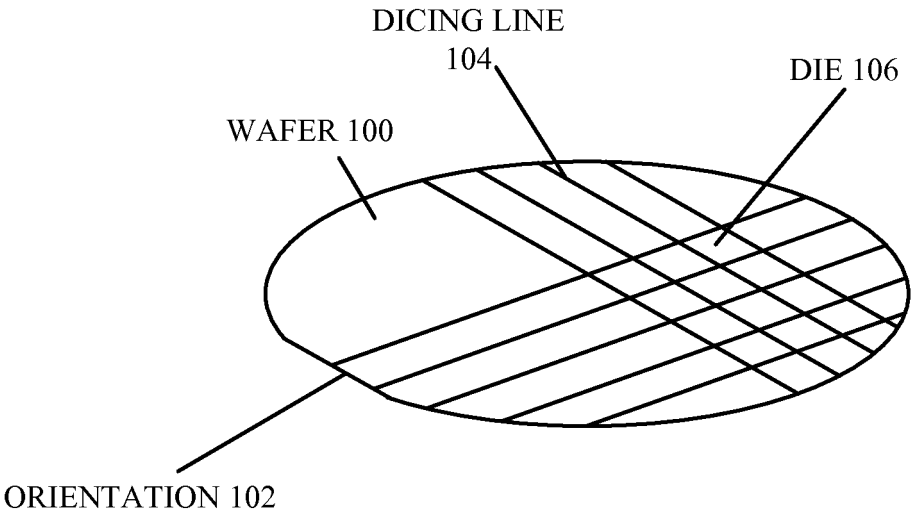

FIG. 1

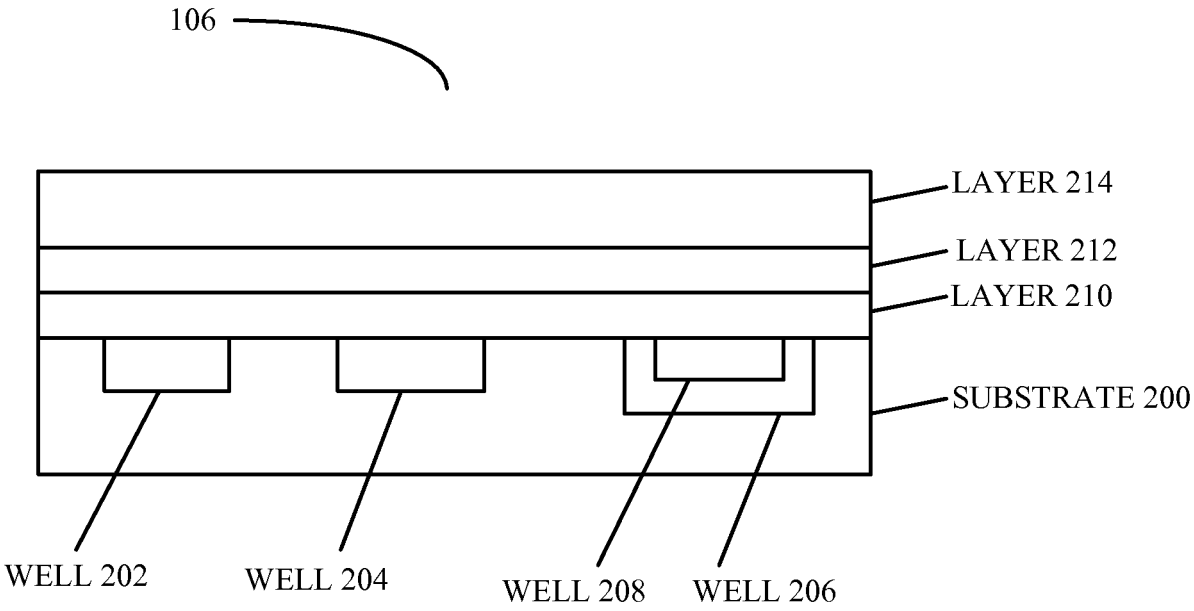
106
LAYER 214
LAYER 212
LAYER 210
SUBSTRATE 200
WELL 202
WELL 204
WELL 208
WELL 206

