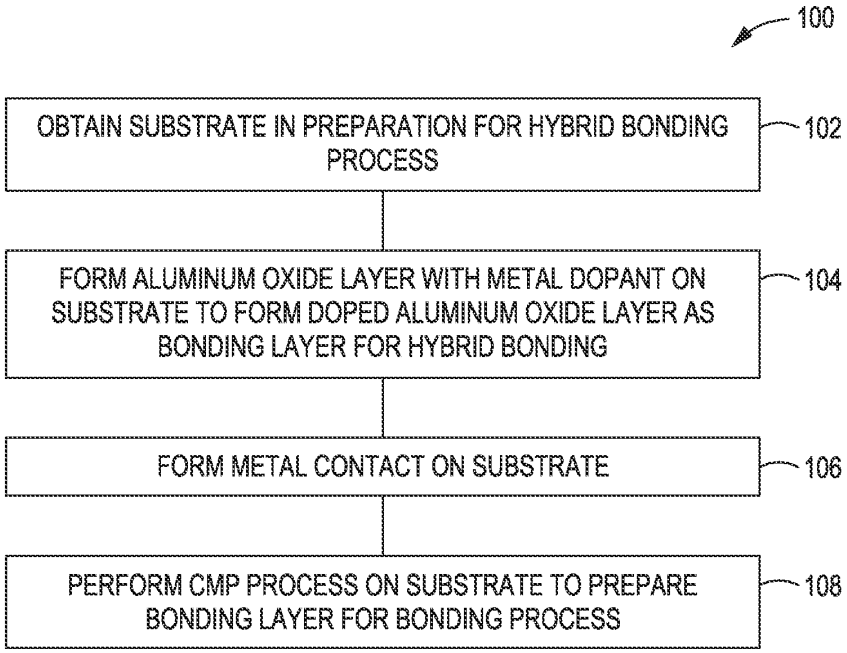

100
OBTAIN SUBSTRATE IN PREPARATION FOR HYBRID BONDING PROCESS
102
FORM ALUMINUM OXIDE LAYER WITH METAL DOPANT ON SUBSTRATE TO FORM DOPED ALUMINUM OXIDE LAYER AS BONDING LAYER FOR HYBRID BONDING
104
FORM METAL CONTACT ON SUBSTRATE
106
PERFORM CMP PROCESS ON SUBSTRATE TO PREPARE BONDING LAYER FOR BONDING PROCESS
108

