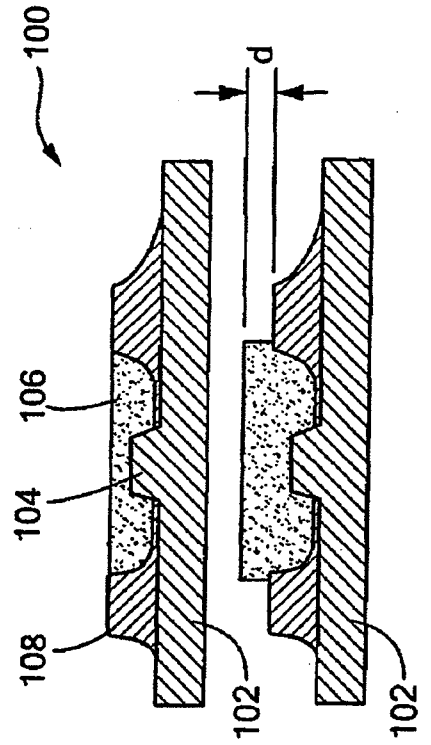

100
d
106
104
108
102
102

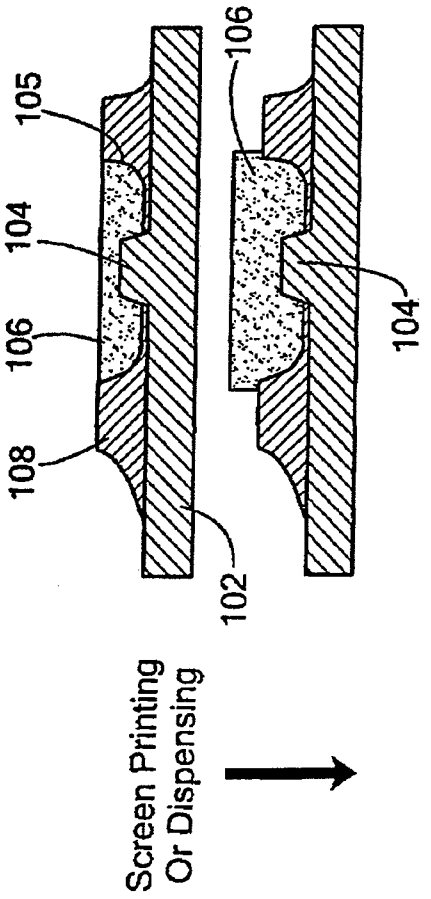

105
106
104
106
108
102
104
Screen Printing
Or Dispensing

FIG. 1A

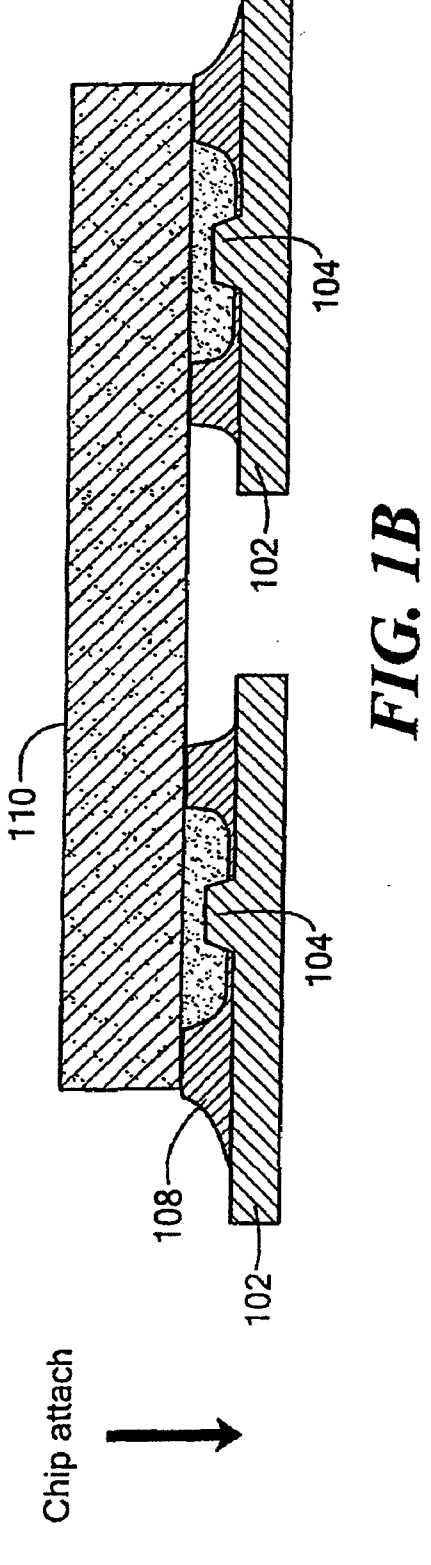