FIG. 2

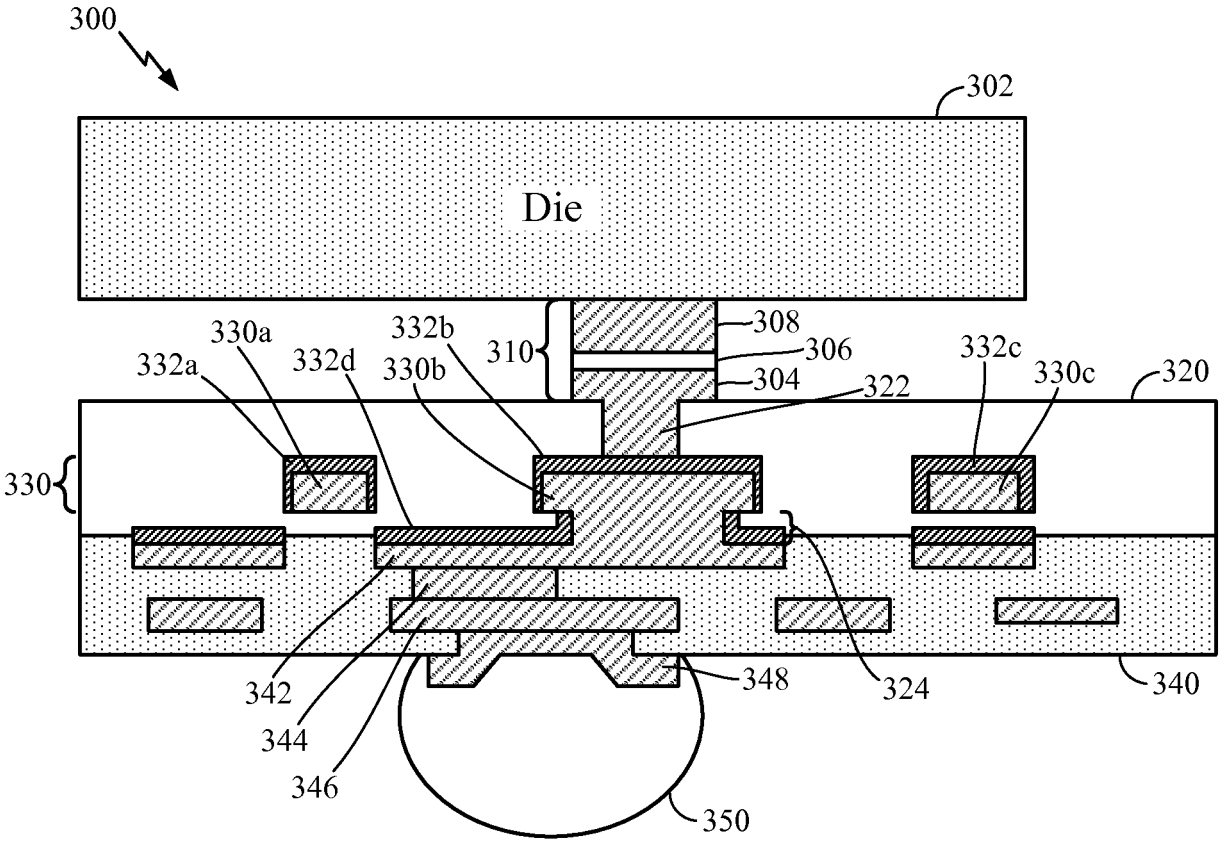

FIG. 3

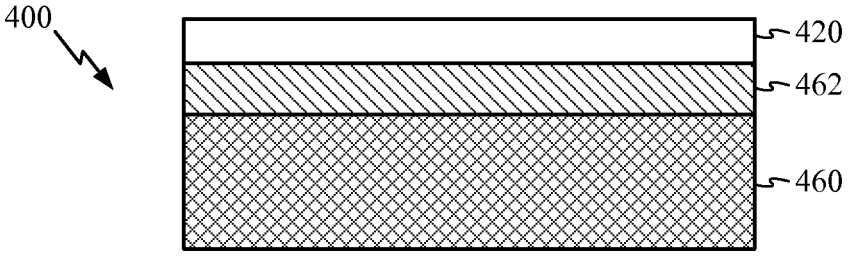

FIG. 4A

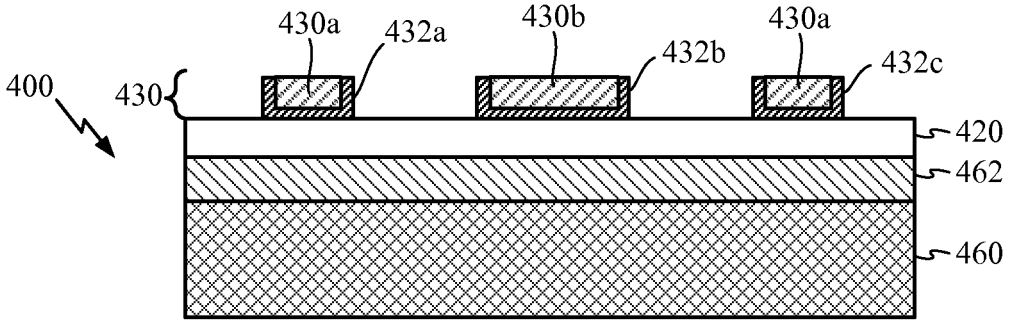

FIG. 4B

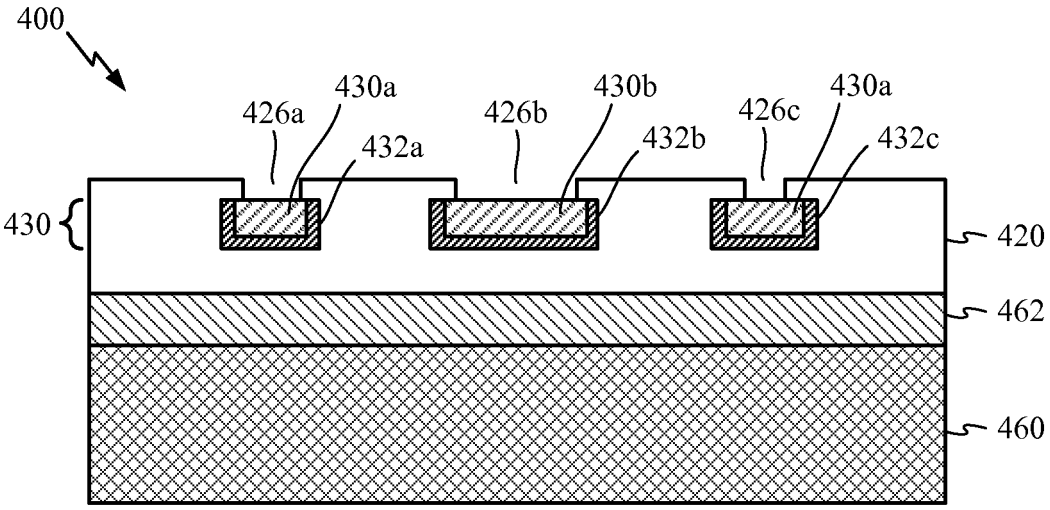
400
426a
430a
432a
426b
430b
432b
426c
430a
432c
430
420
462
460

FIG. 4C

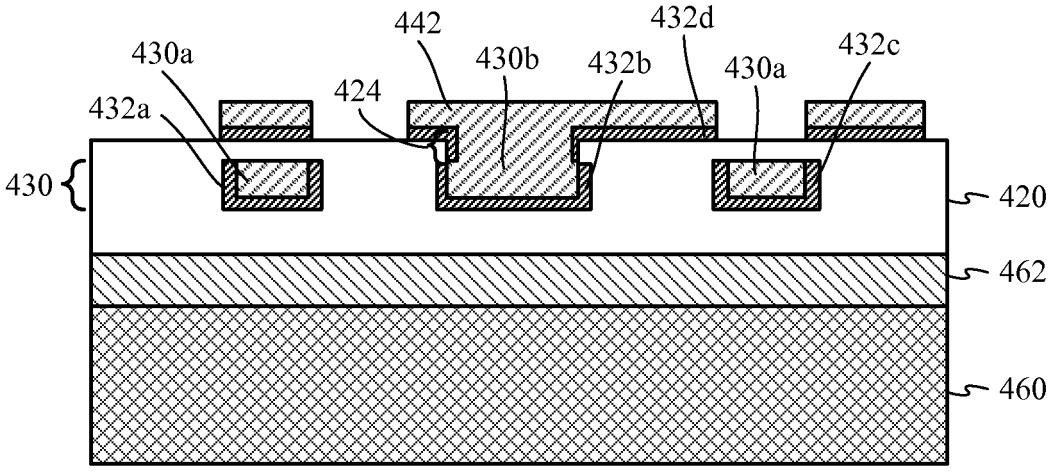
442
432d
430a
430b
432b
430a
432c
424
432a
430
420
462
460

