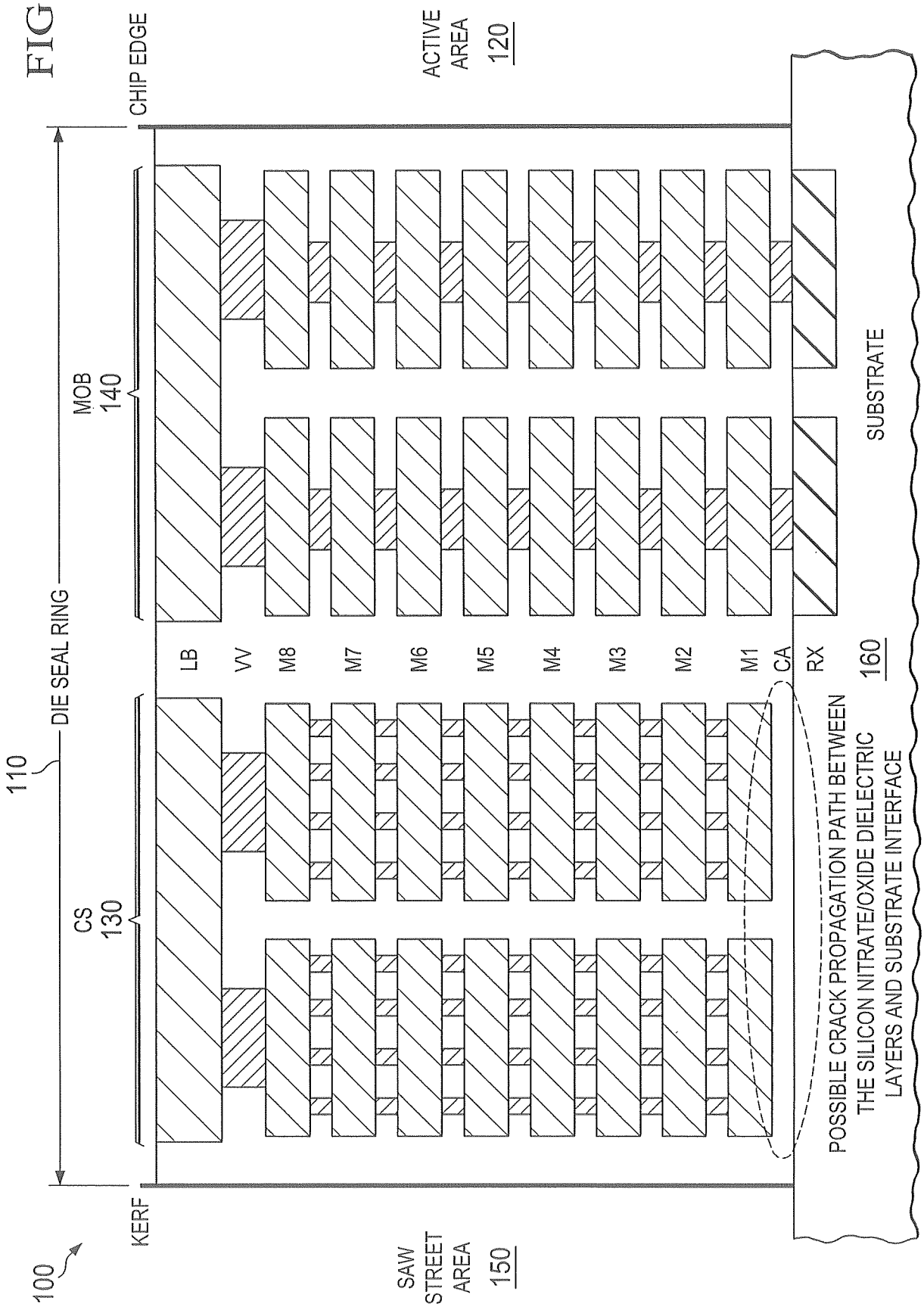
FIG. 1


