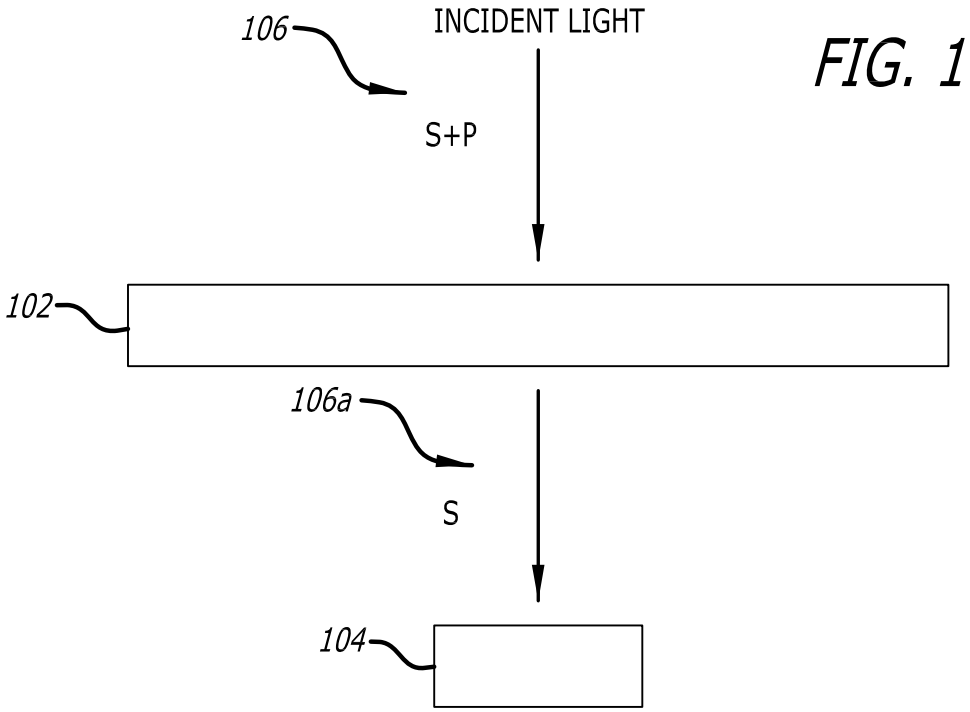

106
INCIDENT LIGHT
S+P
102
106a
S
104

FIG. 1

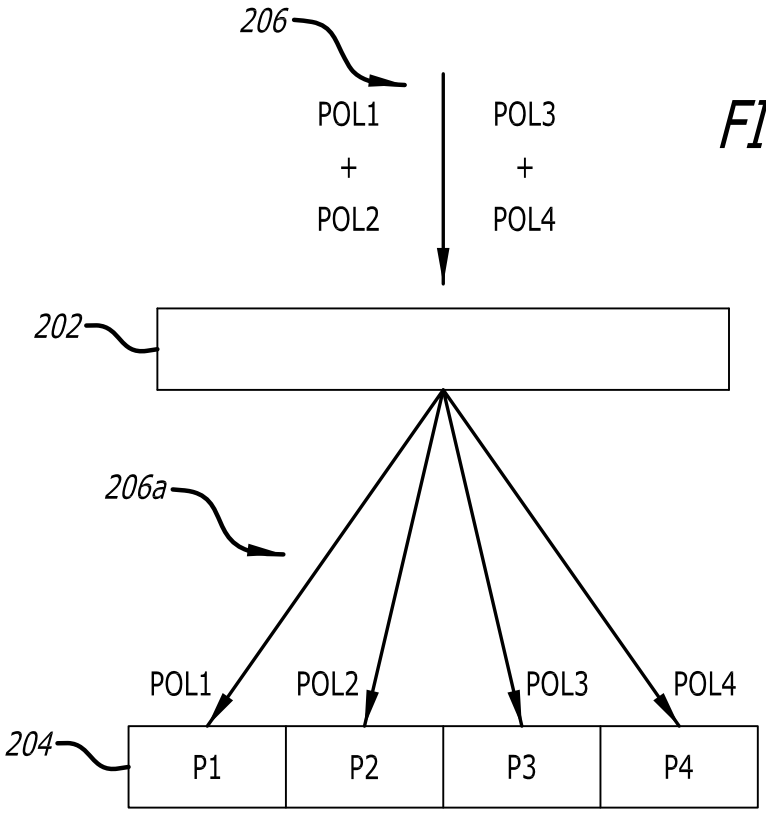

206
POL1
+
POL2
POL3
+
POL4
202
206a
POL1
POL2
POL3
POL4
204
P1
P2
P3
P4

FIG. 2

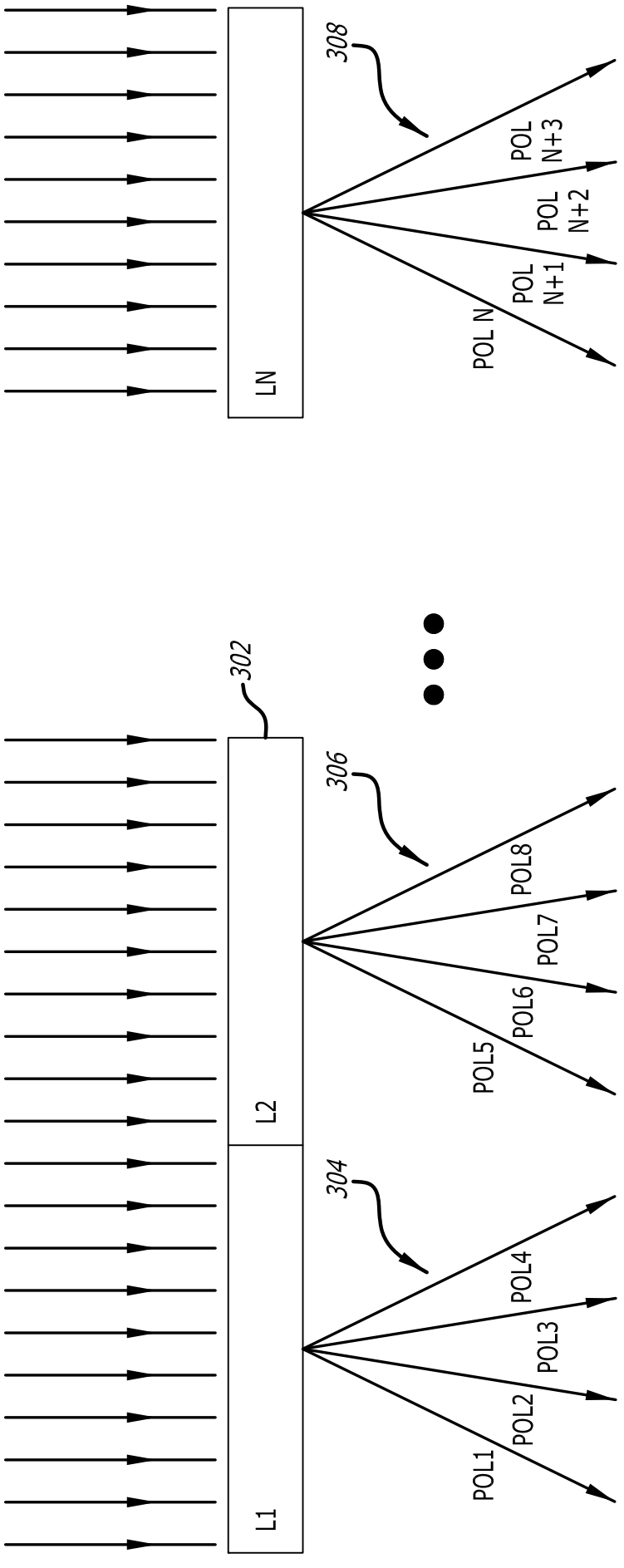

L1
L2
LN
302
304