FIG. 1

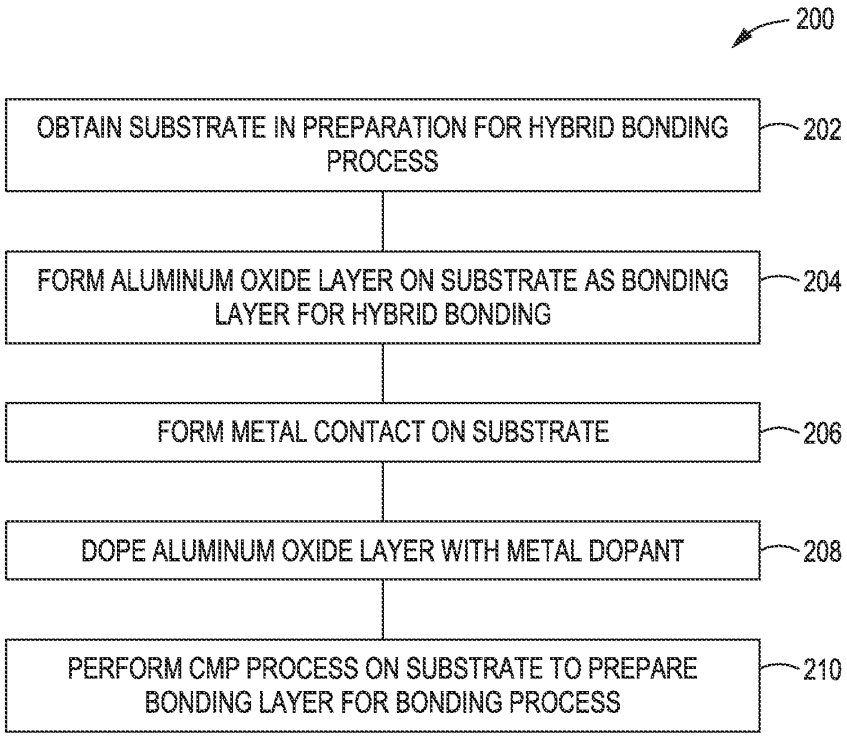

200
OBTAIN SUBSTRATE IN PREPARATION FOR HYBRID BONDING PROCESS
202
FORM ALUMINUM OXIDE LAYER ON SUBSTRATE AS BONDING LAYER FOR HYBRID BONDING
204
FORM METAL CONTACT ON SUBSTRATE
206
DOPE ALUMINUM OXIDE LAYER WITH METAL DOPANT
208
PERFORM CMP PROCESS ON SUBSTRATE TO PREPARE BONDING LAYER FOR BONDING PROCESS
210