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

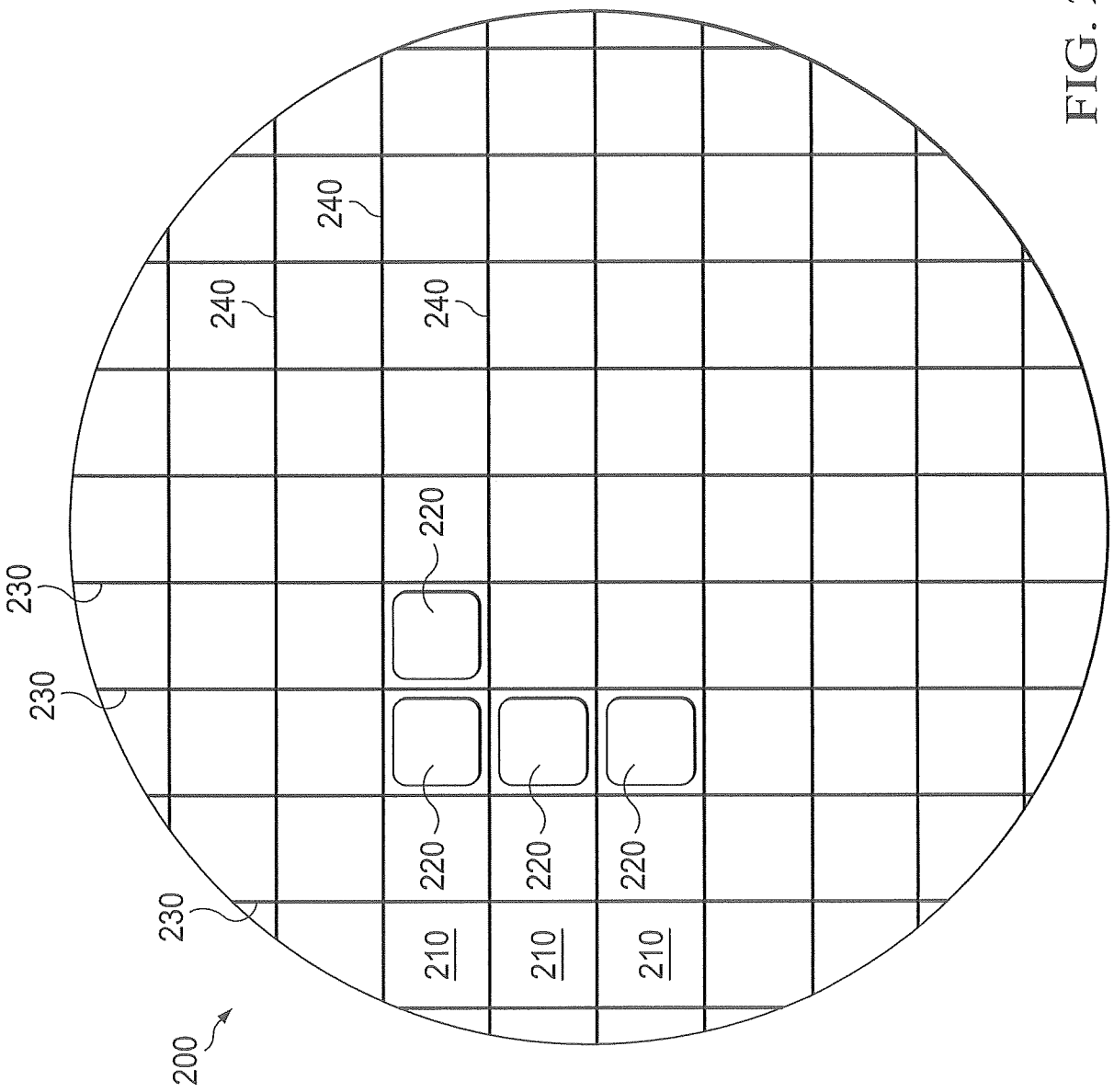


FIG. 2

FIG. 3A

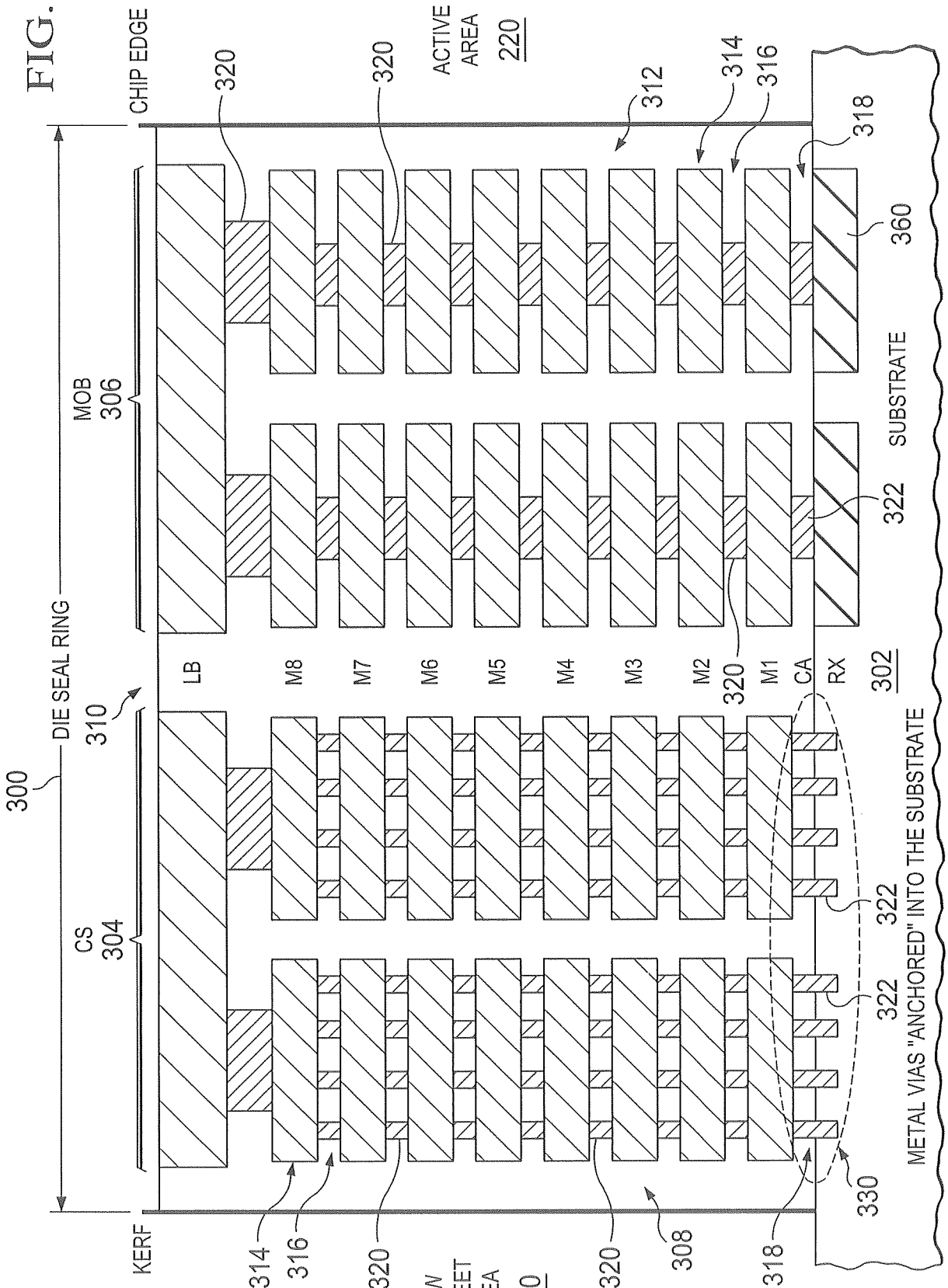