FIG. 4D

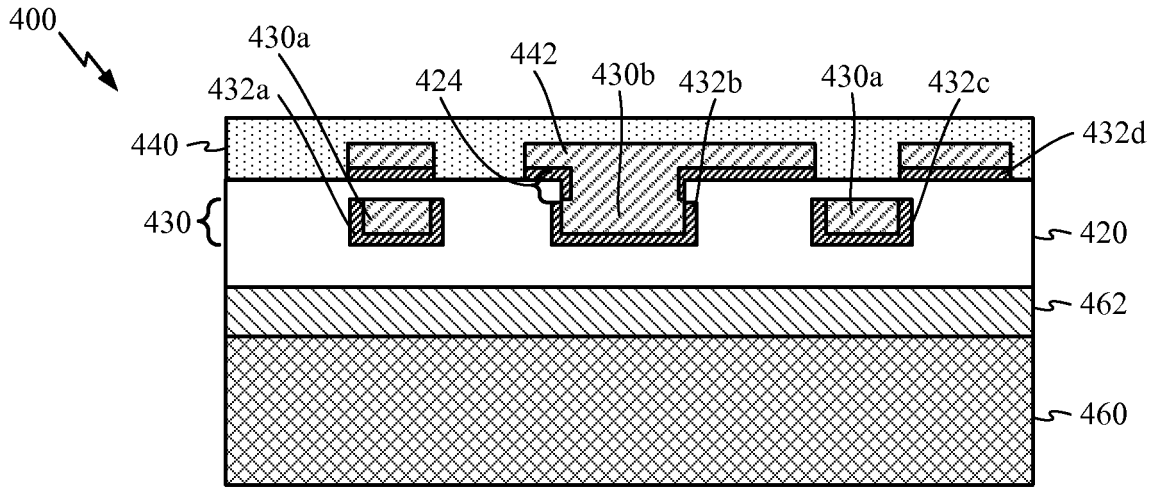

FIG. 4E

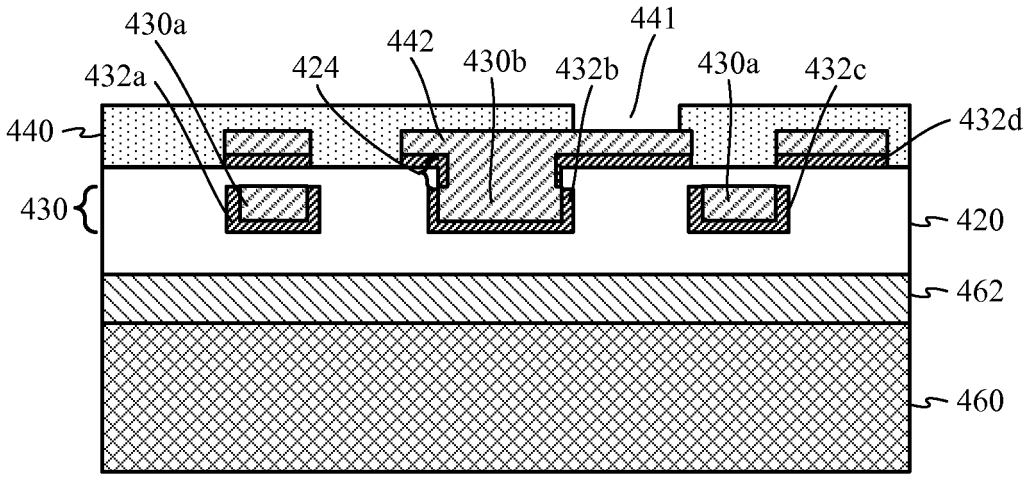

FIG. 4F

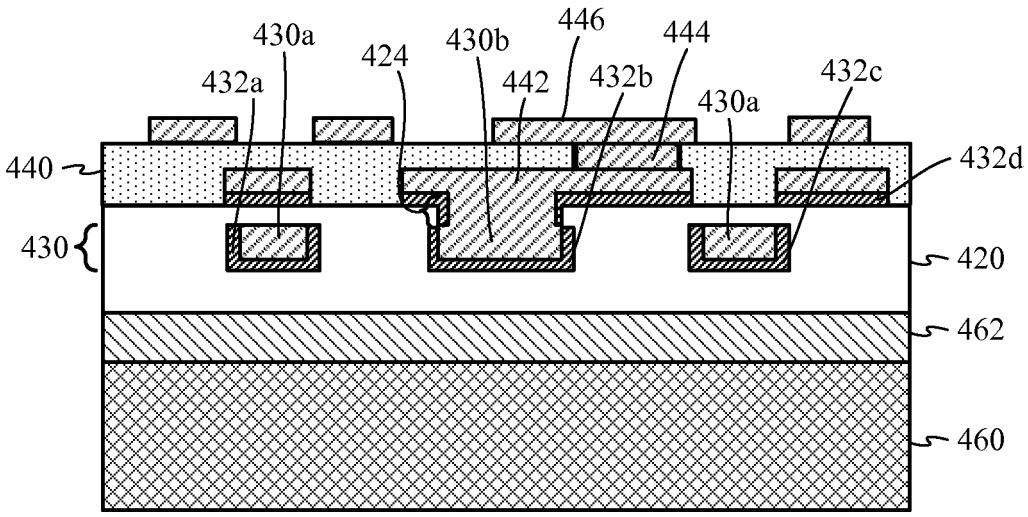

FIG. 4G

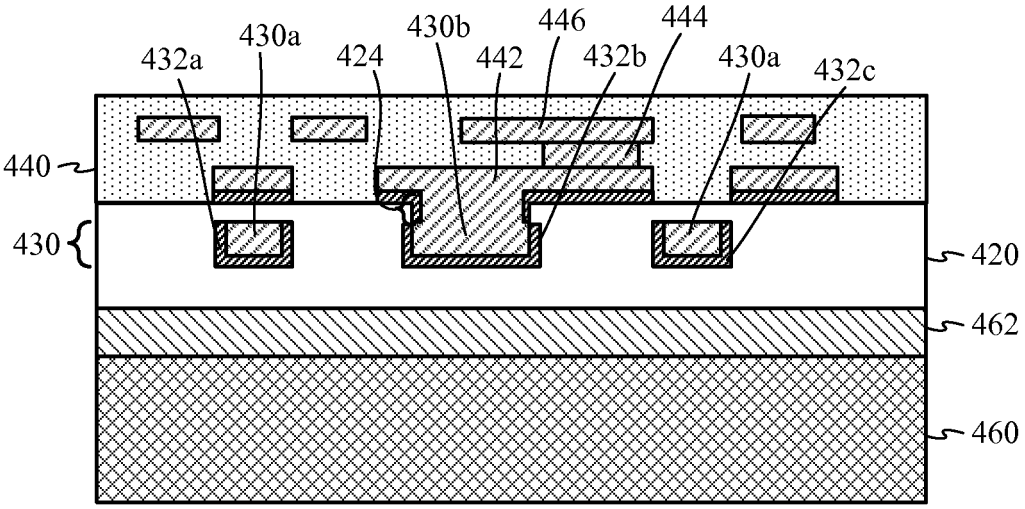

FIG. 4H

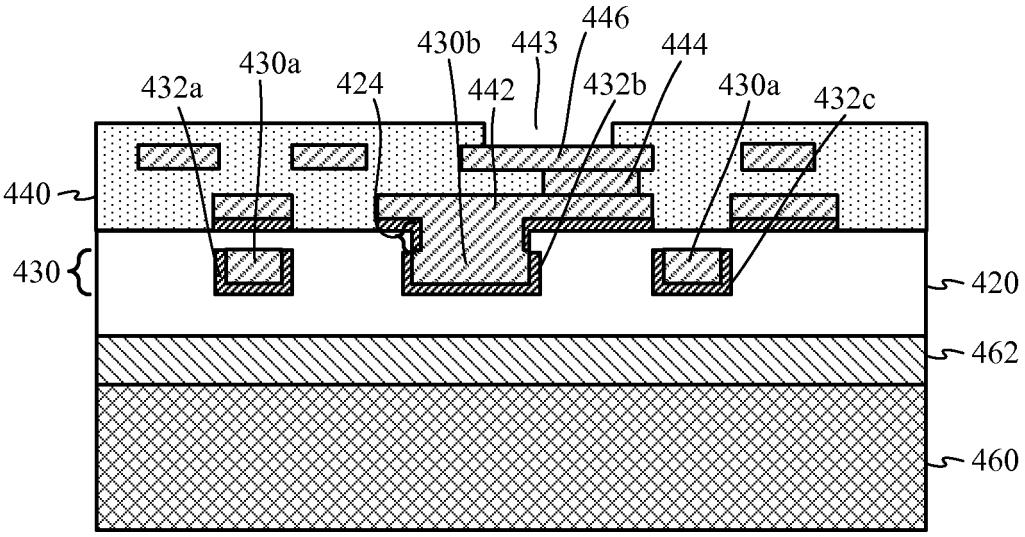

FIG. 4I