306
308
POL1
POL2
POL3
POL4
POL5
POL6
POL7
POL8
POL N
POL N+1
POL N+2
POL N+3

FIG. 3A

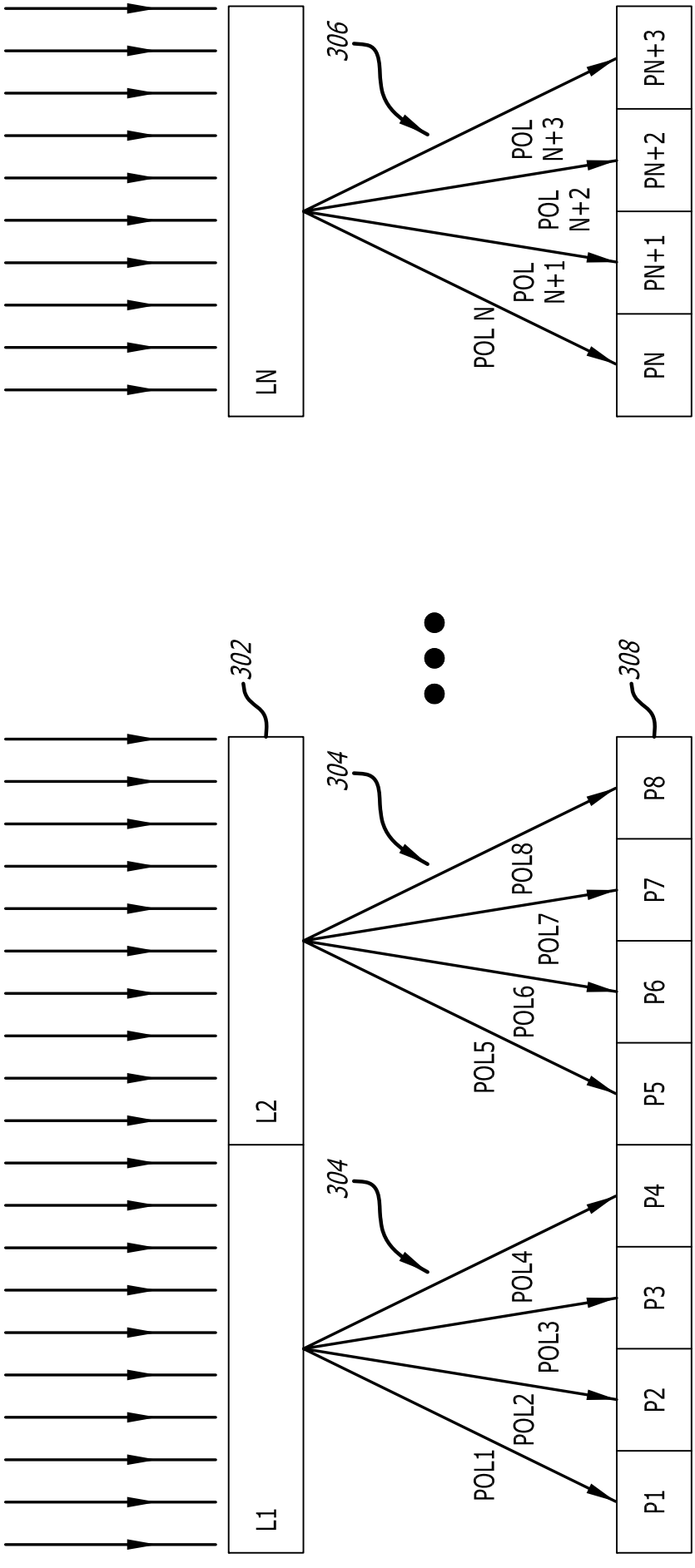

L1
L2
LN
302
304
304
306
308
POL1
POL2
POL3
POL4
POL5
POL6
POL7
POL8
POL N
POL N+1
POL N+2
POL N+3
P1
P2
P3
P4
P5
P6
P7
P8
PN
PN+1
PN+2
PN+3