FIG. 2

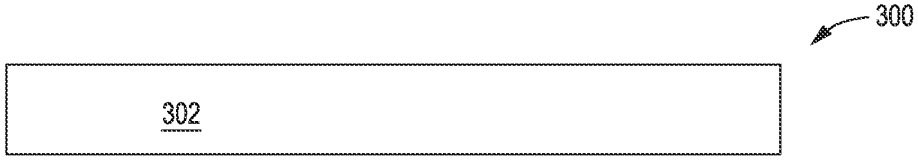


FIG. 3

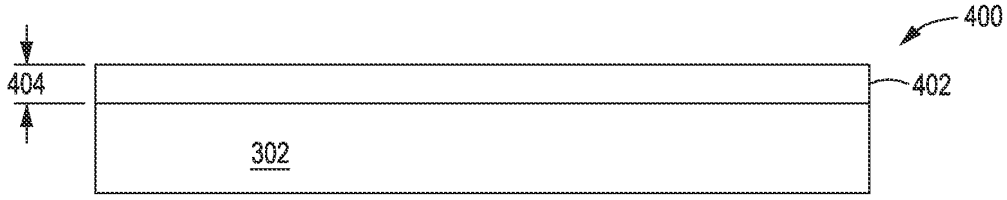


FIG. 4

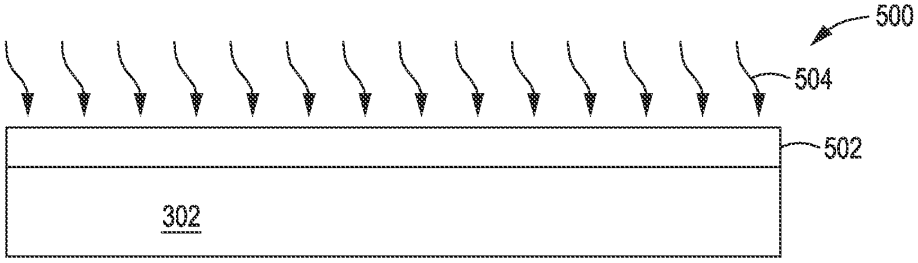


FIG. 5

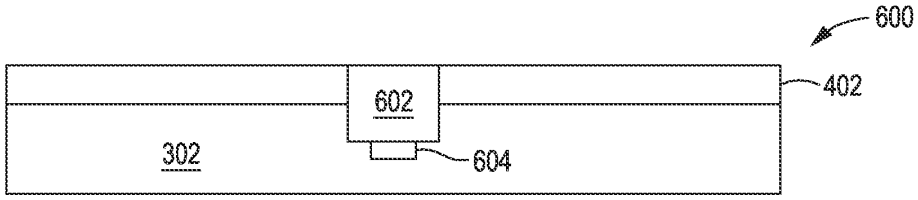


FIG. 6

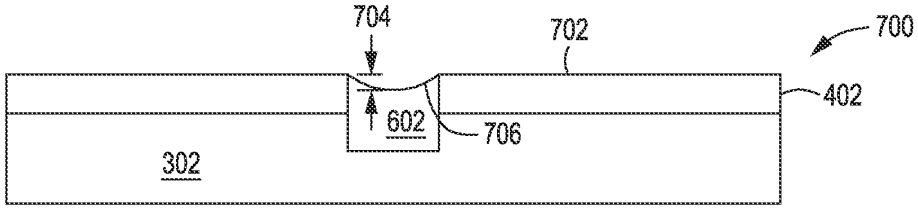


FIG. 7

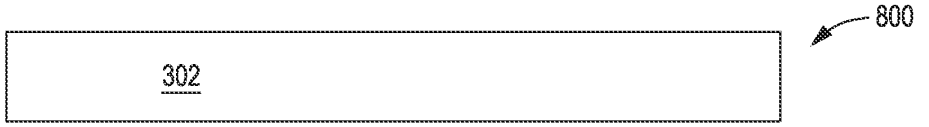


FIG. 8

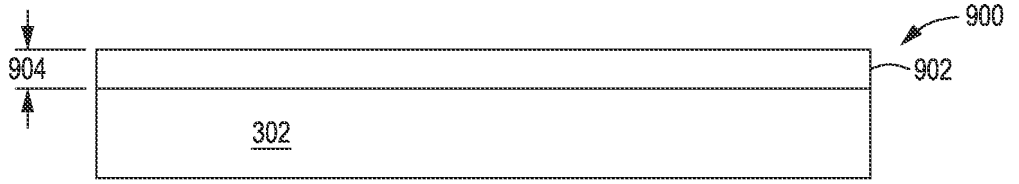


FIG. 9

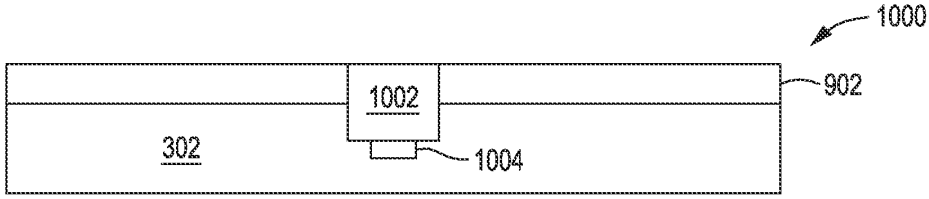


