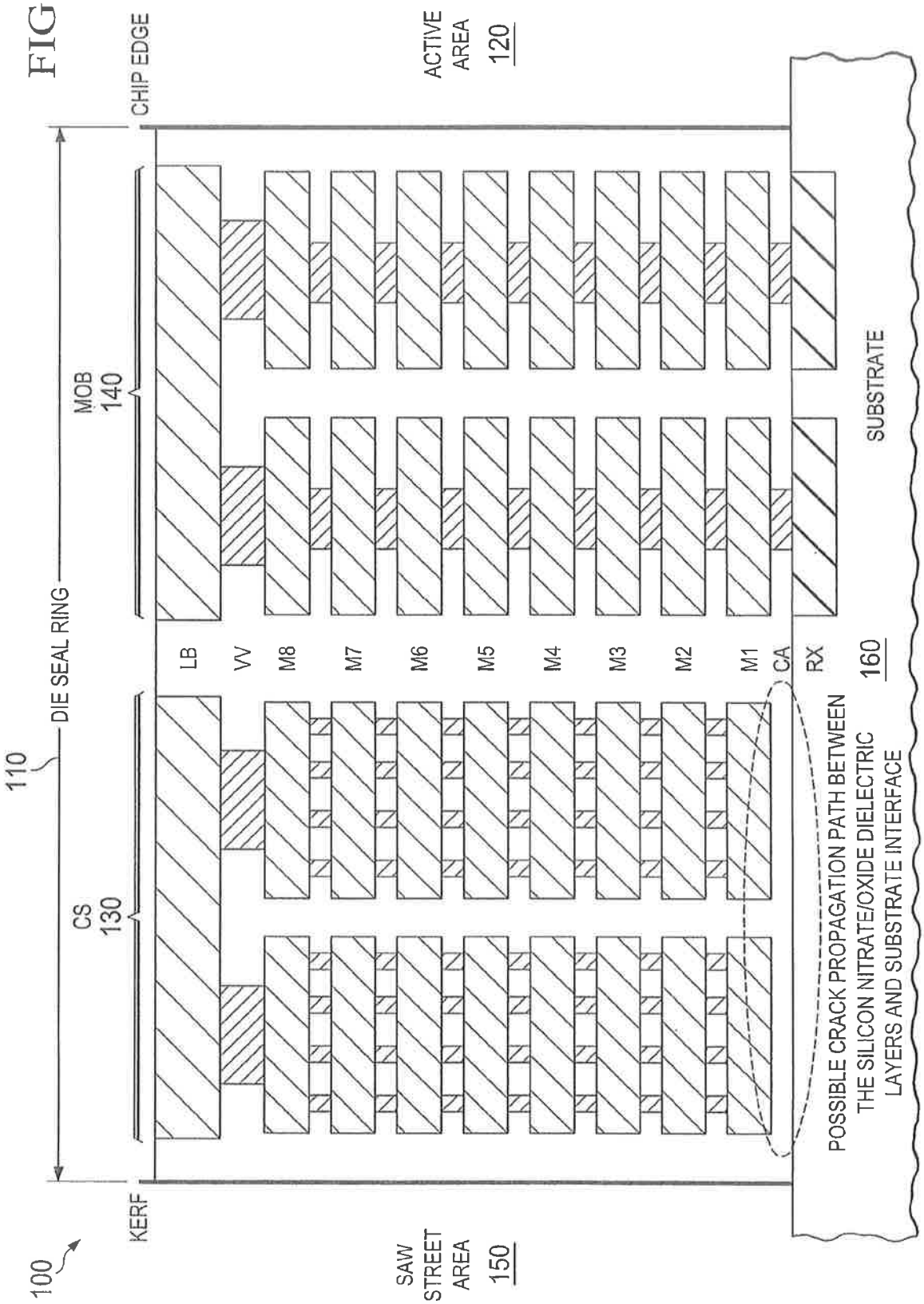
FIG. 1


100
110
DIE SEAL RING
CHIP EDGE
KERF
MOB
140
CS
130
ACTIVE
AREA
120
SAW
STREET
AREA
150
LB
VV
M8
M7
M6
M5
M4
M3
M2
M1
CA
RX
SUBSTRATE
160
POSSIBLE CRACK PROPAGATION PATH BETWEEN
THE SILICON NITRATE/OXIDE DIELECTRIC
LAYERS AND SUBSTRATE INTERFACE