FIG. 3B

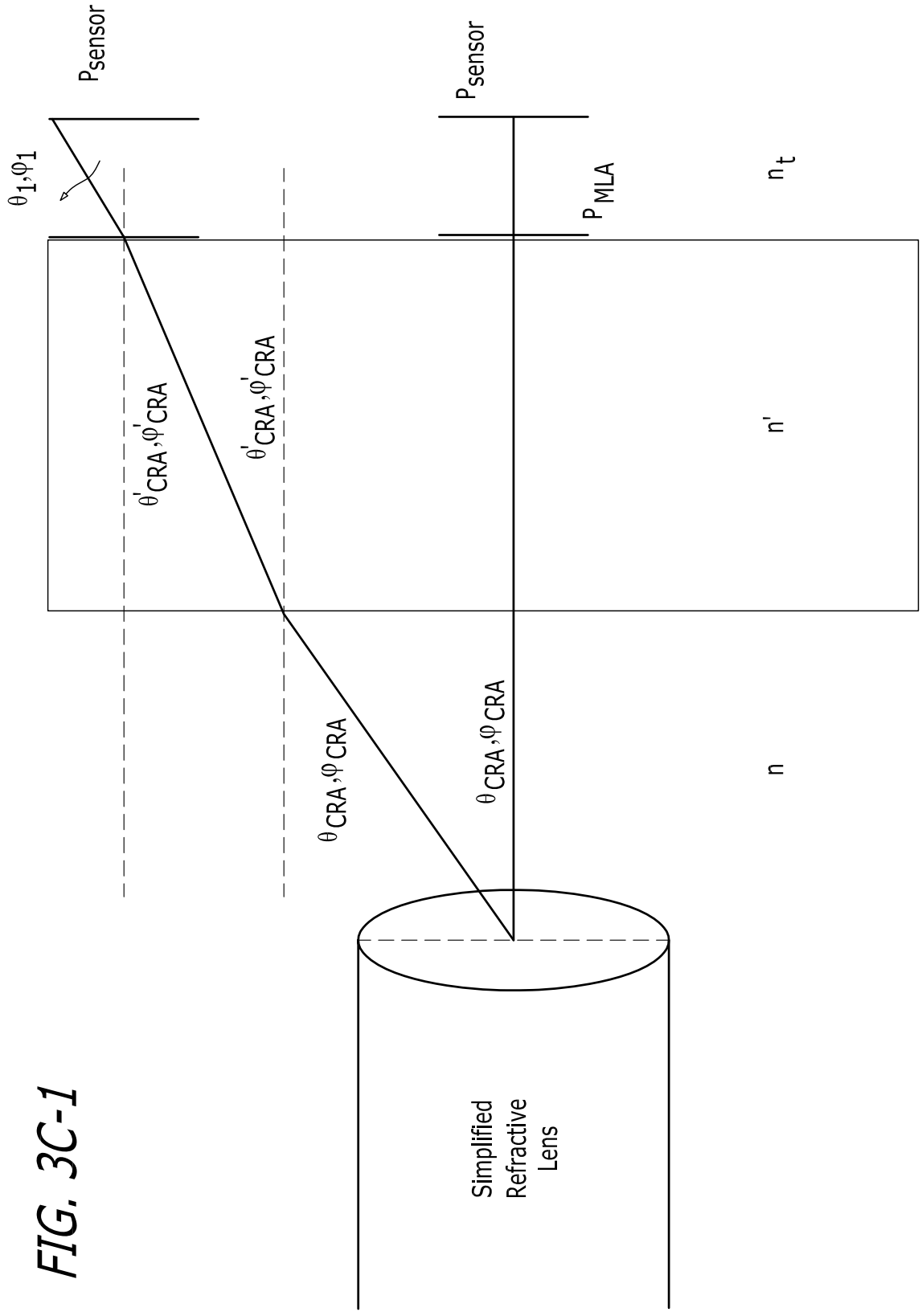

P sensor
P sensor
θ1,φ1
P MLA
nt
θ'CRA,φ'CRA
θ'CRA,φ'CRA
n'
θCRA,φCRA
θCRA,φCRA
n
Simplified
Refractive
Lens

FIG. 3C-1

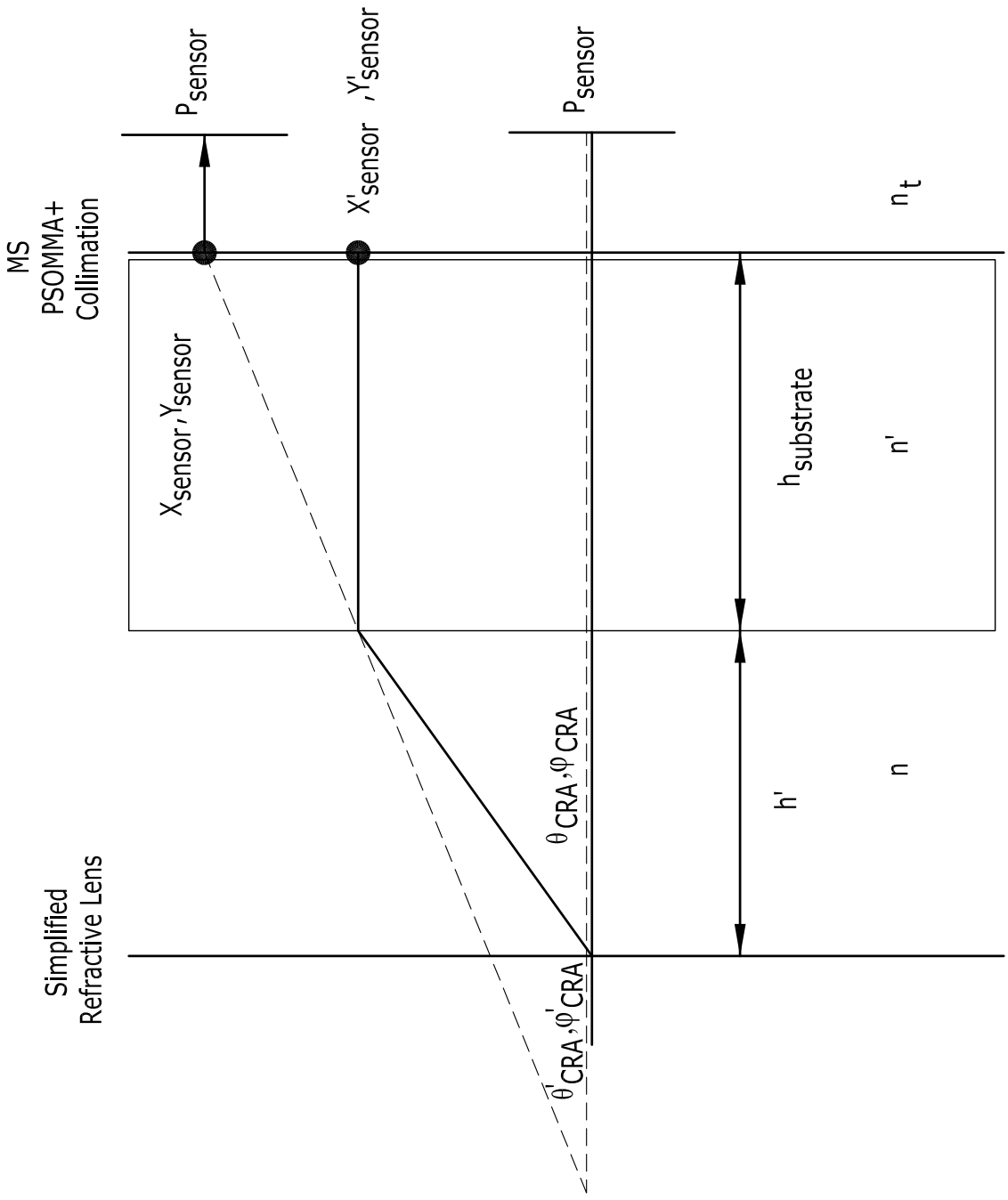

MS
PSOMMA+
Collimation
Simplified
Refractive Lens
P sensor
X'sensor , Y'sensor
P sensor
n t
X sensor , Y sensor
h substrate
n'
θ CRA, φ CRA
h'
n
θ' CRA, φ' CRA