FIG. 10

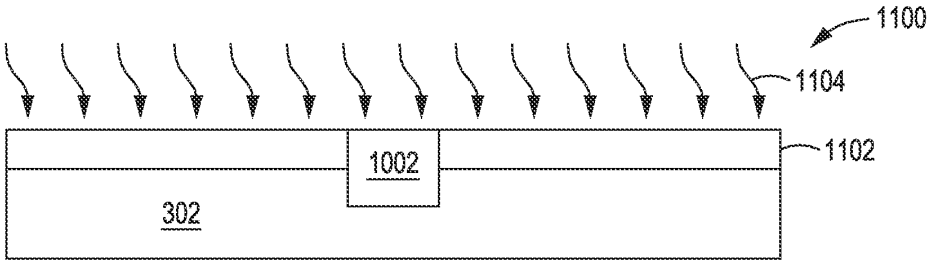


FIG. 11

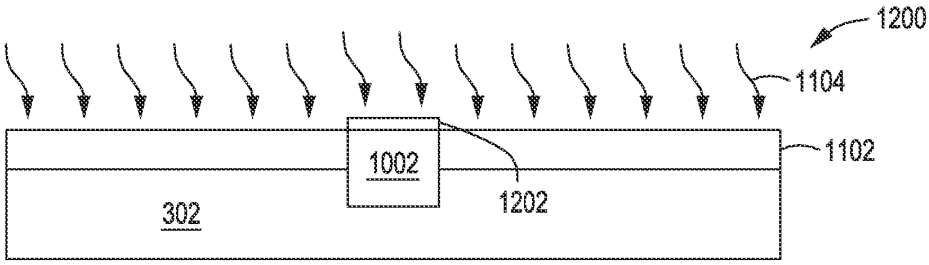


FIG. 12

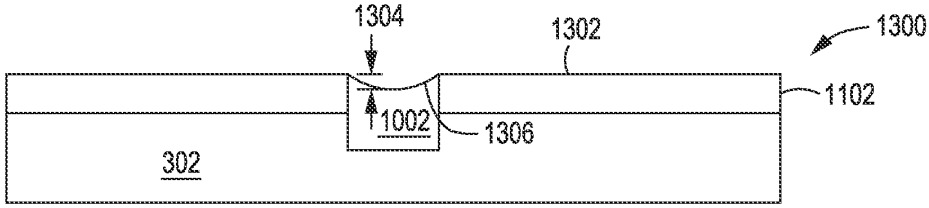


FIG. 13

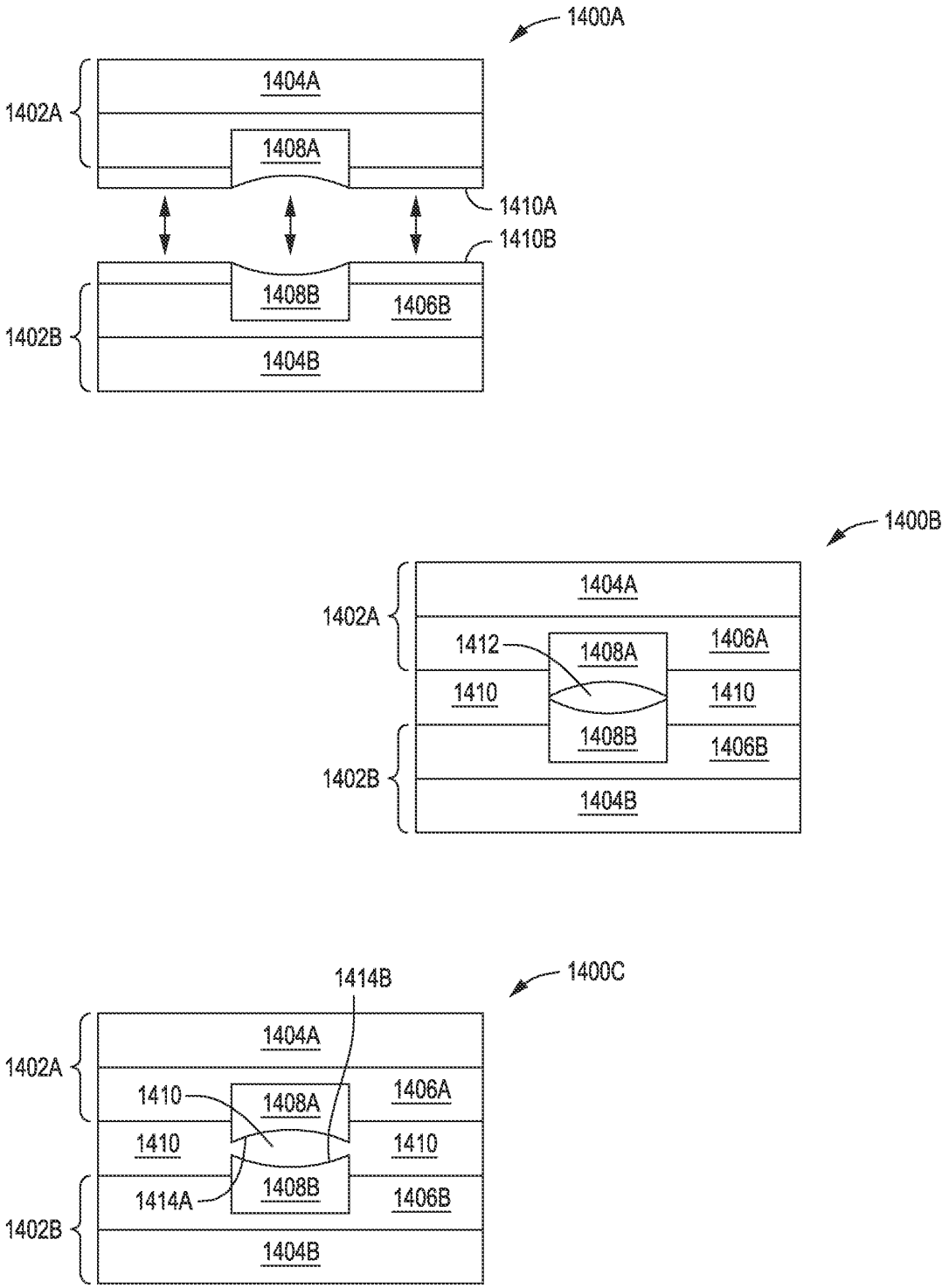

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1400C
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1410
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1404B