100
104
102
110
104
108
102
Chip attach

FIG. 1B

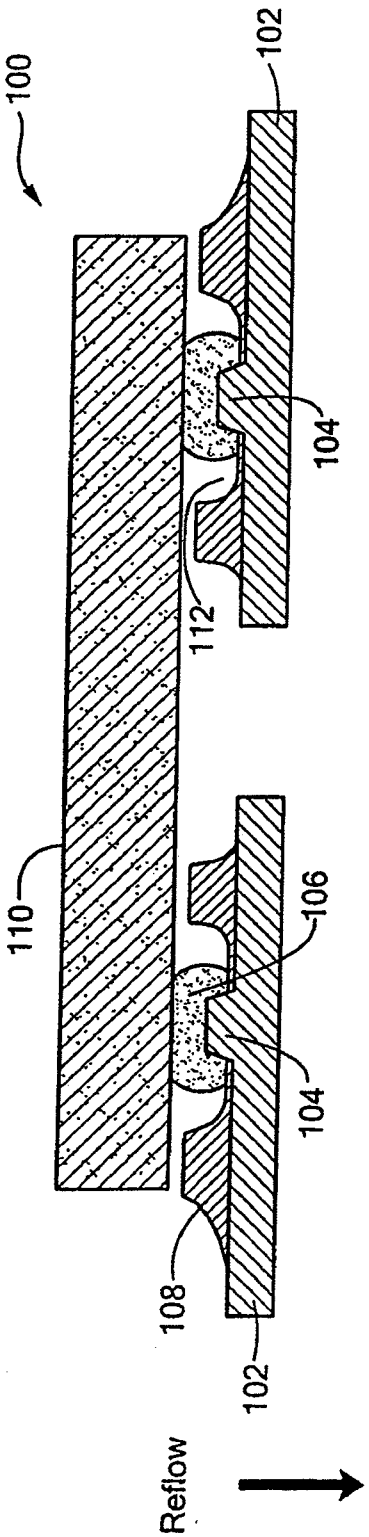

100
102
104
112
110
106
104
108
102
Reflow

FIG. 1C

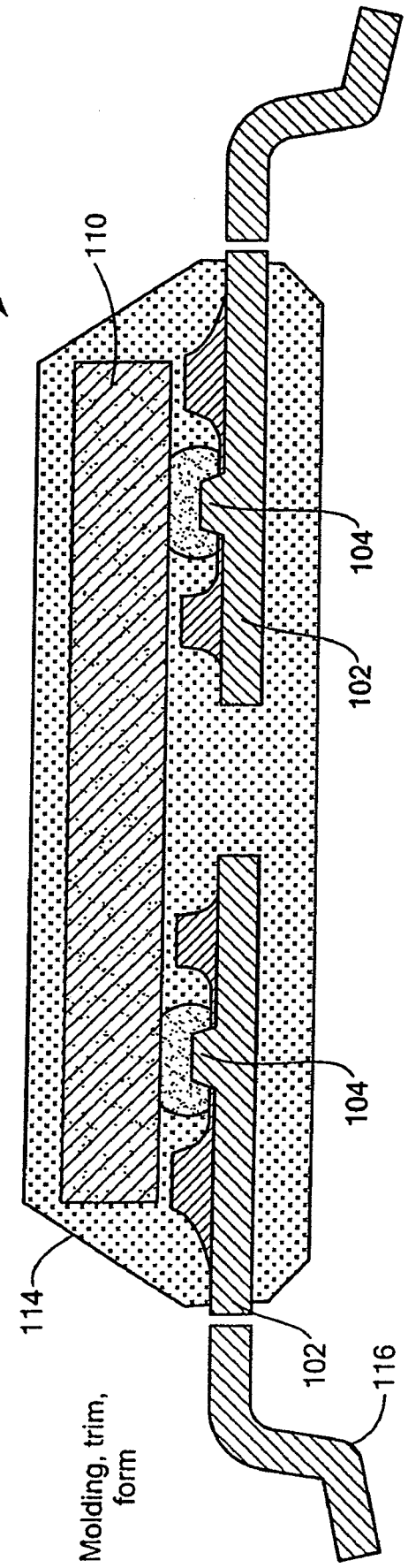