FIG. 3C-2

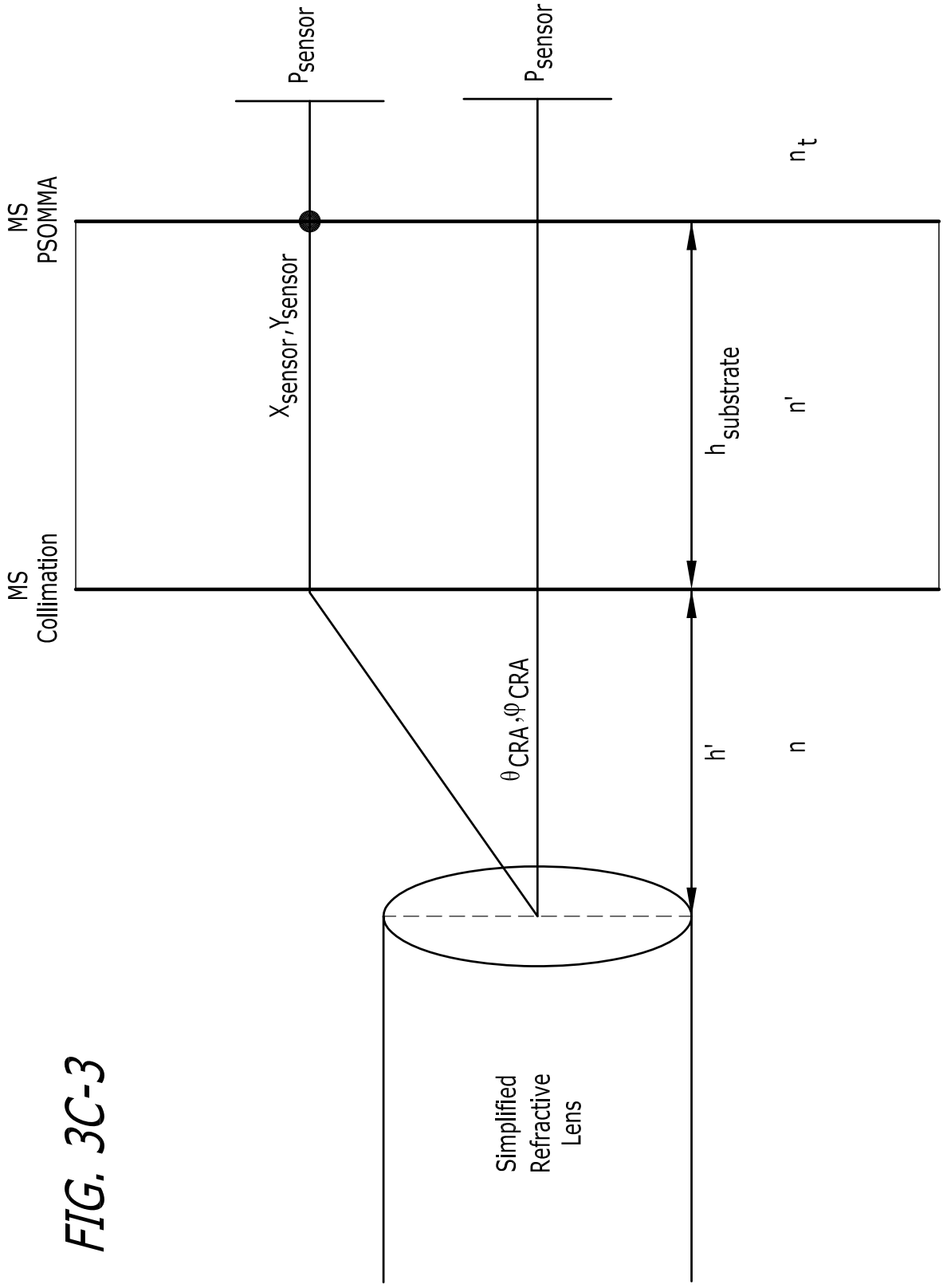

MS
PSOMMA
MS
Collimation
Psensor
Psensor
Xsensor, Ysensor
θCRA, φCRA
hsubstrate
h'
n t
n'
n
Simplified
Refractive
Lens