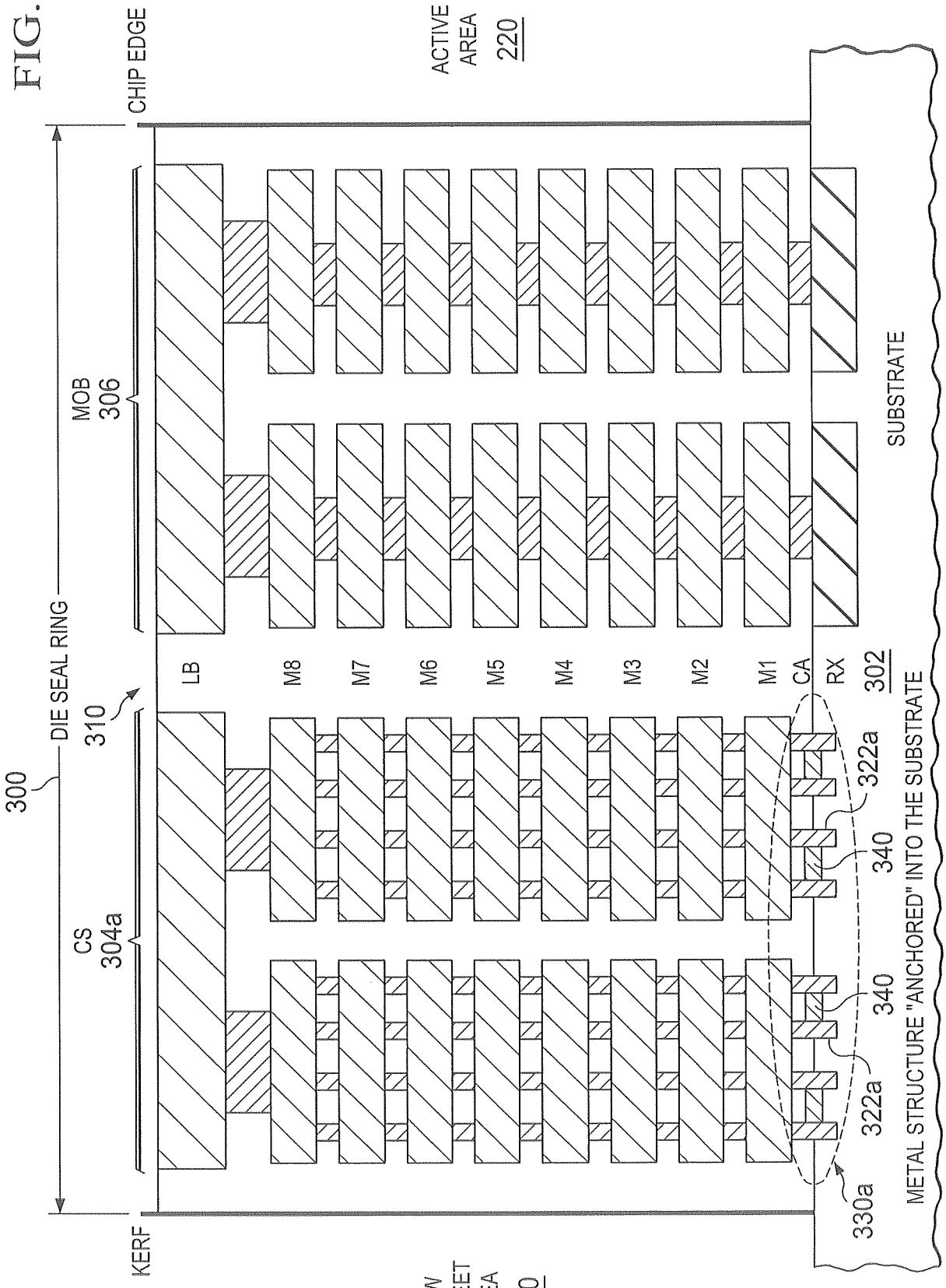