100
110
104
102
104
114
102
116
Molding, trim, form

FIG. 1D

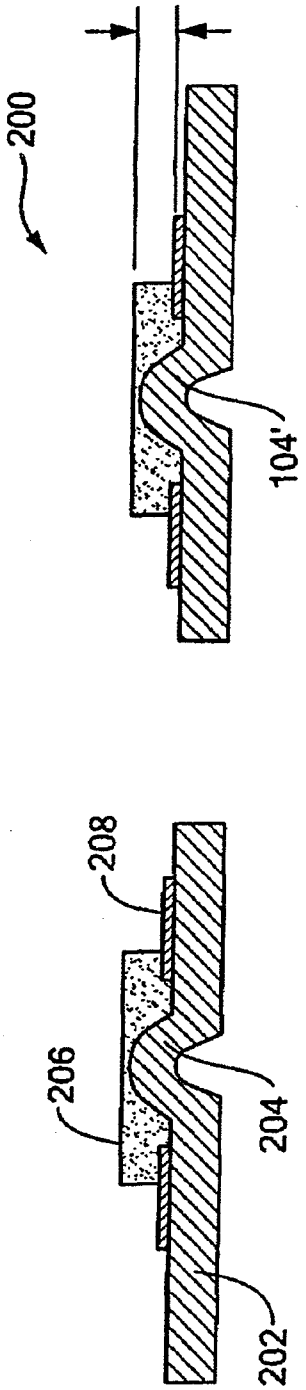

200
104'
208
206
204
202
Screen Printing
Or Dispensing

FIG. 2A

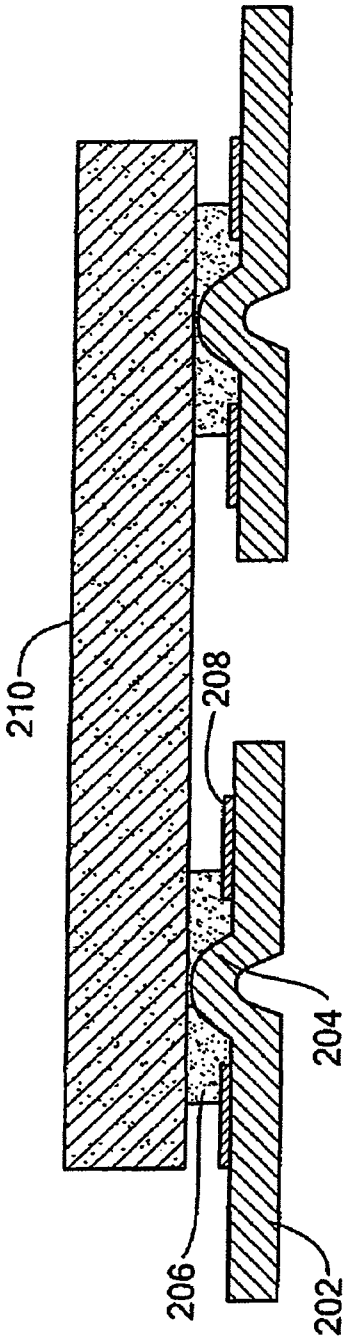

