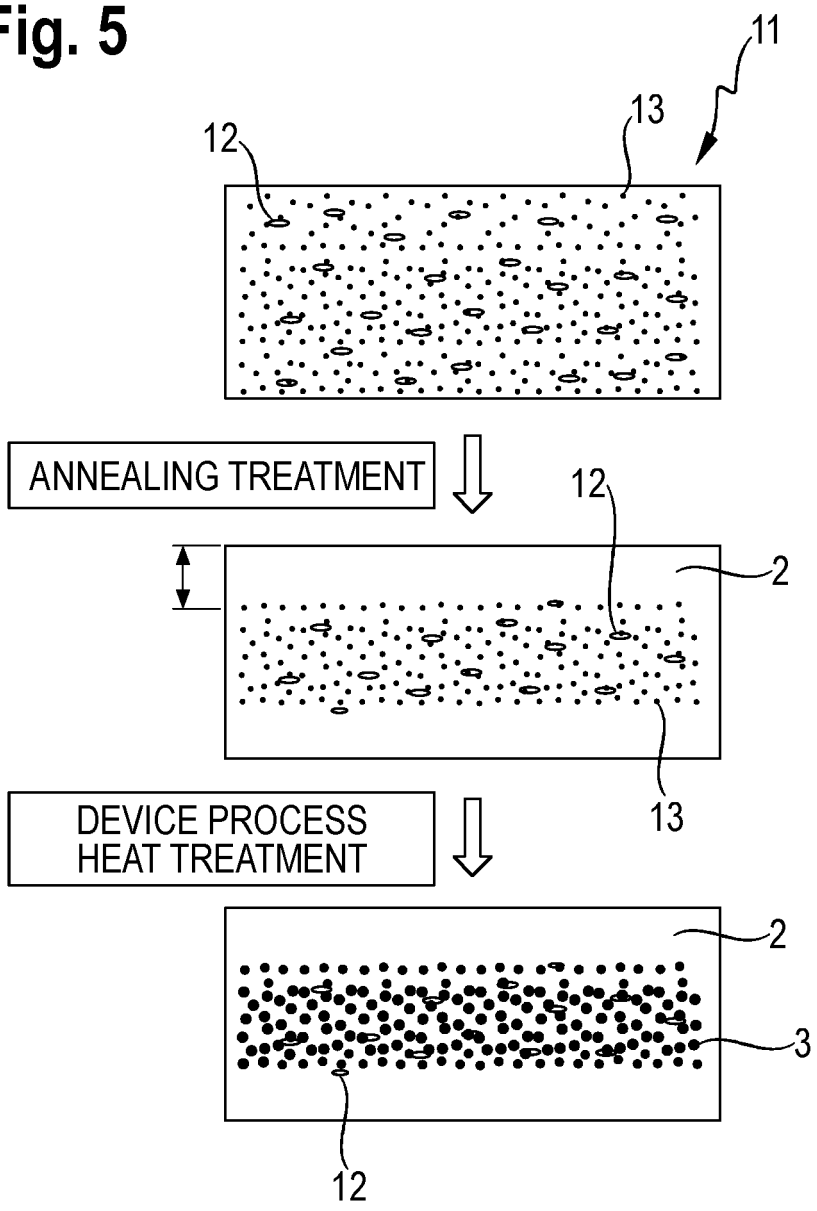


Fig. 5


11
13
12
ANNEALING TREATMENT
12
2
13
DEVICE PROCESS
HEAT TREATMENT
2
3
12