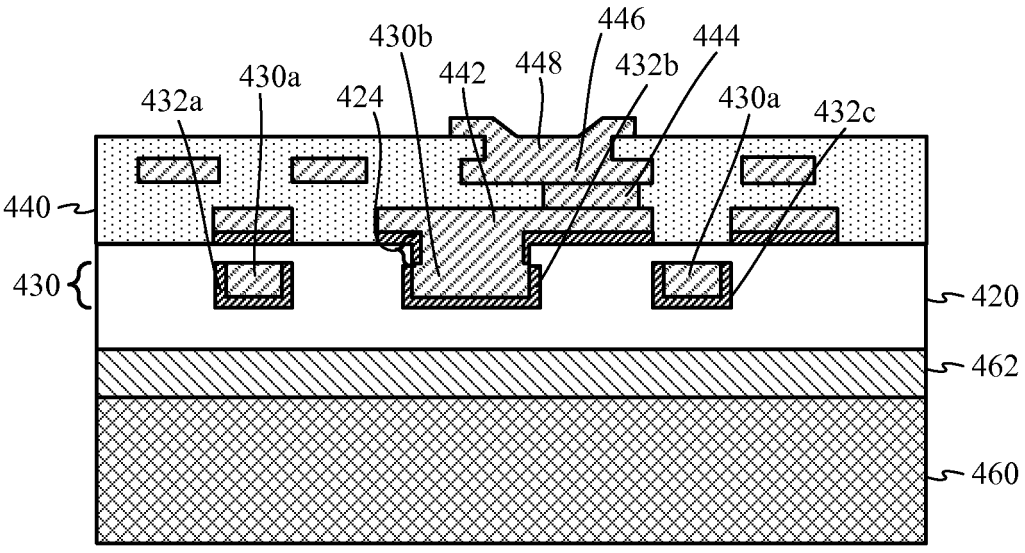

FIG. 4J

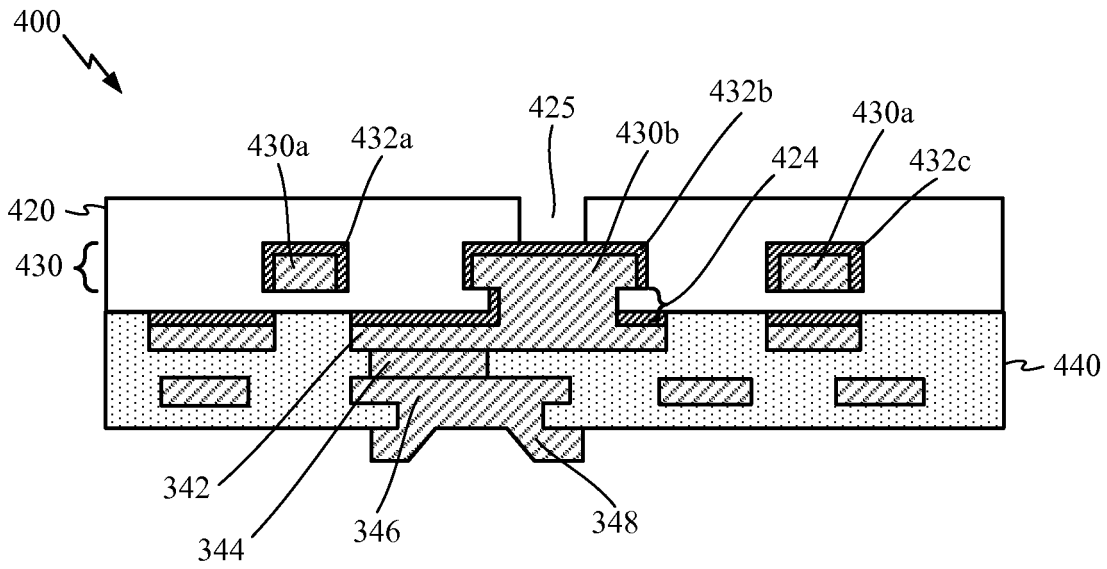
400
425
432b
430a
430b
424
430a
432a
432c
420
430
440
342
344
346
348

FIG. 4K

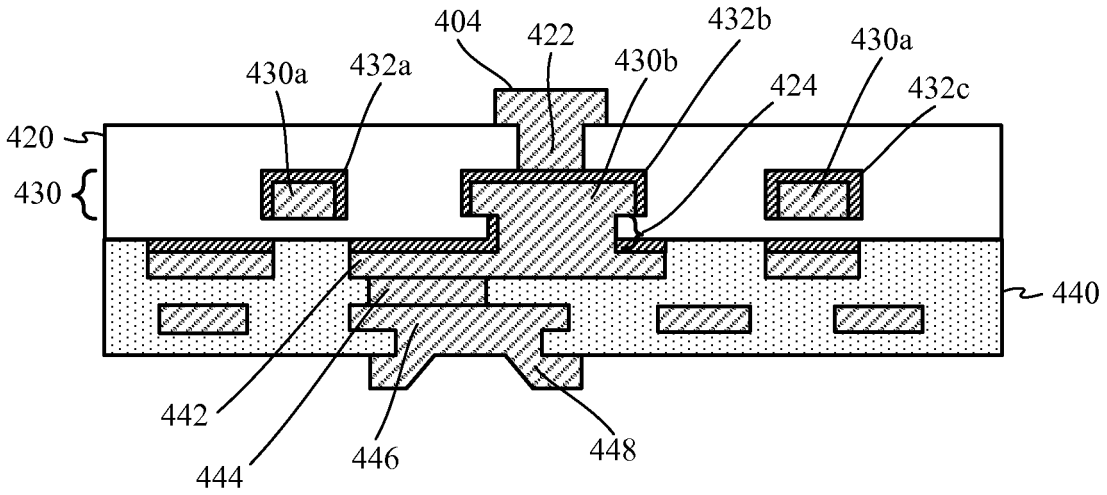
404
422
432b
430a
430b
424
430a
432a
432c
420
430
440
442
444
446
448