300
DIE SEAL RING
310
CS
304
MOB
306
CHIP EDGE
320
320
ACTIVE AREA
220
312
314
316
318
360
SUBSTRATE
322
320
302
LB
M8
M7
M6
M5
M4
M3
M2
M1
CA
RX
322
322
330
METAL VIAS "ANCHORED" INTO THE SUBSTRATE
KERF
314
316
320
SAW STREET AREA
230
320
308
318

FIG. 3B


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

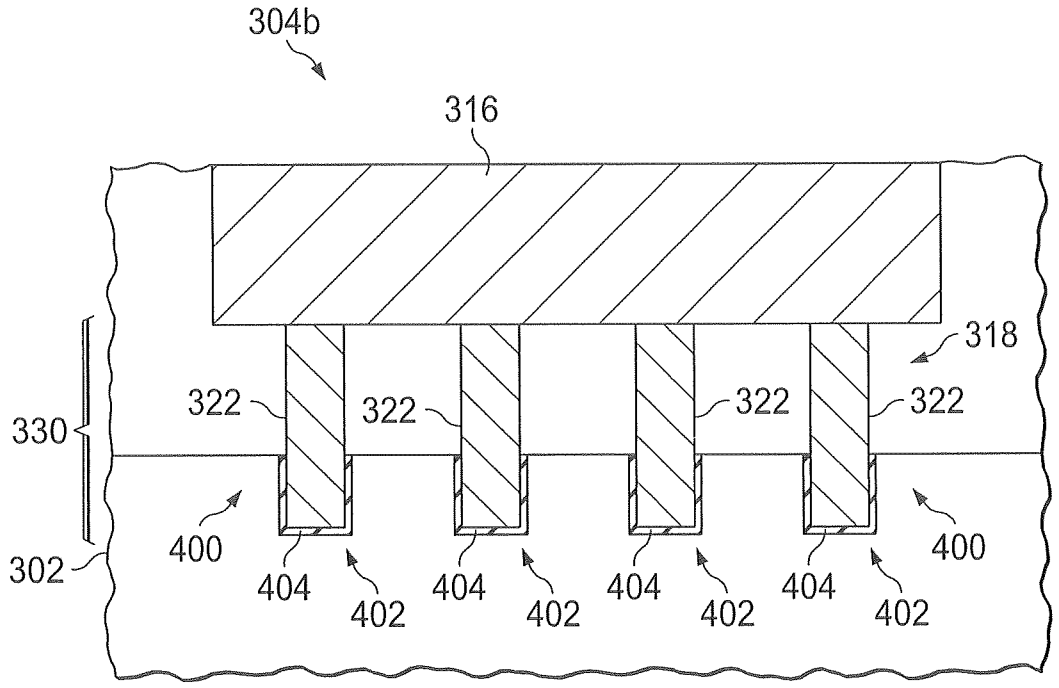

304b
316
318
322
322
322
322
330
302
400
400
404
402
404
402
404
402
404
402

FIG. 4A

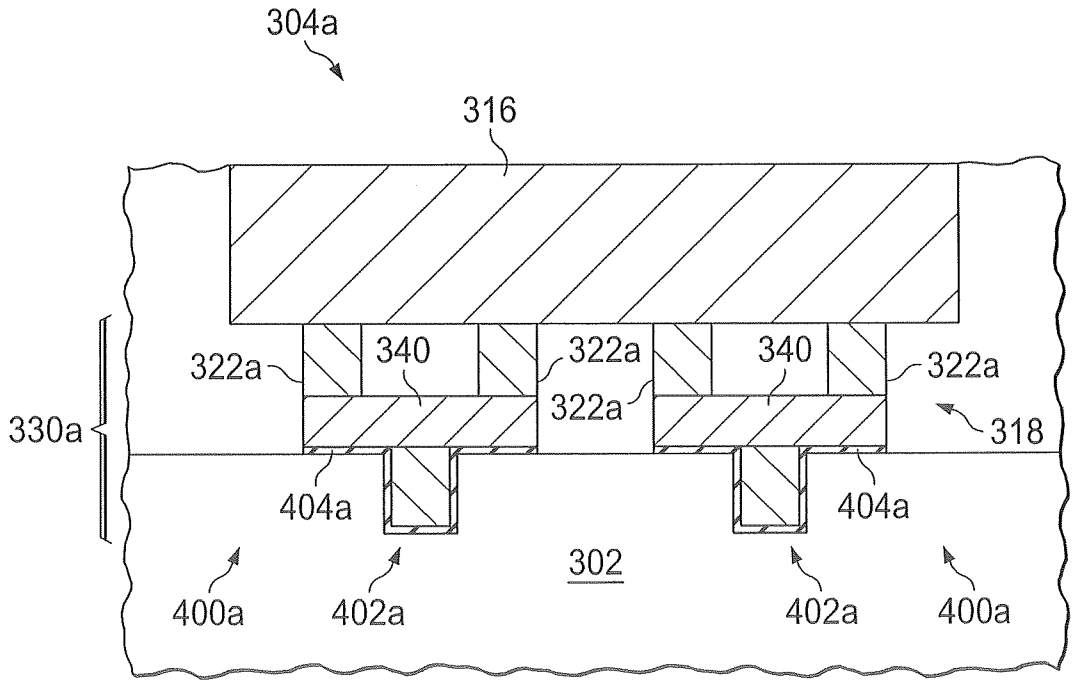

304a
316
322a
340
322a
340
322a
322a
330a
318
404a
404a
302
400a
402a
402a
400a

FIG. 4B