FIG. 3C-3

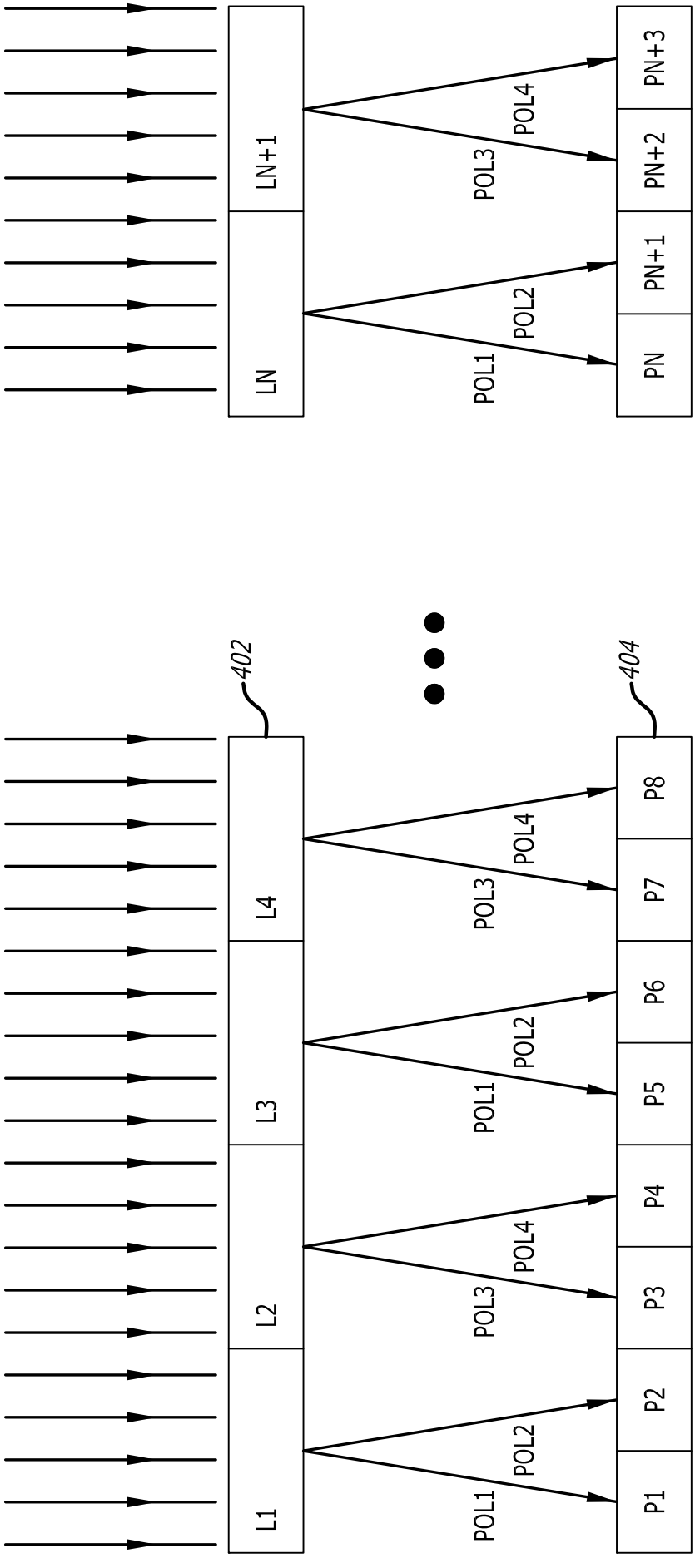

402
404
L1
L2
L3
L4
LN
LN+1
P1
P2
P3
P4
P5
P6
P7
P8
PN
PN+1
PN+2
PN+3
POL1
POL2