FIG. 14

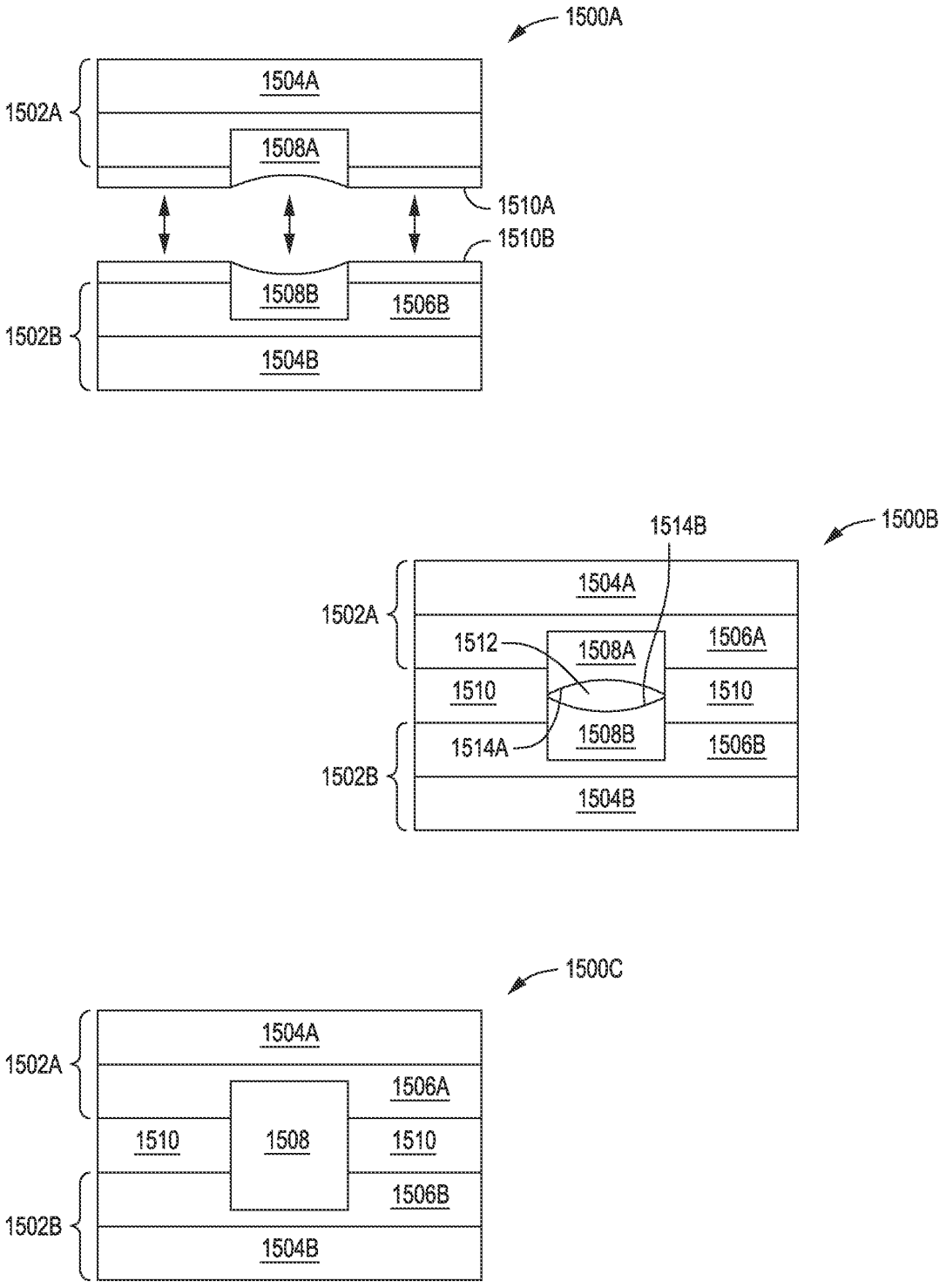

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1506B
1502B
1504B

FIG. 15