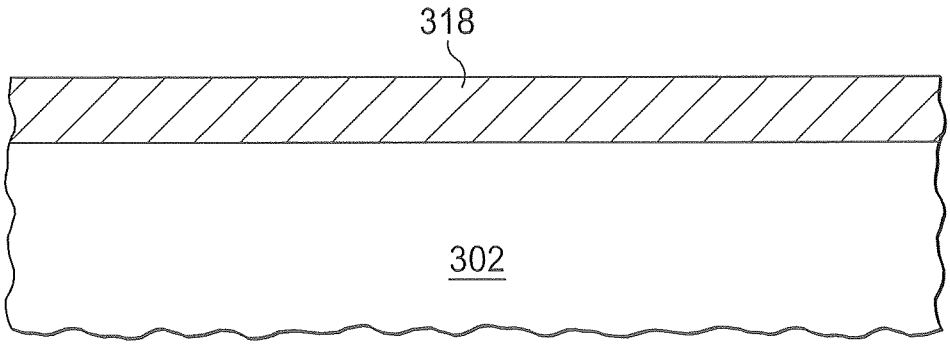


FIG. 5A

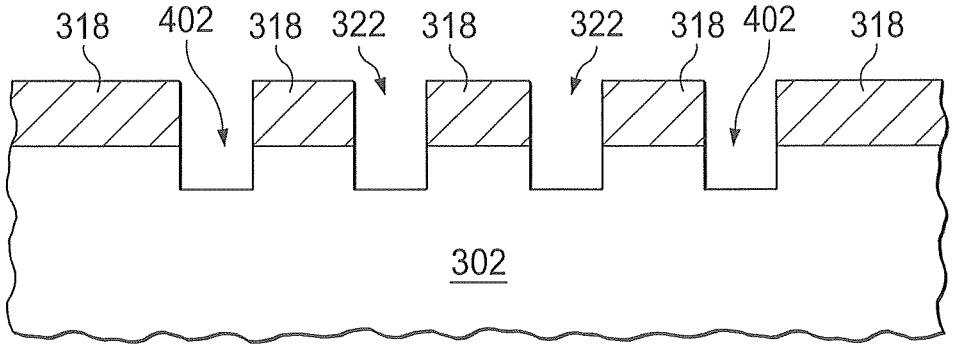


FIG. 5B

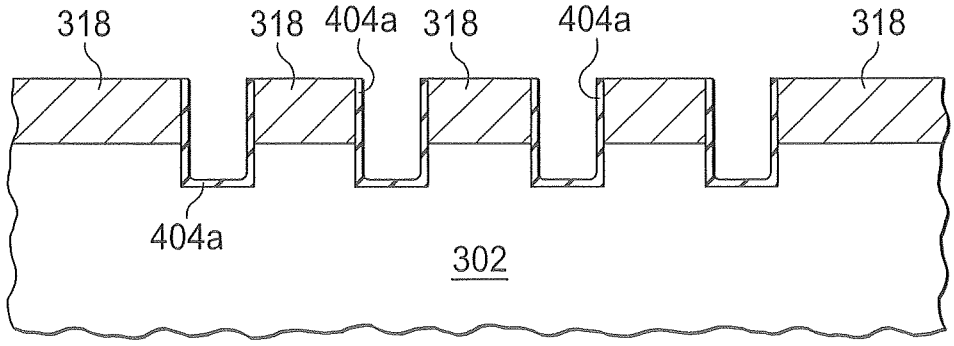


FIG. 5C

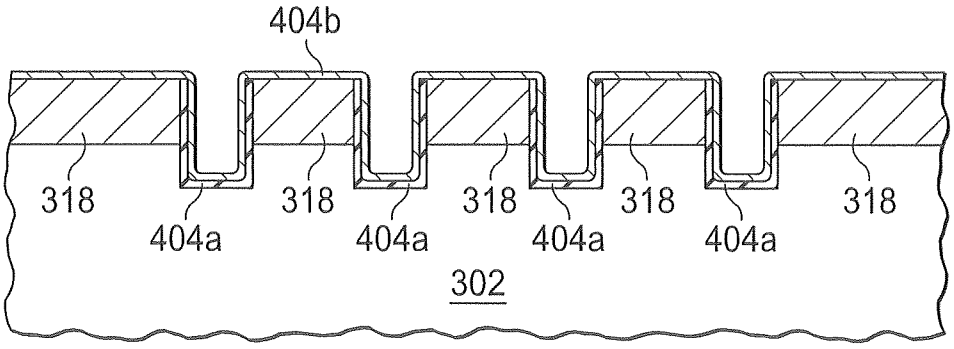


FIG. 5D

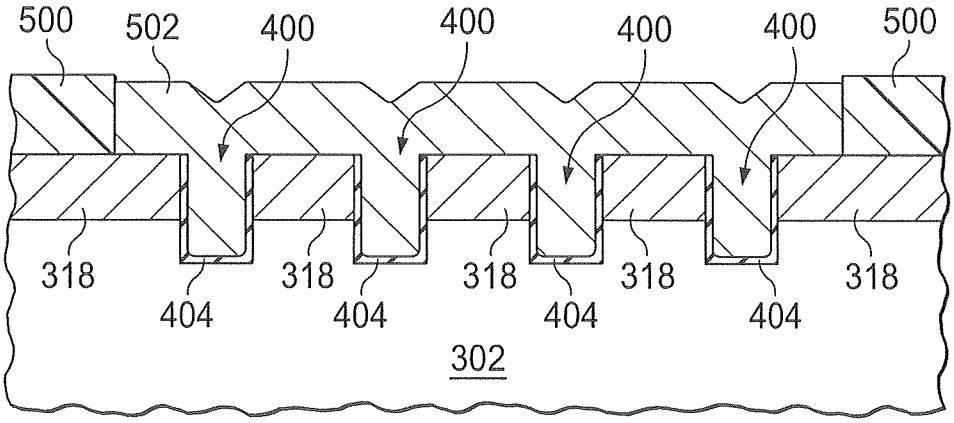


FIG. 5E

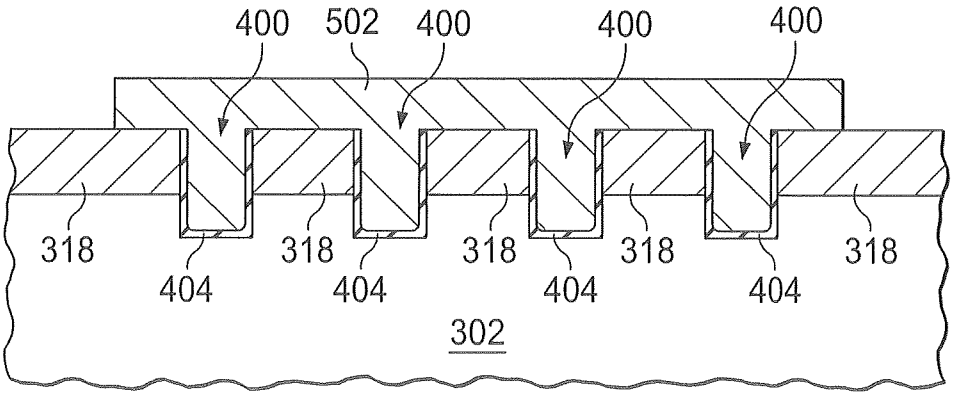


FIG. 5F