FIG. 4L

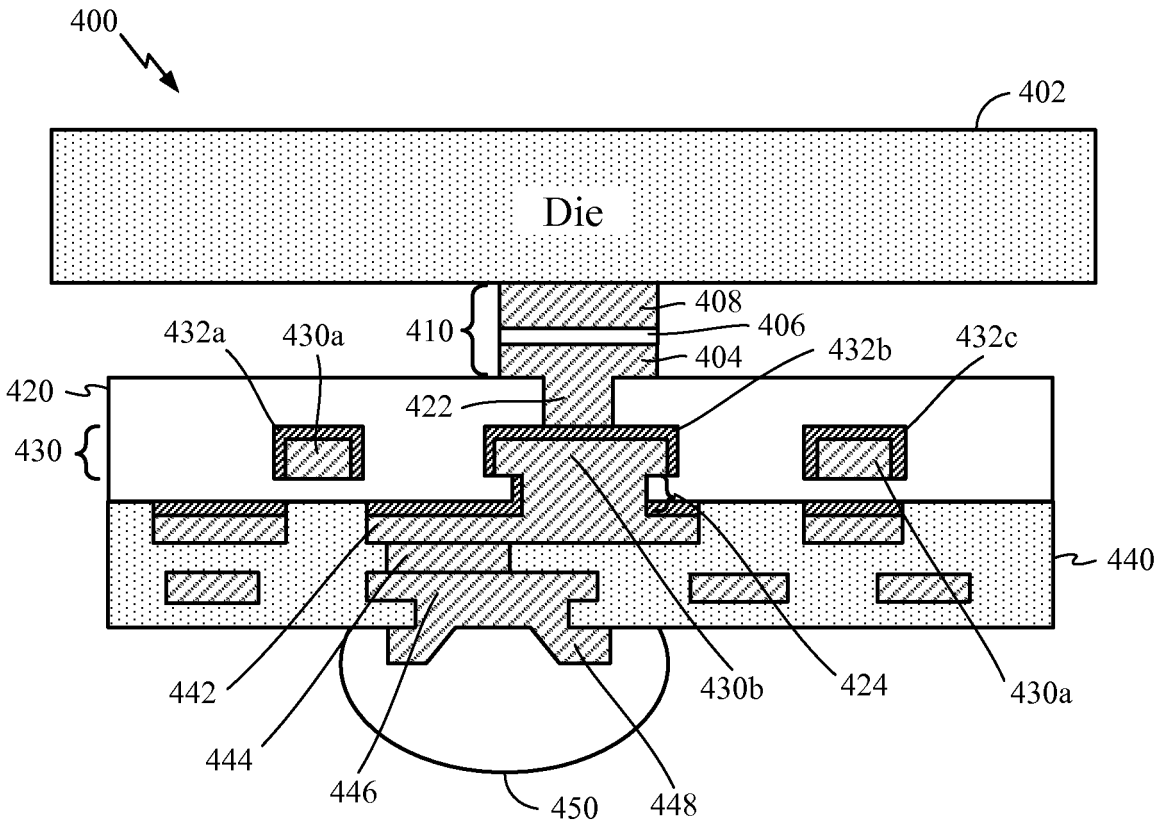
400
402
Die
408
406
404
410
432a
430a
432b
432c
420
422
430
440
442
444
446
450
448
430b
424
430a

FIG. 4M

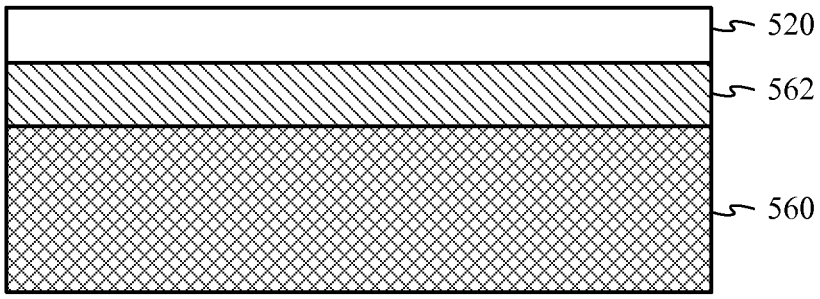
520
562
560

FIG. 5A

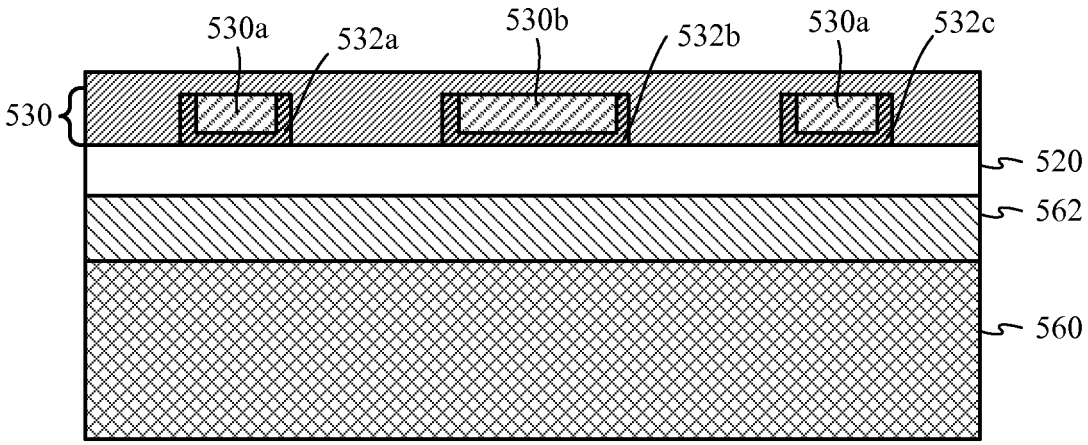
530a
532a
530b
532b
530a
532c
530
520
562
560

FIG. 5B

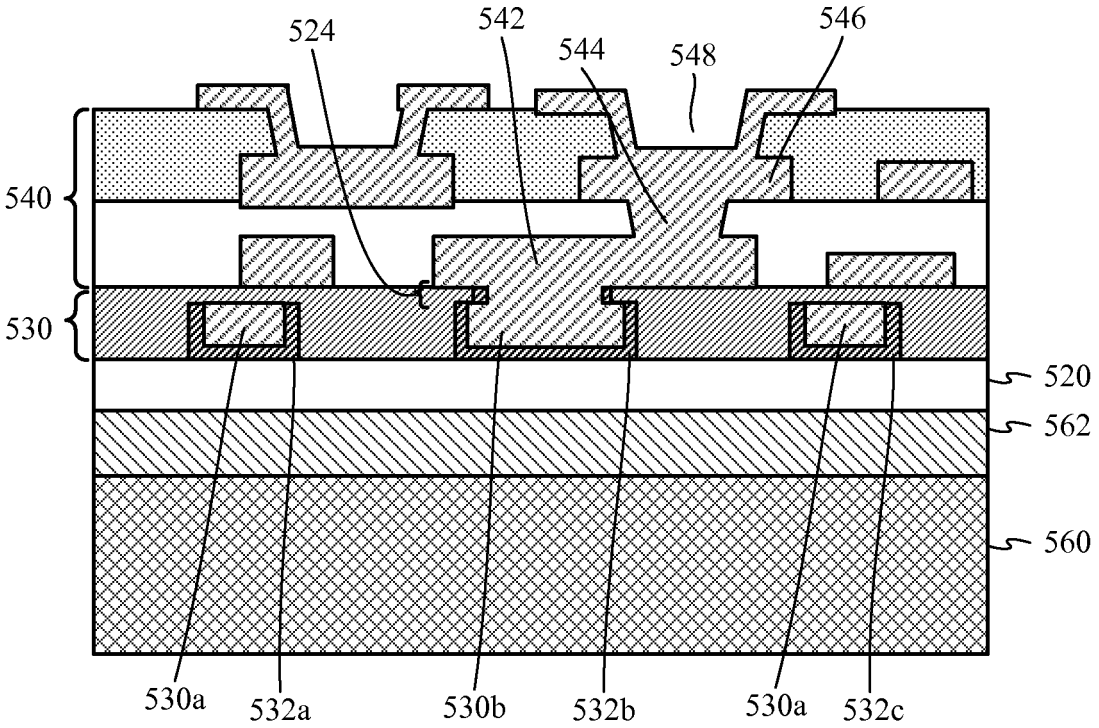
524
542
544
548
546
540
530
520
562
560
530a
532a
530b
532b
530a
532c