POL3
POL4

FIG. 4A

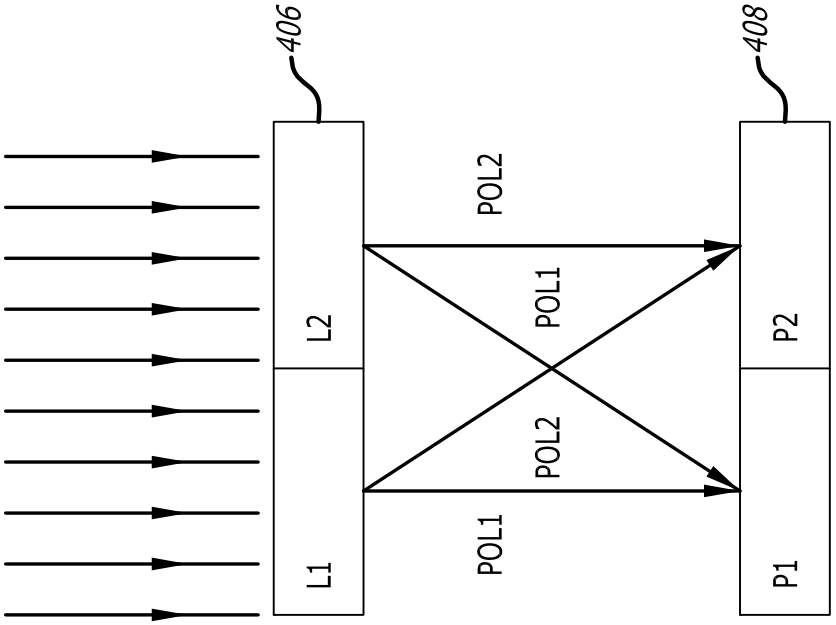


FIG. 4B

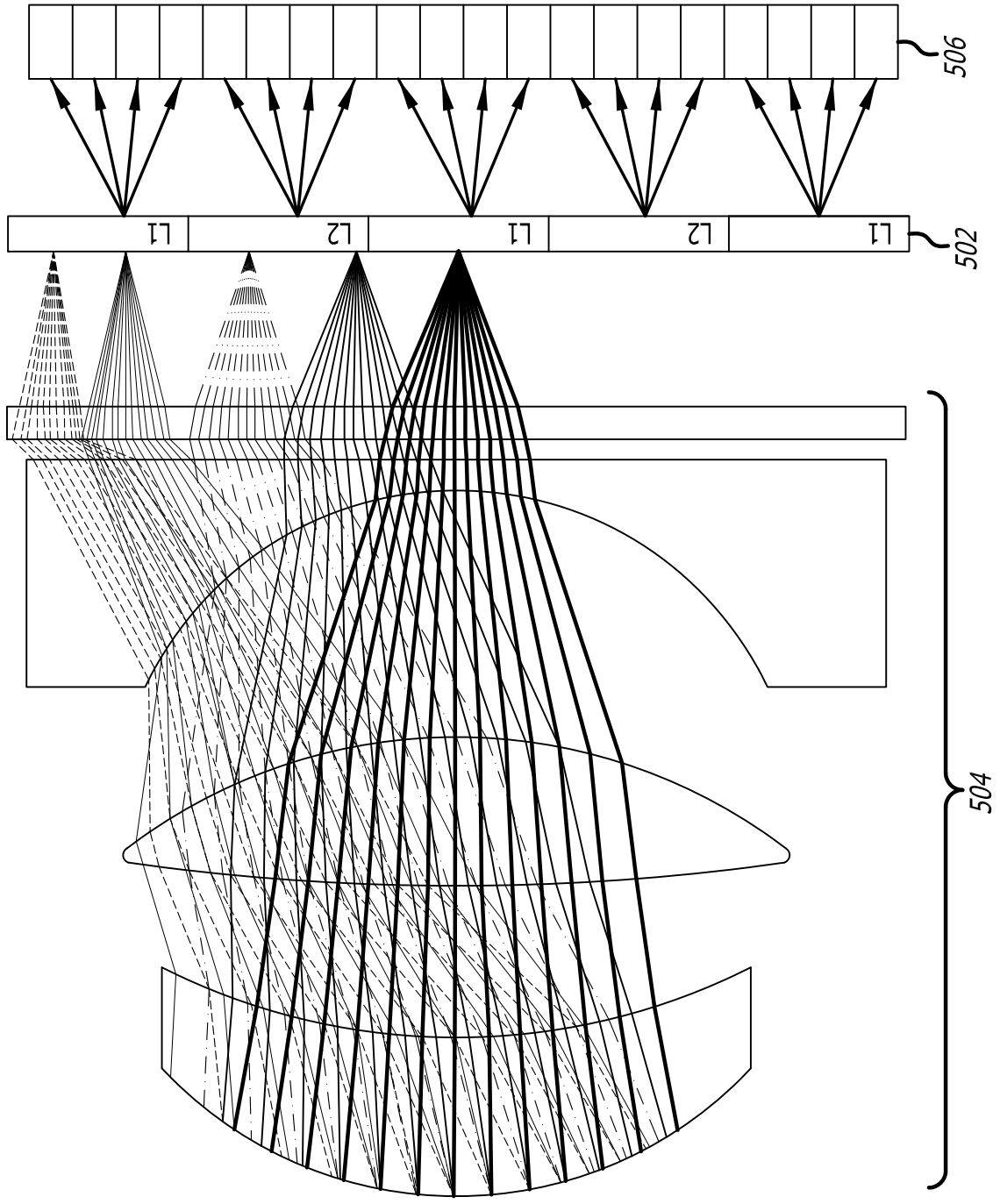


FIG. 5A-1