200
210
208
206
204
202
Chip attach

FIG. 2B

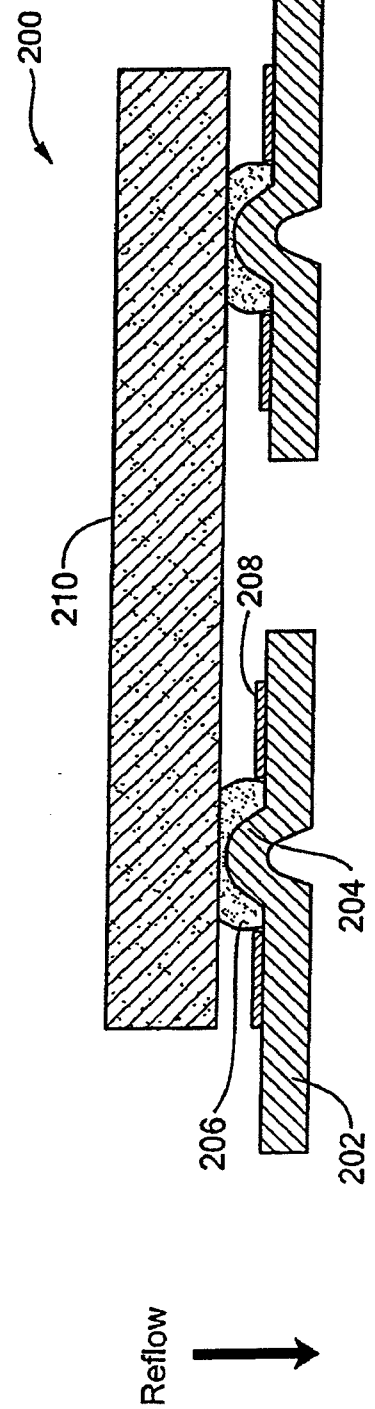

200
210
208
204
206
202
Reflow

FIG. 2C

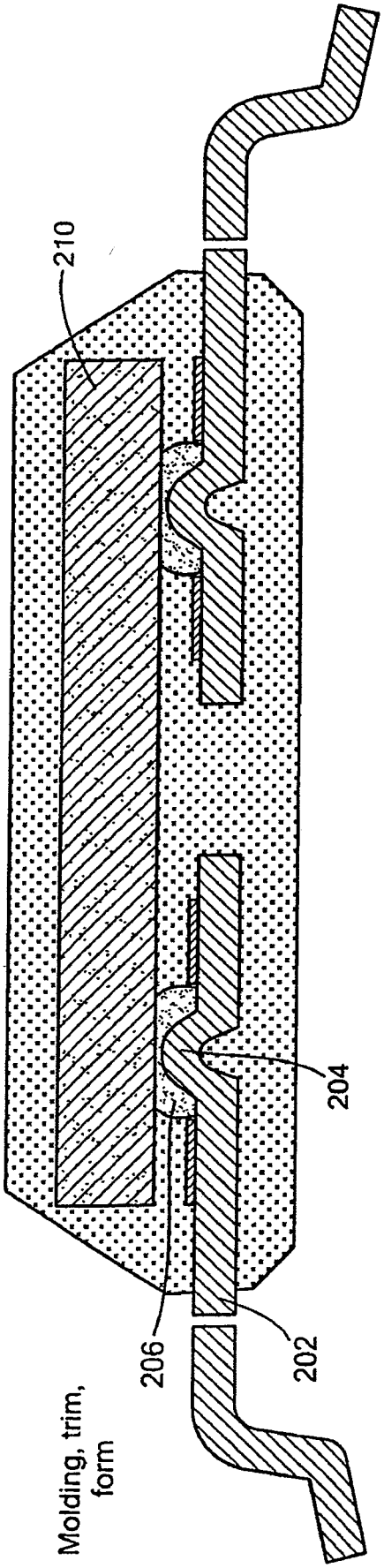
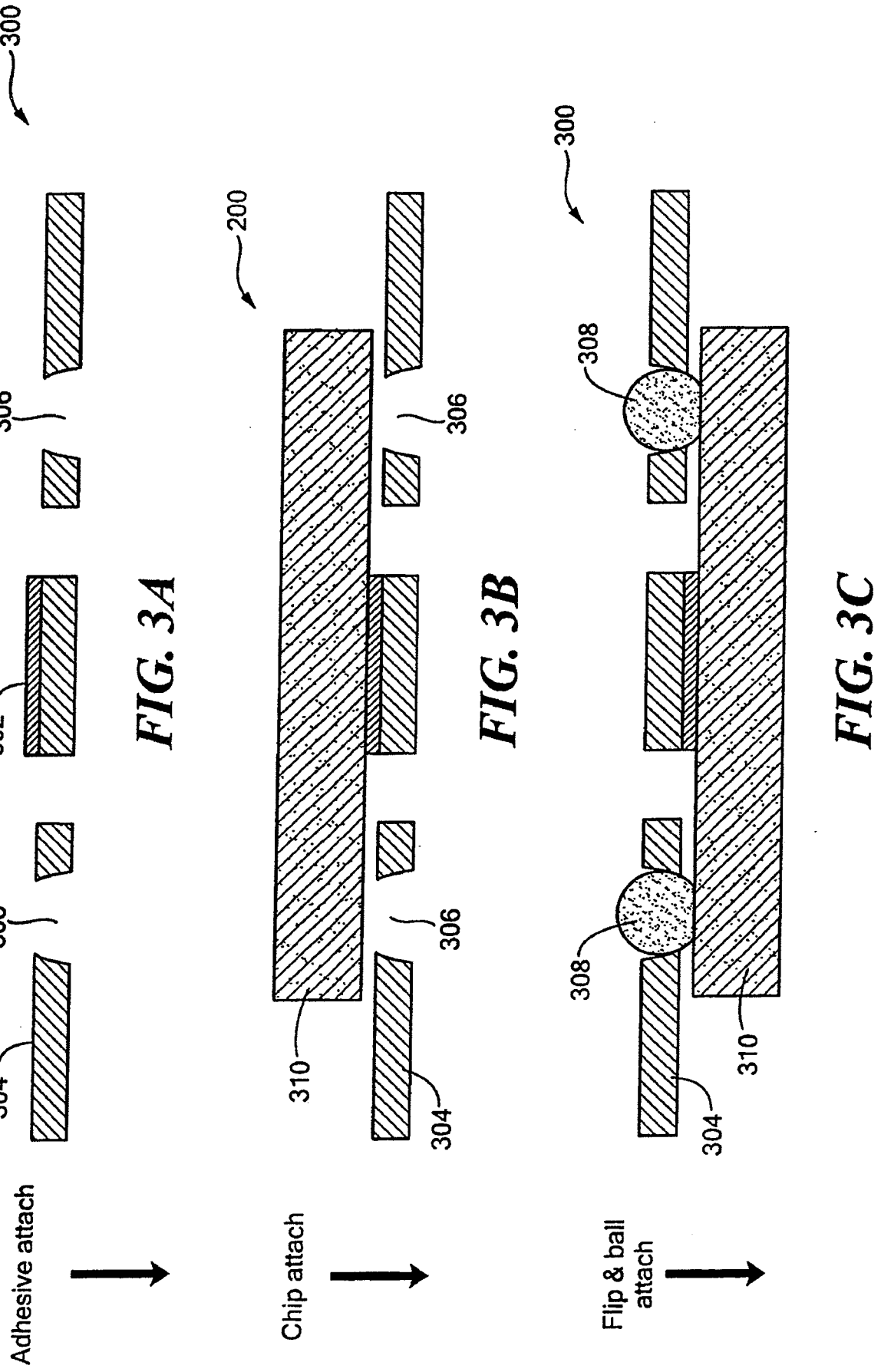

200
210
204
206
202
Molding, trim, form

FIG. 2D


300
306
302
306
304
Adhesive attach
FIG. 3A
200
306
310
306
304
Chip attach
FIG. 3B
300
308
308
310
304
Flip & ball attach
FIG. 3C