FIG. 5C

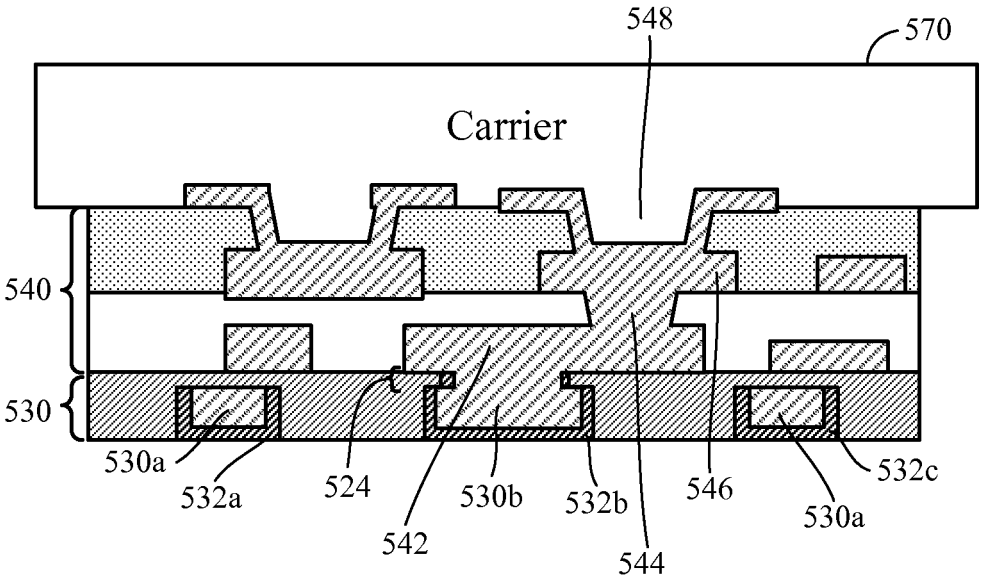
548
570
Carrier
540
530
530a
532a
524
542
530b
532b
544
546
530a
532c

FIG. 5D

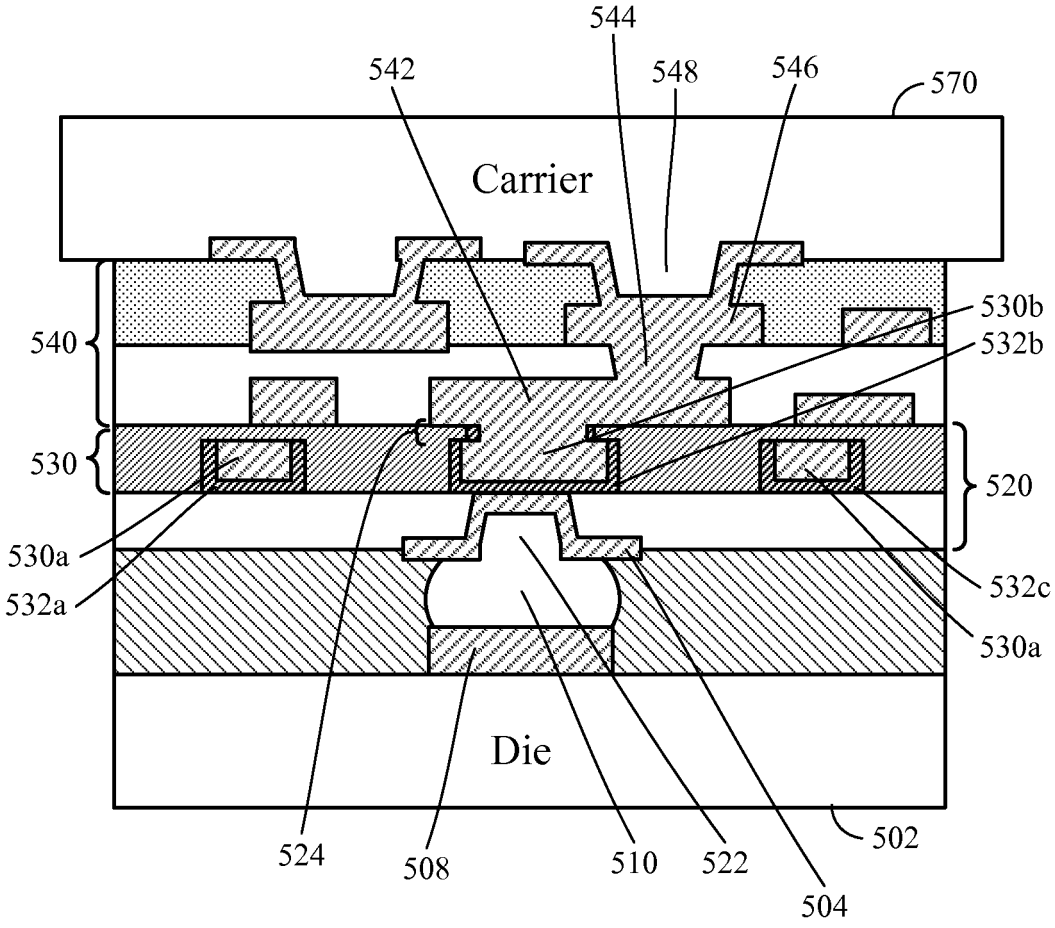
544
542
548
546
570
Carrier
530b
532b
540
530
520
530a
532a
532c
530a
Die
524
508
510
522
502
504

FIG. 5E

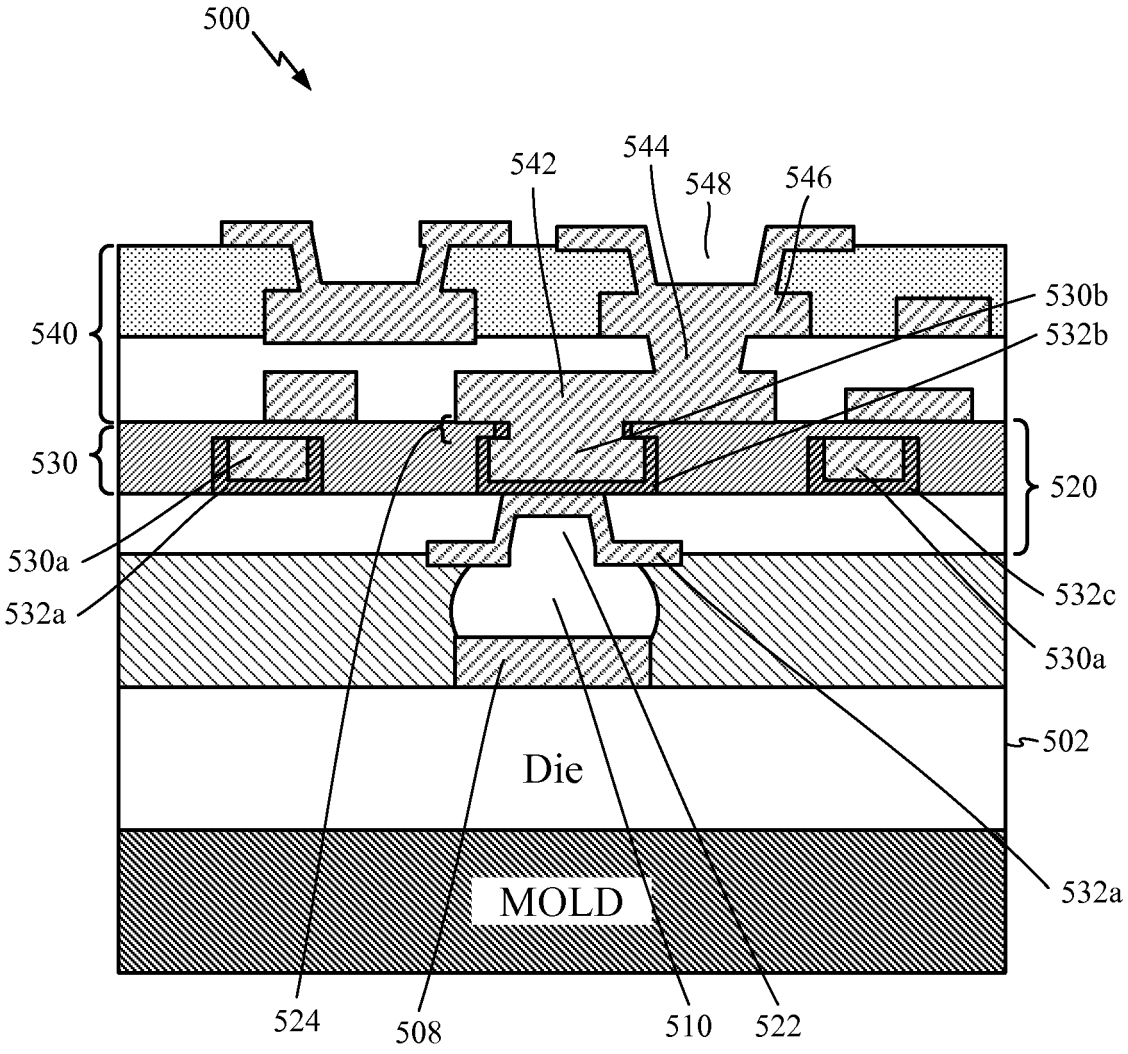
500
542
544
548
546
540
530b
532b
530
520
530a
532a
532c
530a
502
Die
MOLD
532a
524
508
510
522