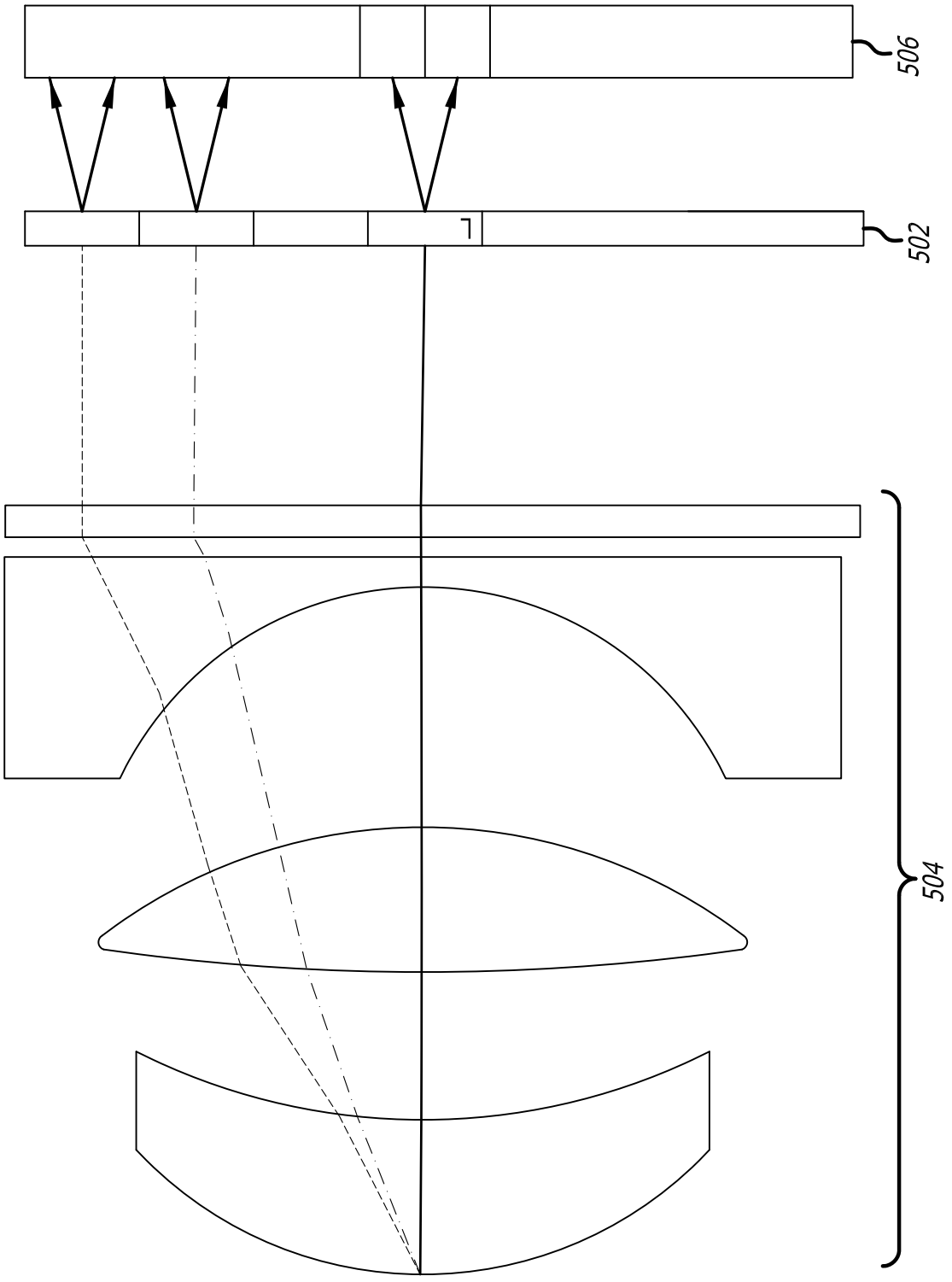


FIG. 5A-2

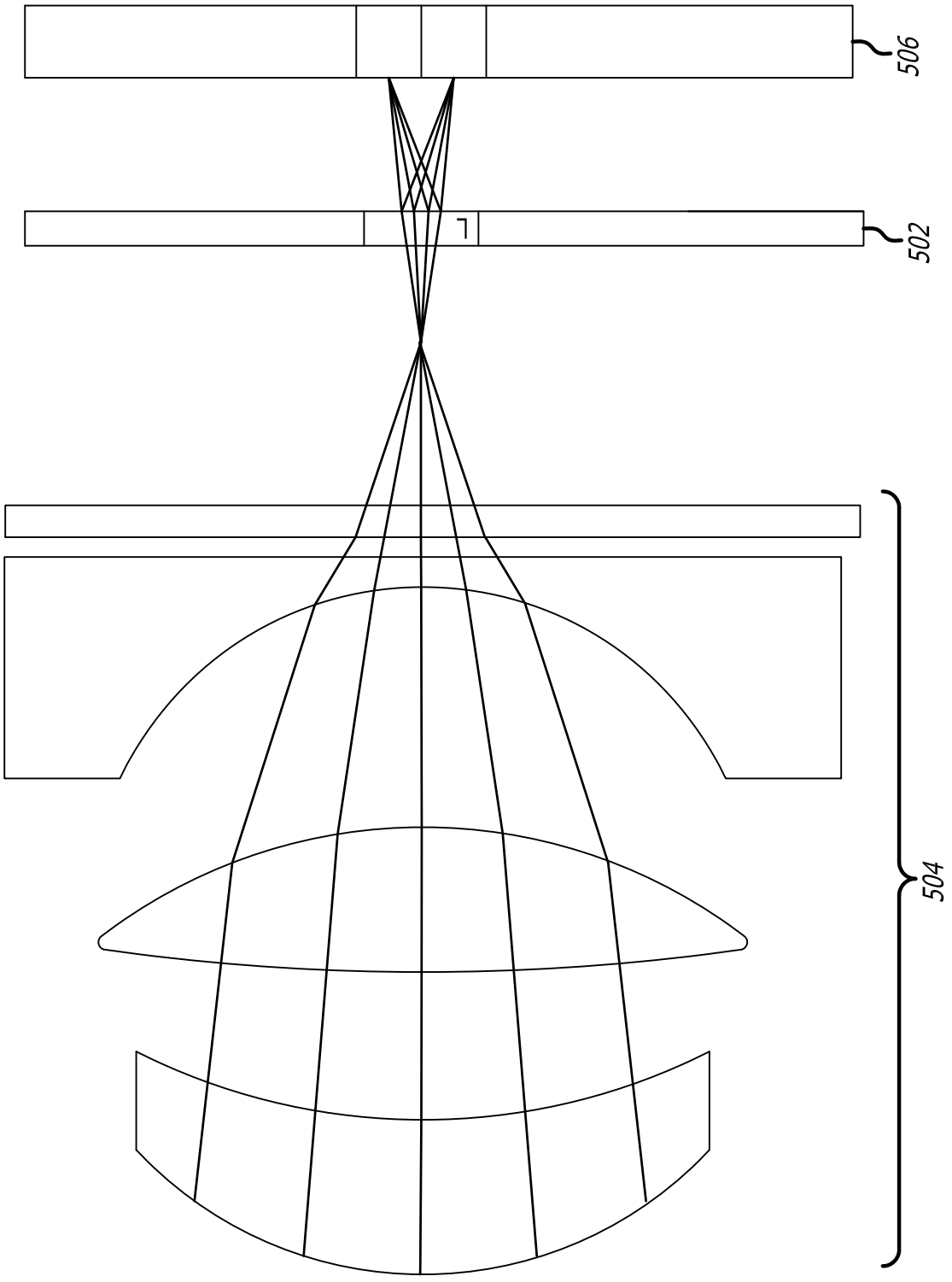


FIG. 5A-3

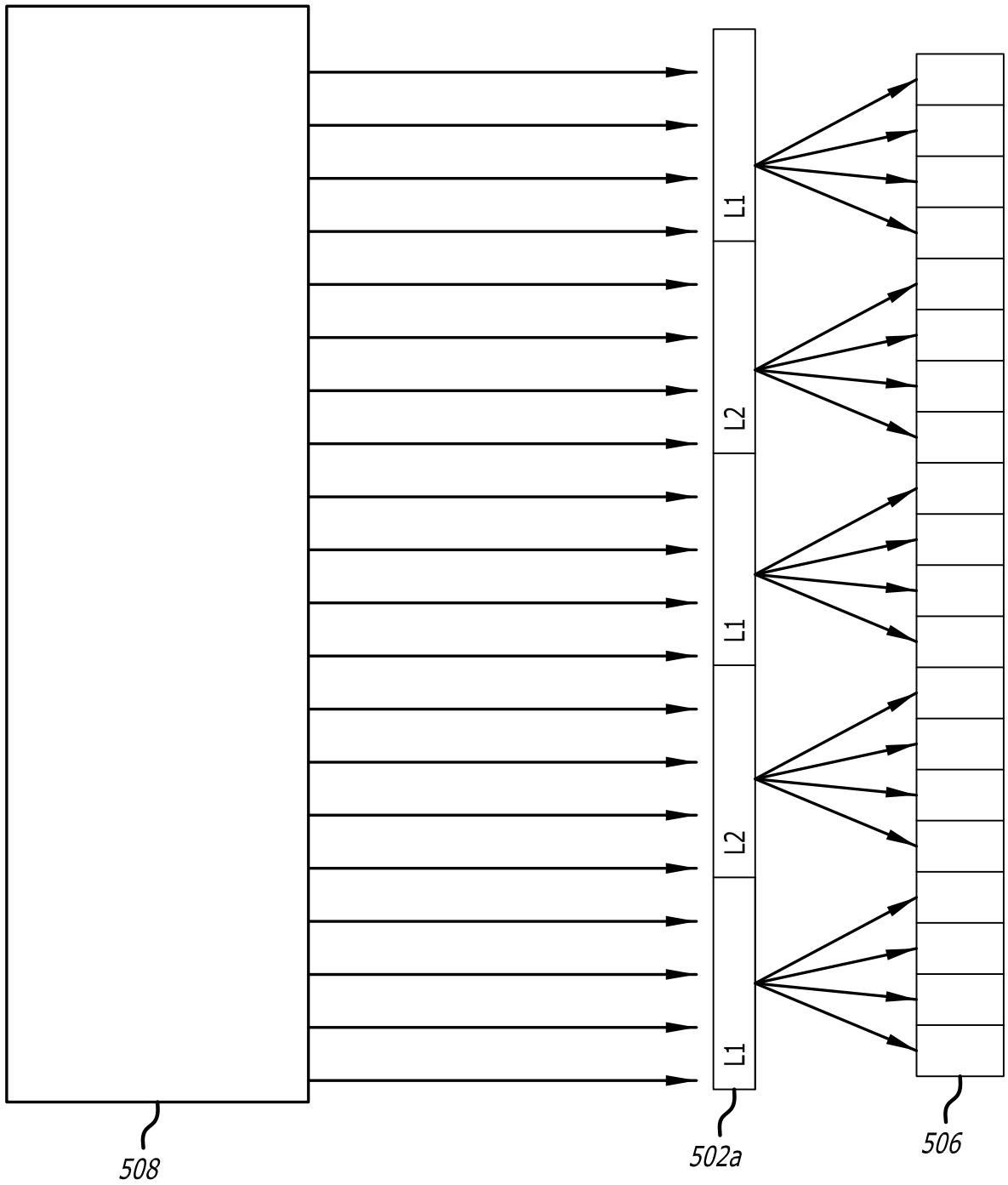