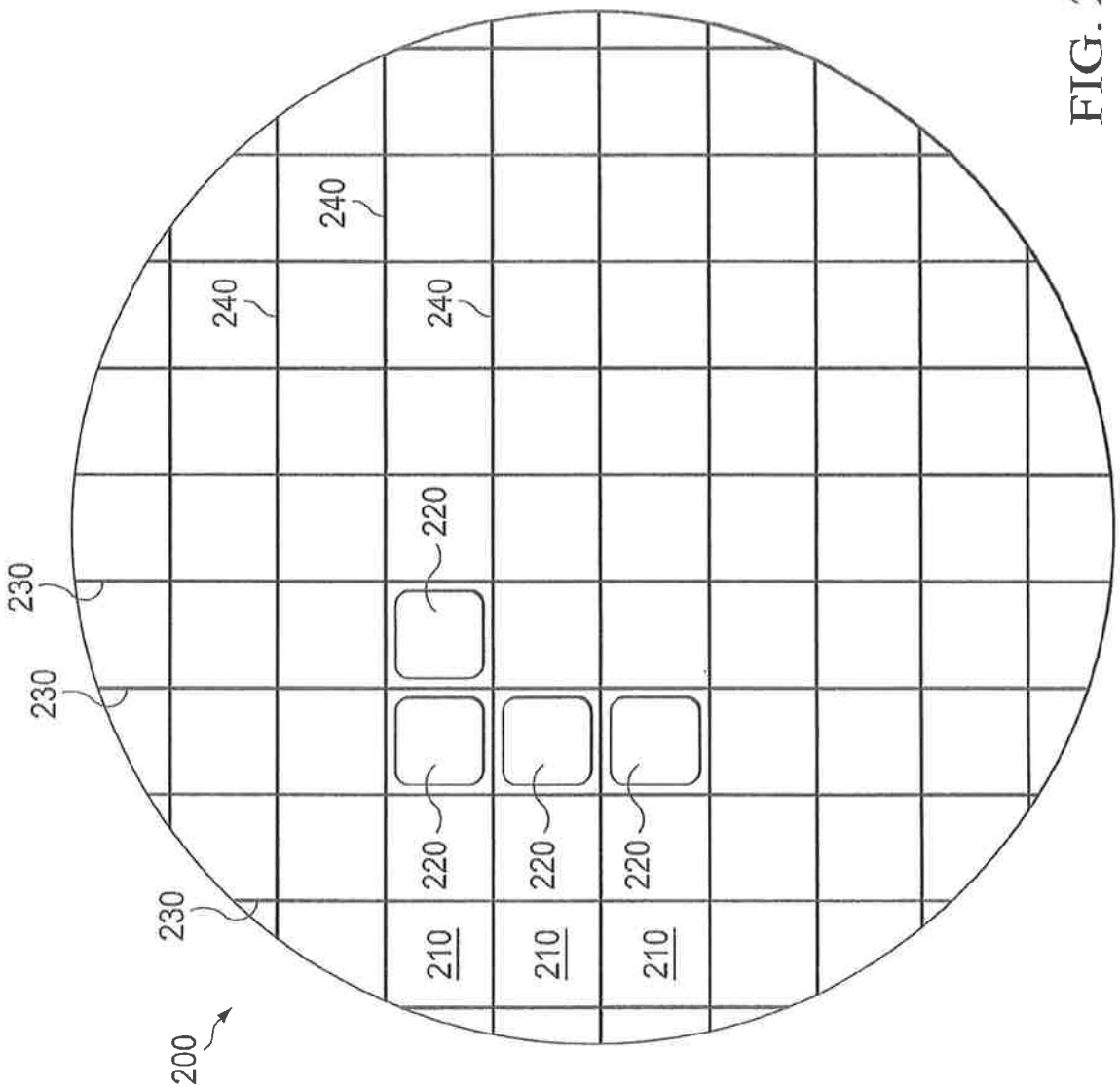