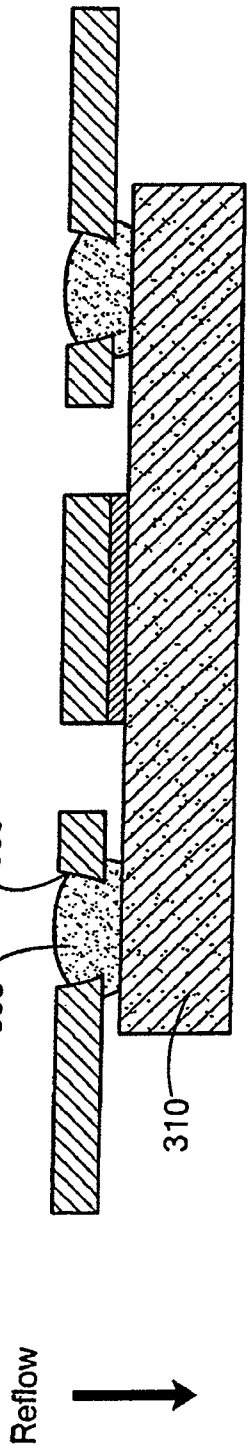



FIG. 3D

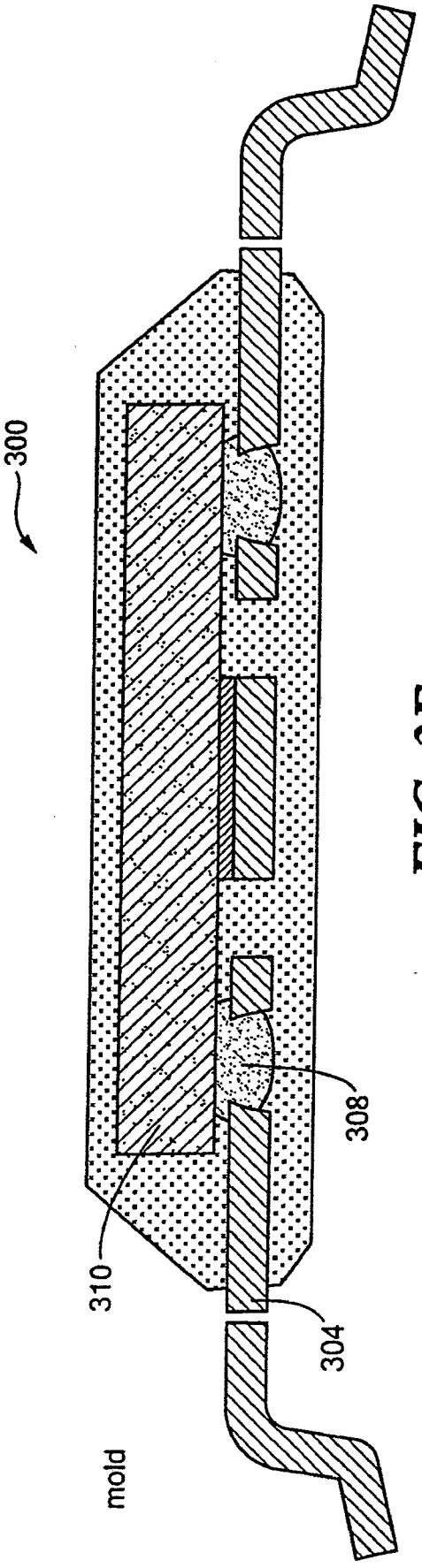



FIG. 3E

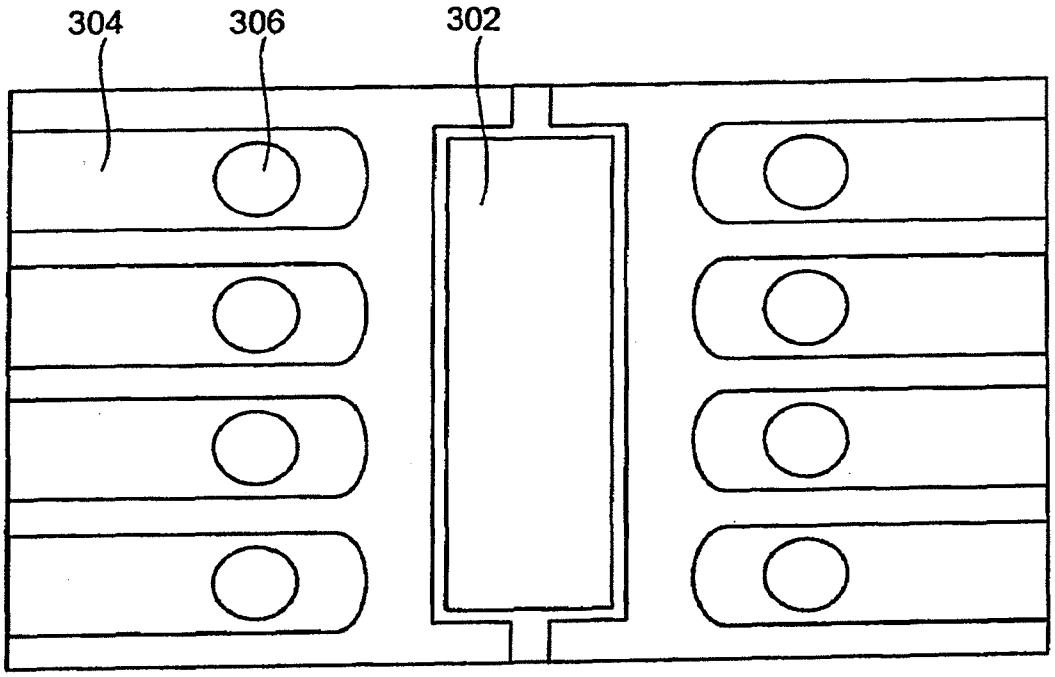



*FIG. 3A1*