FIG. 5F

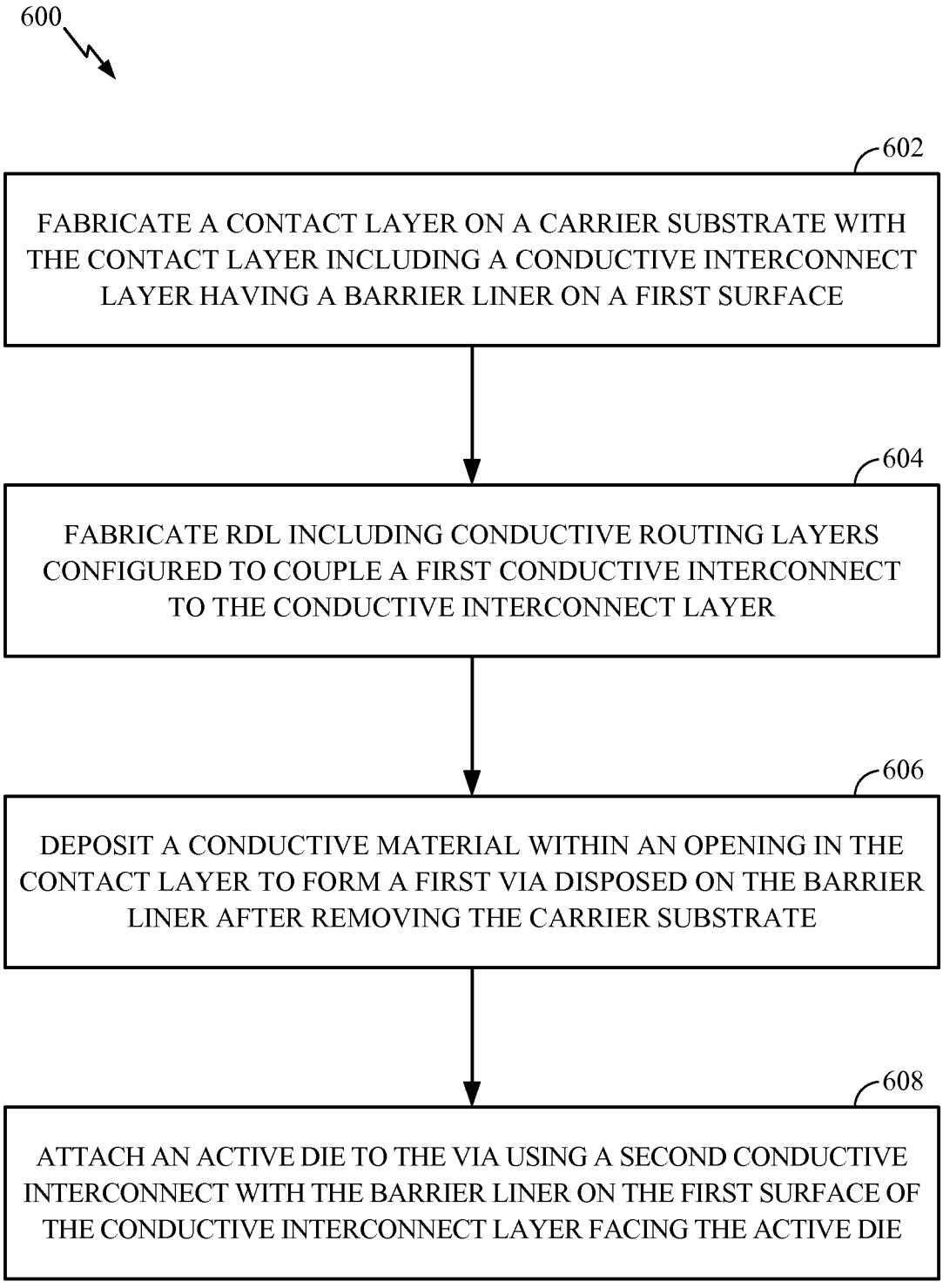
600
602
FABRICATE A CONTACT LAYER ON A CARRIER SUBSTRATE WITH THE CONTACT LAYER INCLUDING A CONDUCTIVE INTERCONNECT LAYER HAVING A BARRIER LINER ON A FIRST SURFACE
604
FABRICATE RDL INCLUDING CONDUCTIVE ROUTING LAYERS CONFIGURED TO COUPLE A FIRST CONDUCTIVE INTERCONNECT TO THE CONDUCTIVE INTERCONNECT LAYER
606
DEPOSIT A CONDUCTIVE MATERIAL WITHIN AN OPENING IN THE CONTACT LAYER TO FORM A FIRST VIA DISPOSED ON THE BARRIER LINER AFTER REMOVING THE CARRIER SUBSTRATE
608
ATTACH AN ACTIVE DIE TO THE VIA USING A SECOND CONDUCTIVE INTERCONNECT WITH THE BARRIER LINER ON THE FIRST SURFACE OF THE CONDUCTIVE INTERCONNECT LAYER FACING THE ACTIVE DIE