FIG. 2

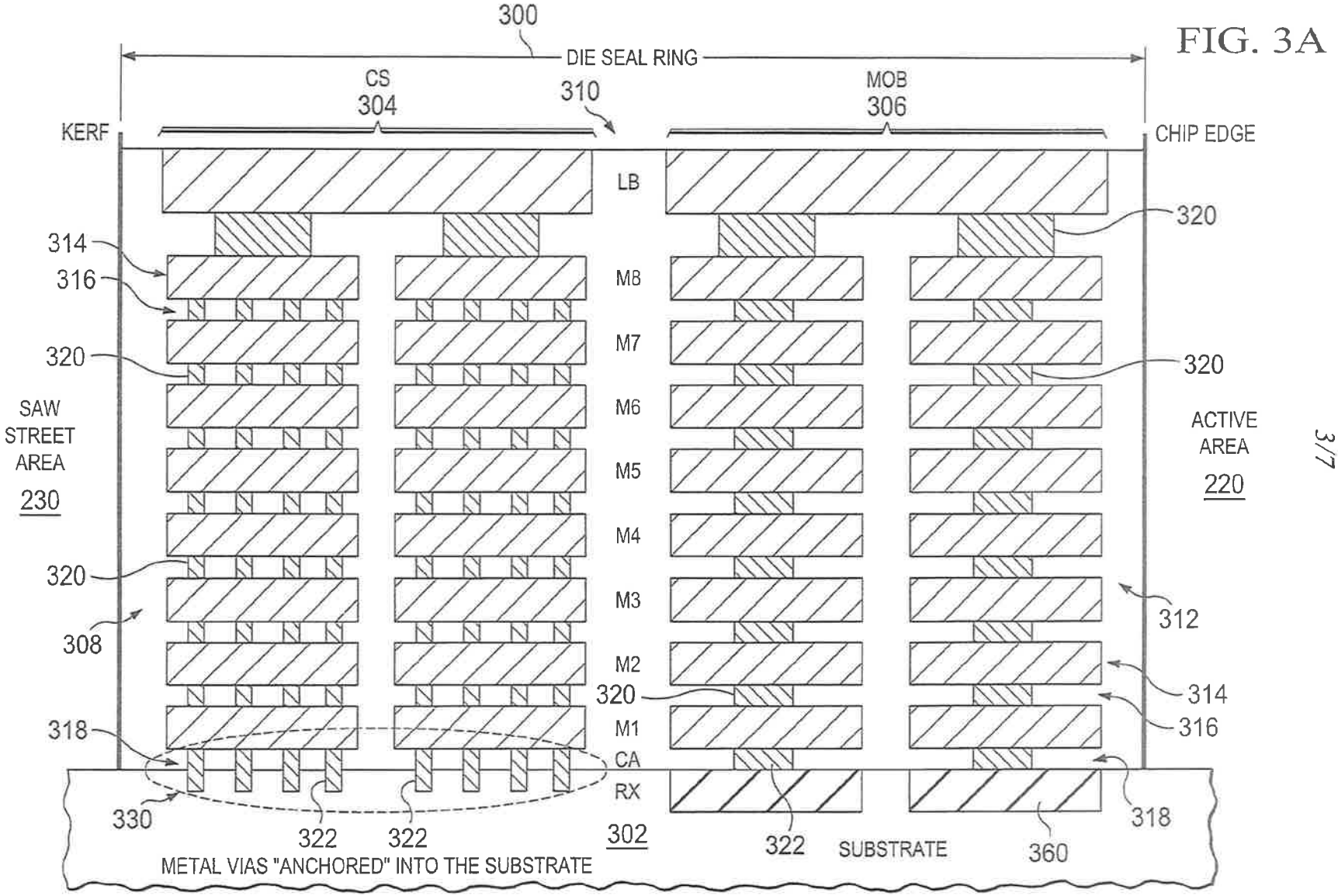