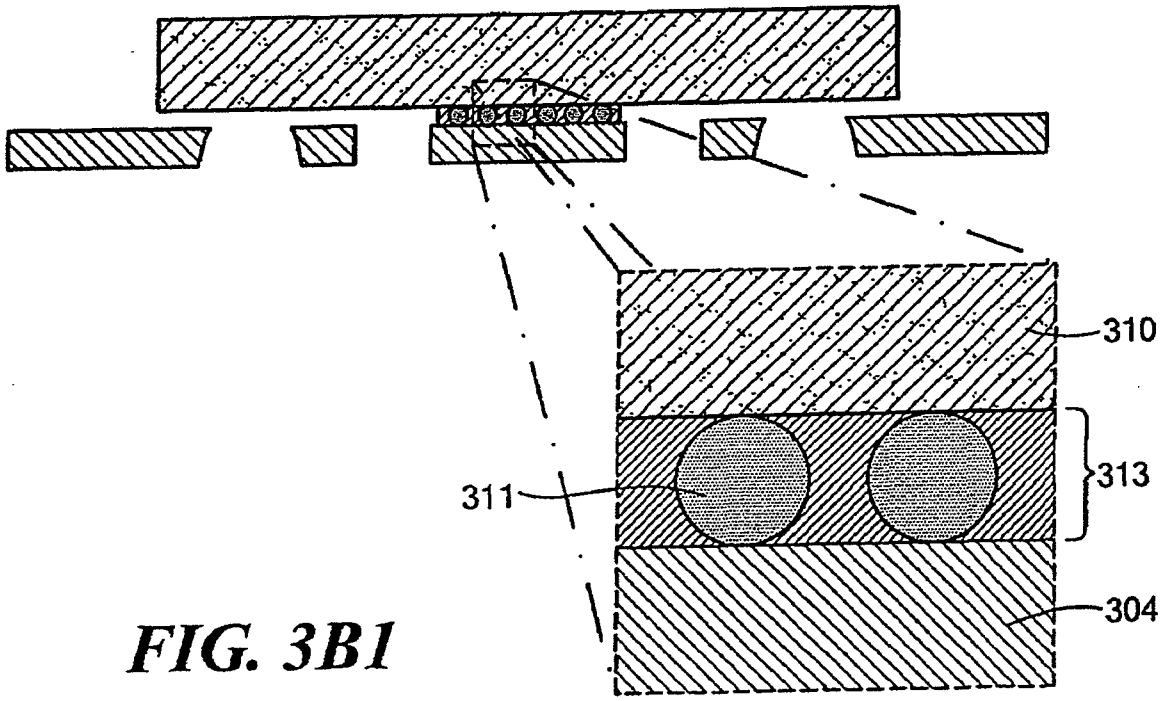



*FIG. 3B1*

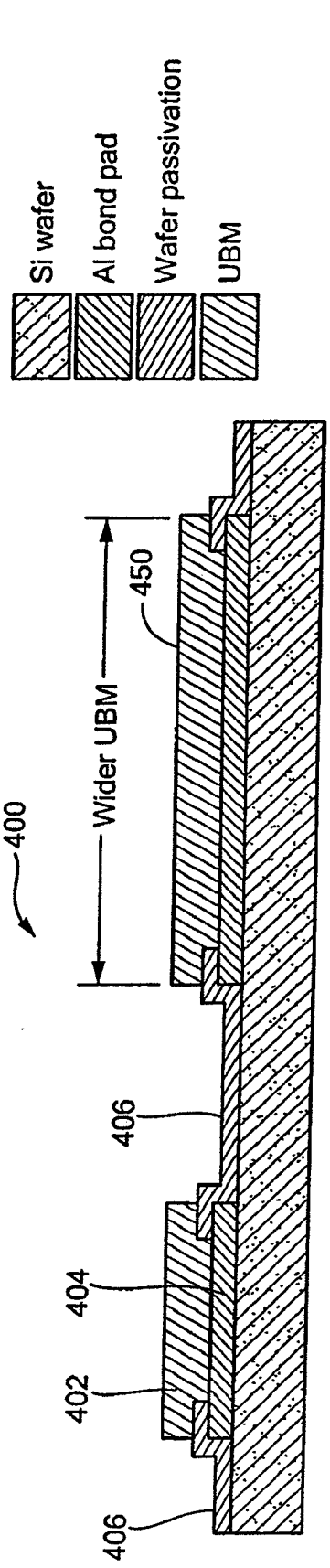

Si wafer
Al bond pad
Wafer passivation
UBM
400
Wider UBM
450
406
404
402
406

FIG. 4