FIG. 6

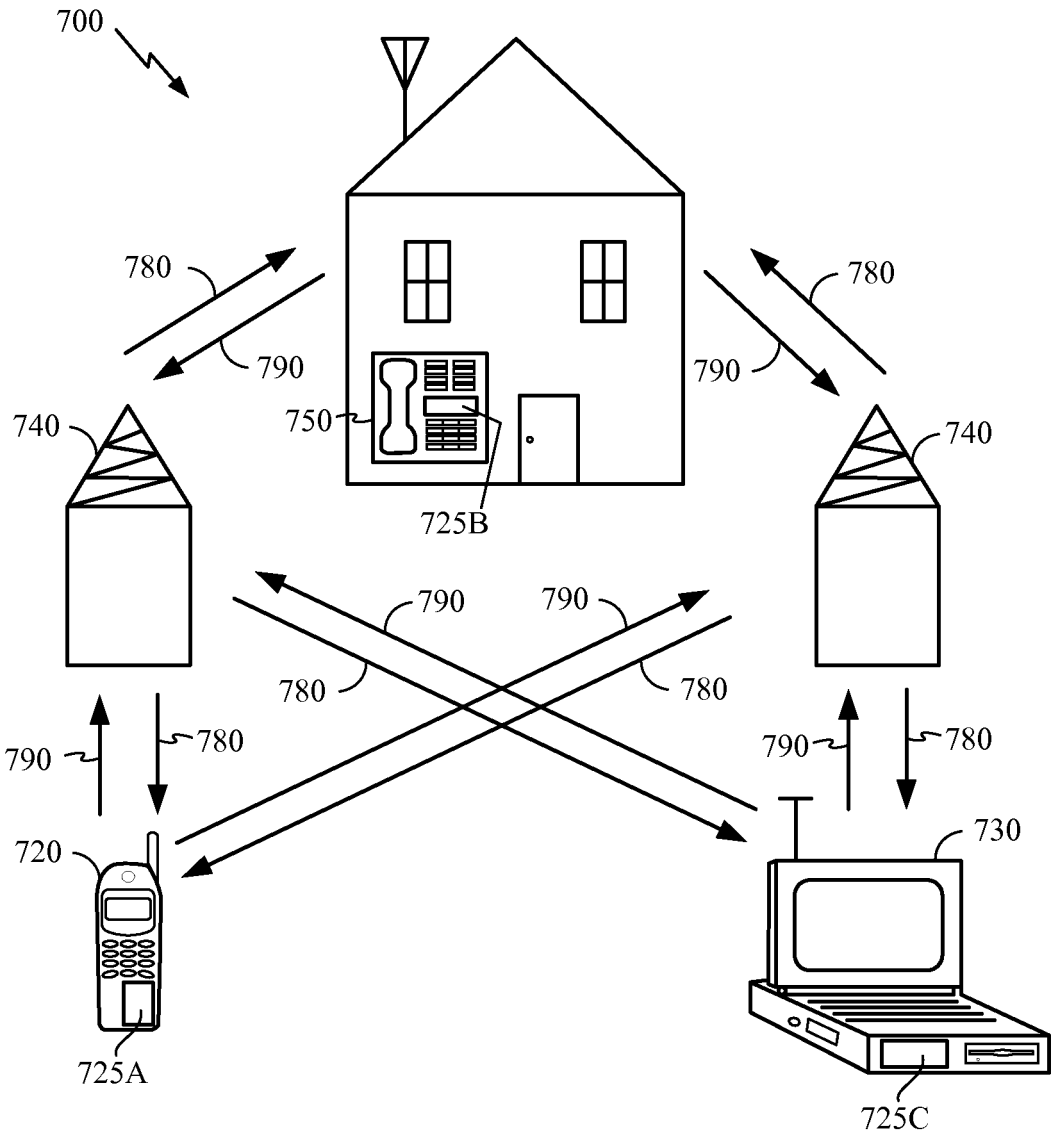
700
780
790
780
790
740
750
740
725B
790
790
780
780
790
780
790
780
720
730
725A
725C

FIG. 7

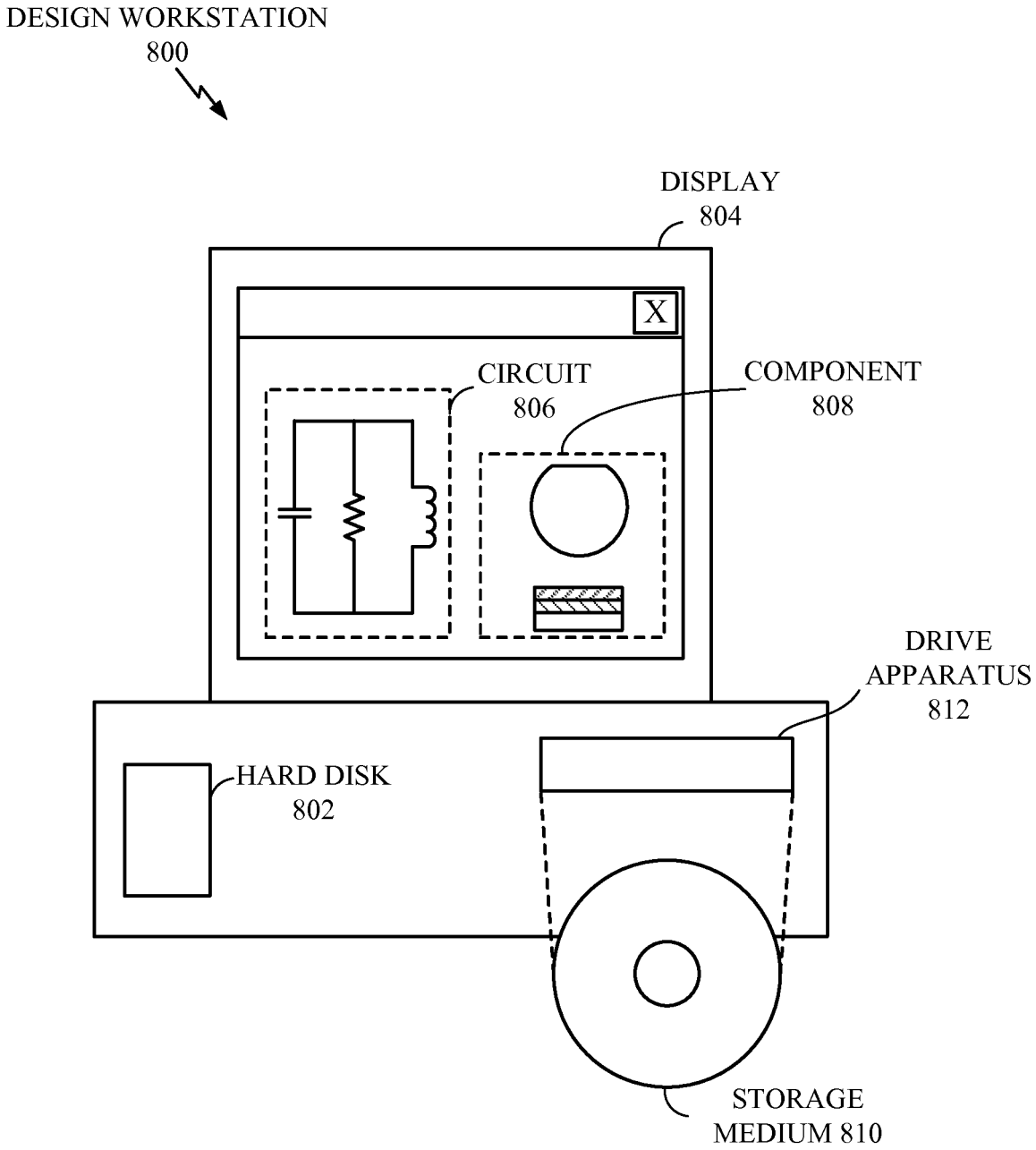
DESIGN WORKSTATION
800
DISPLAY
804
X
CIRCUIT
806
COMPONENT
808
DRIVE
APPARATUS
812
HARD DISK
802
STORAGE
MEDIUM 810

FIG. 8