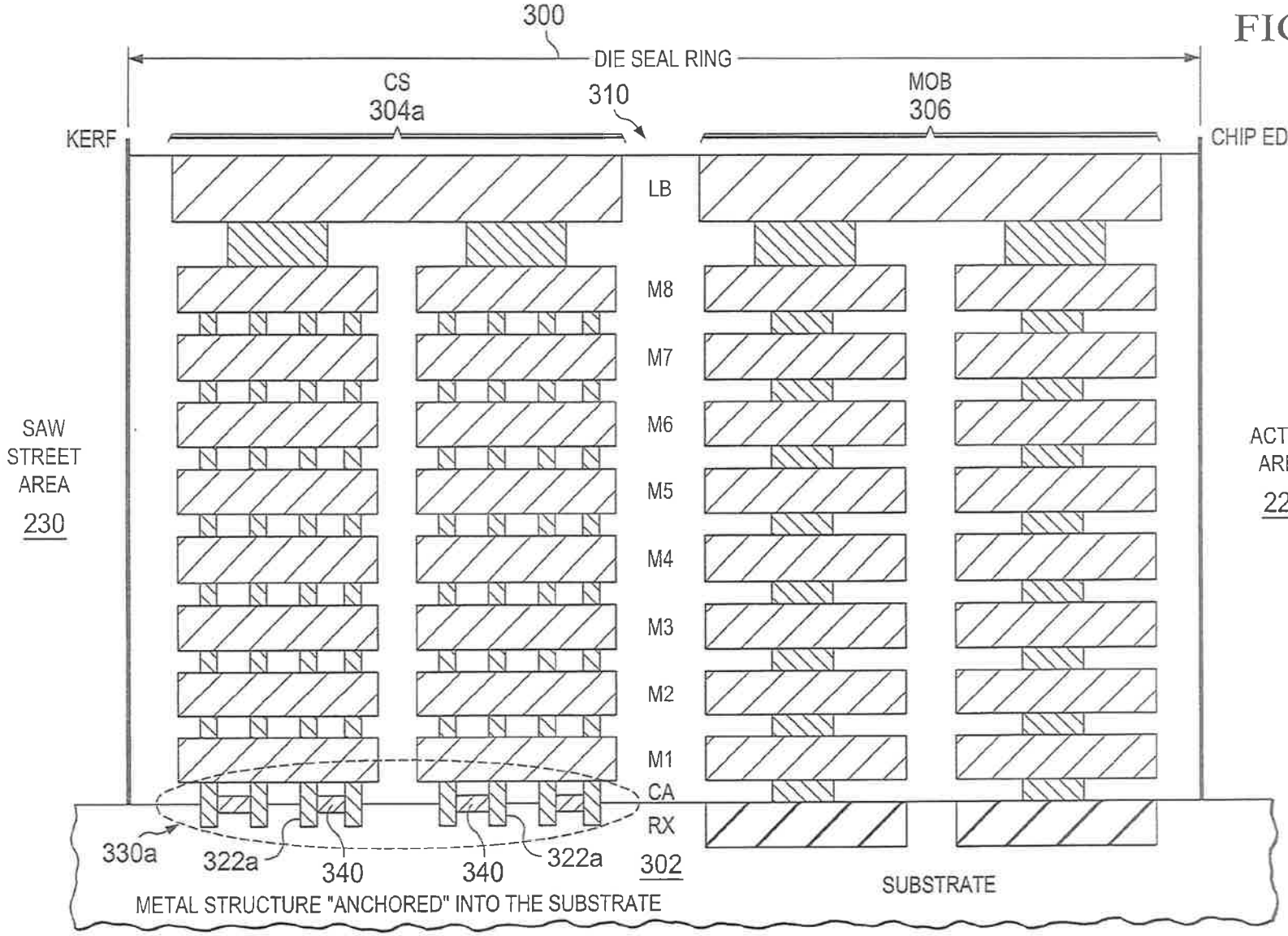