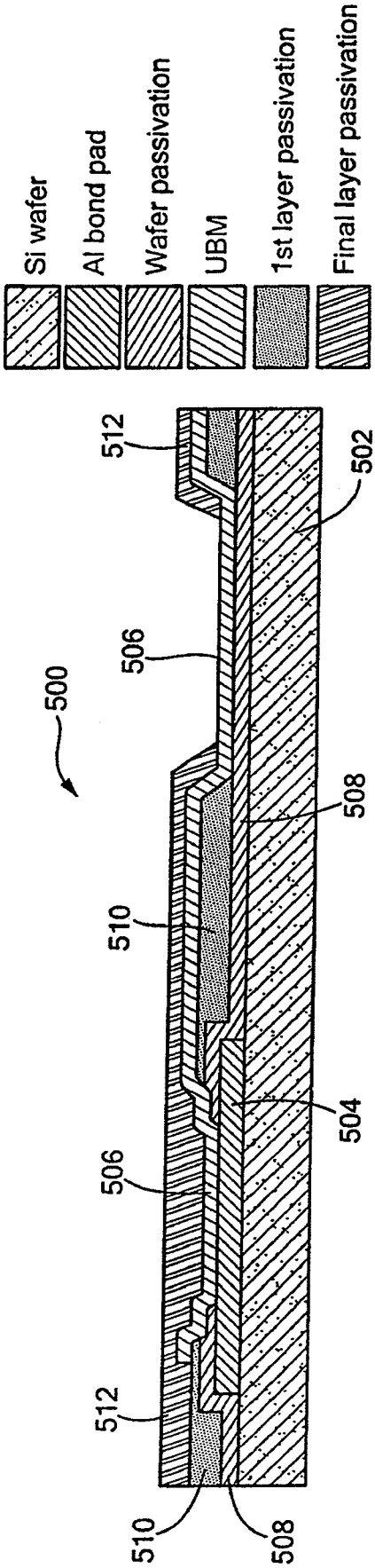

Si wafer
Al bond pad
Wafer passivation
UBM
1st layer passivation
Final layer passivation
500
512
502
506
508
510
504
506
512
510
508

FIG. 5