300
DIE SEAL RING
CS
304
310
MOB
306
KERF
CHIP EDGE
LB
320
314
316
M8
M7
320
320
SAW
STREET
AREA
230
M6
M5
ACTIVE
AREA
220
M4
320
M3
312
308
M2
320
314
318
M1
316
CA
RX
330
322
322
302
322
SUBSTRATE
360
318
METAL VIAS "ANCHORED" INTO THE SUBSTRATE

FIG. 3A

FIG. 3B


300
DIE SEAL RING
CS
304a
310
MOB
306
KERF
CHIP EDGE
LB
M8
M7
M6
M5
M4
M3
M2
M1
CA
RX
SAW
STREET
AREA
230
ACTIVE
AREA
220
330a
322a
340
340
322a
302
SUBSTRATE
METAL STRUCTURE "ANCHORED" INTO THE SUBSTRATE

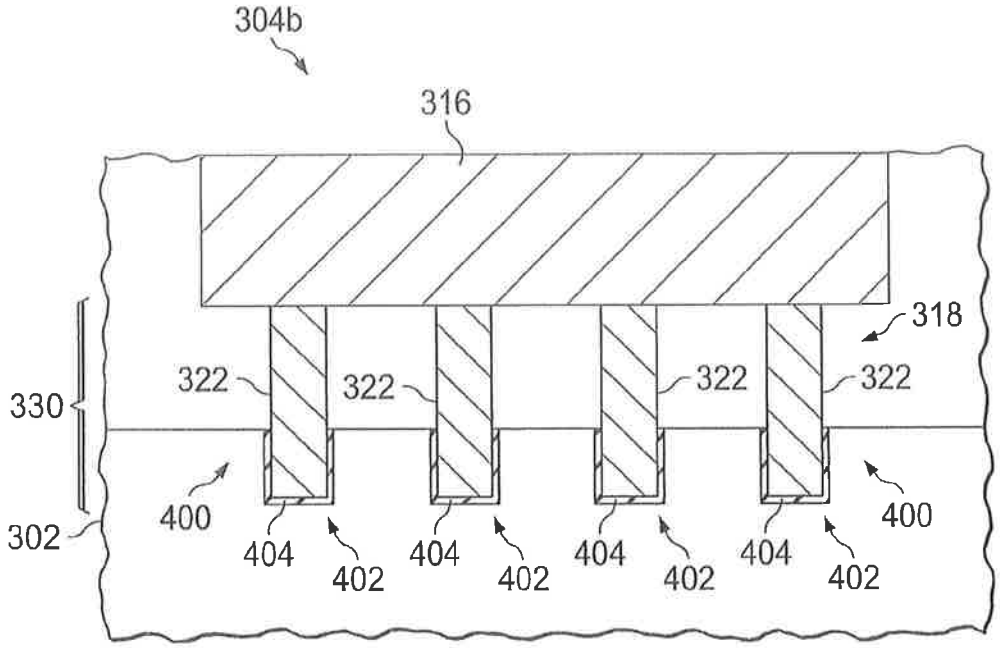

304b
316
318
322
322
322
322
330
302
400
400
404
402
404
402
404
402
404
402

FIG. 4A

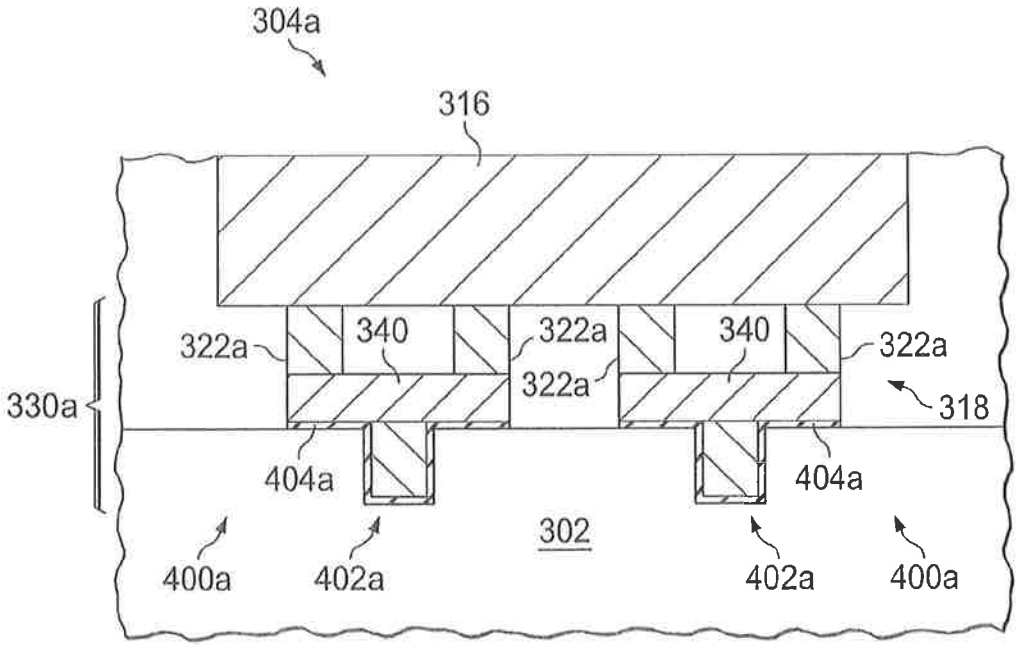

304a
316
322a
340
322a
340
322a
322a
318
330a
404a
404a
302
400a
402a
402a
400a

FIG. 4B

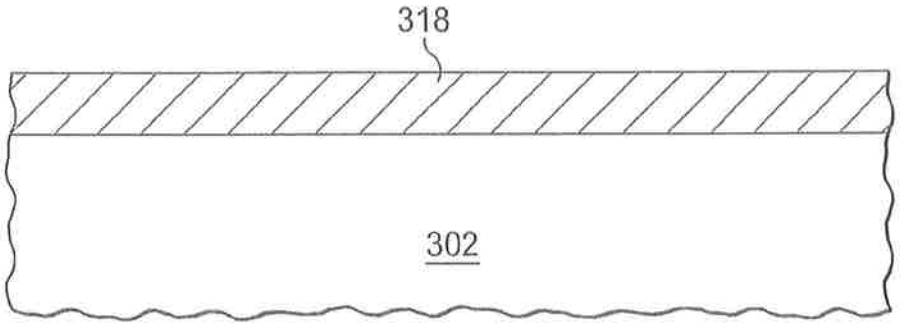



FIG. 5A

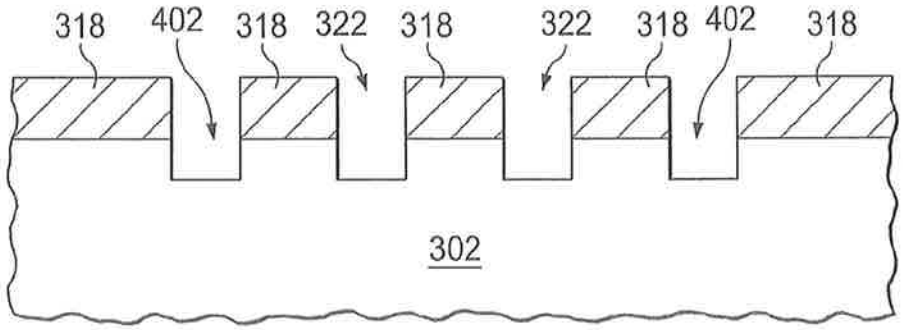



FIG. 5B

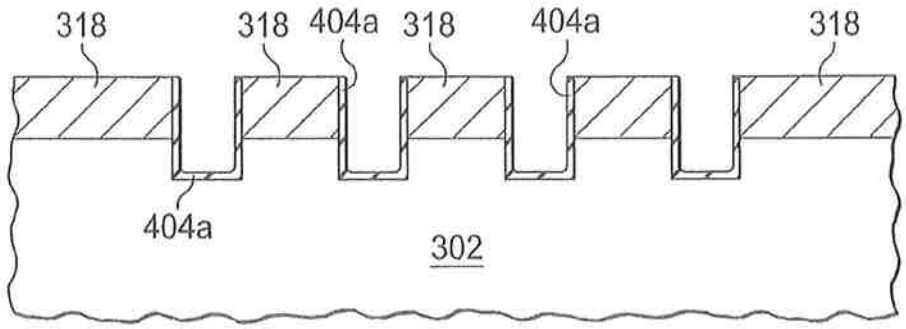



FIG. 5C

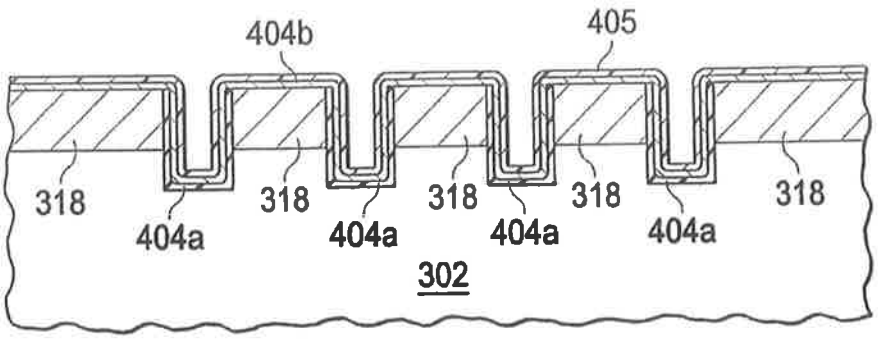



FIG. 5D

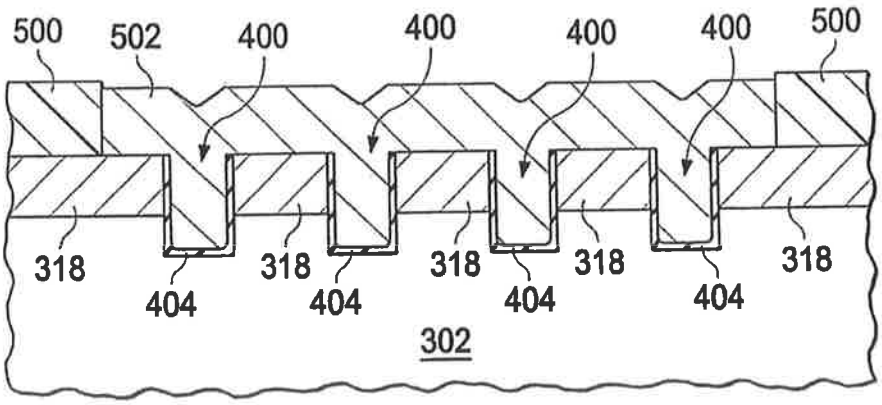



FIG. 5E

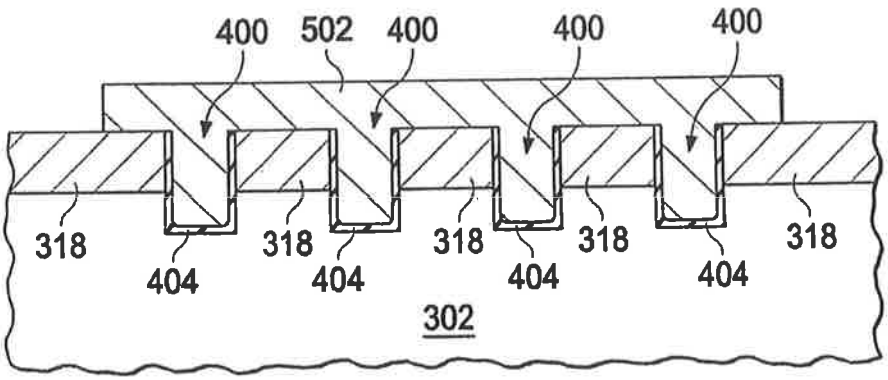



FIG. 5F