FIG. 5B

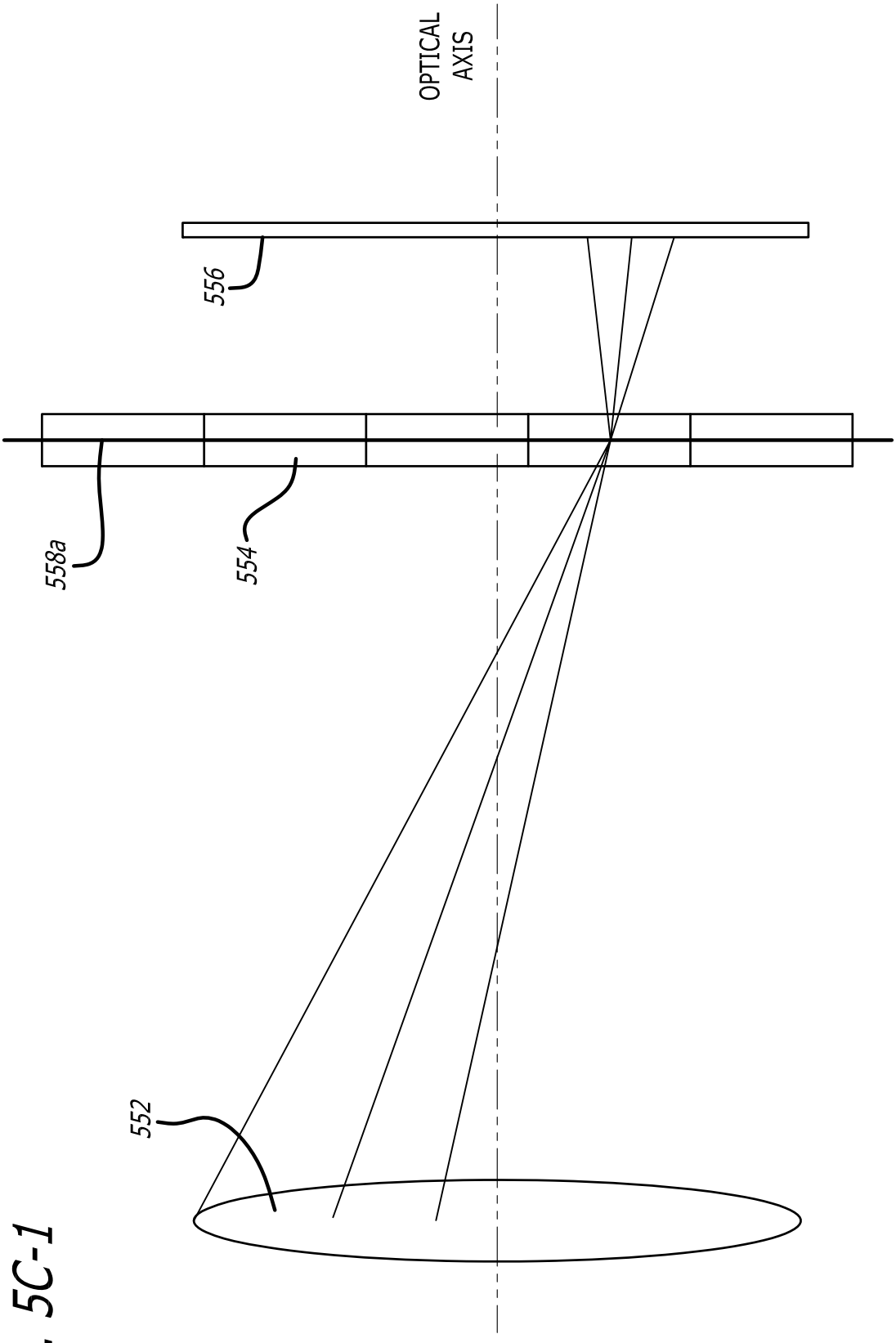


FIG. 5C-1

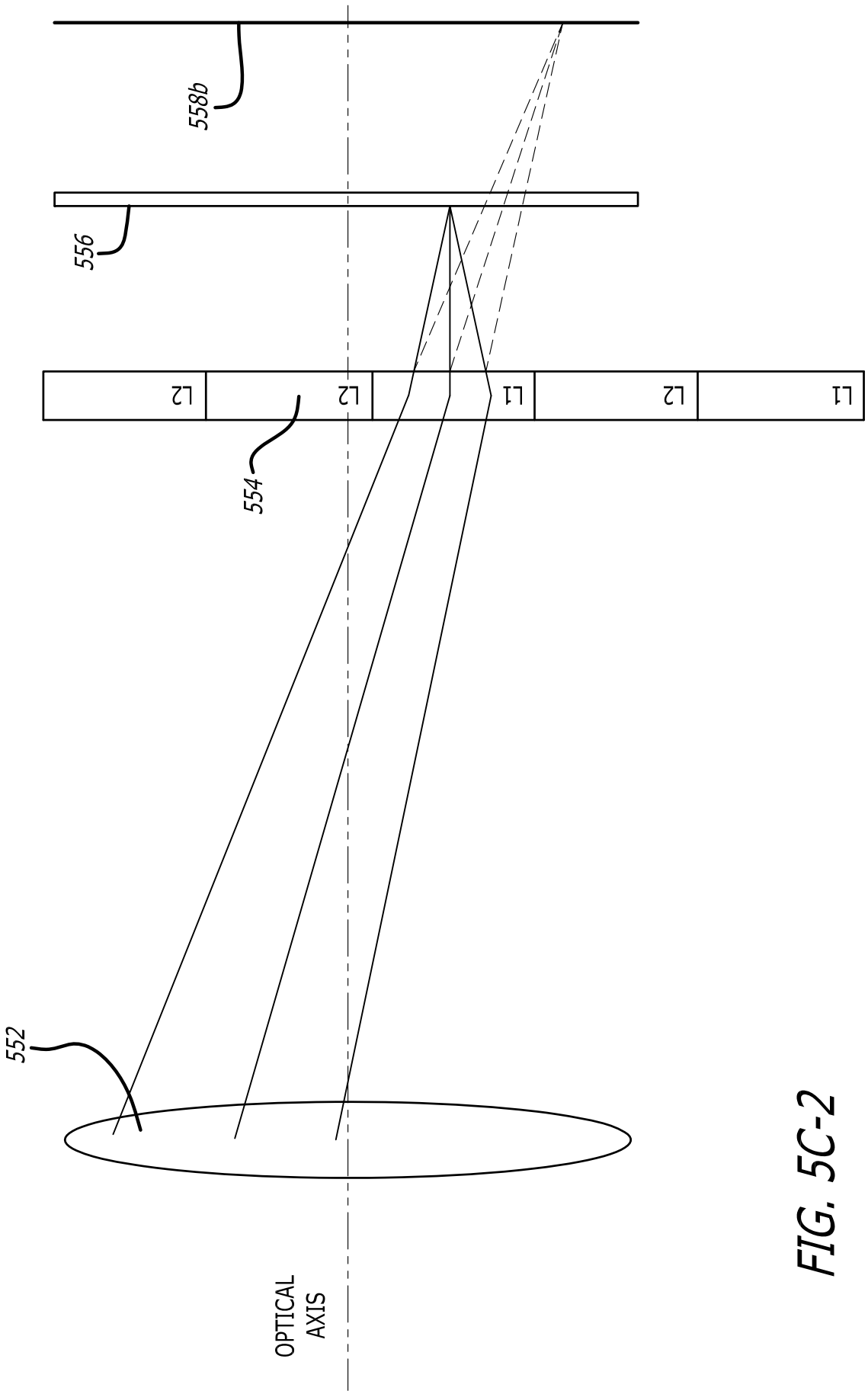


FIG. 5C-2

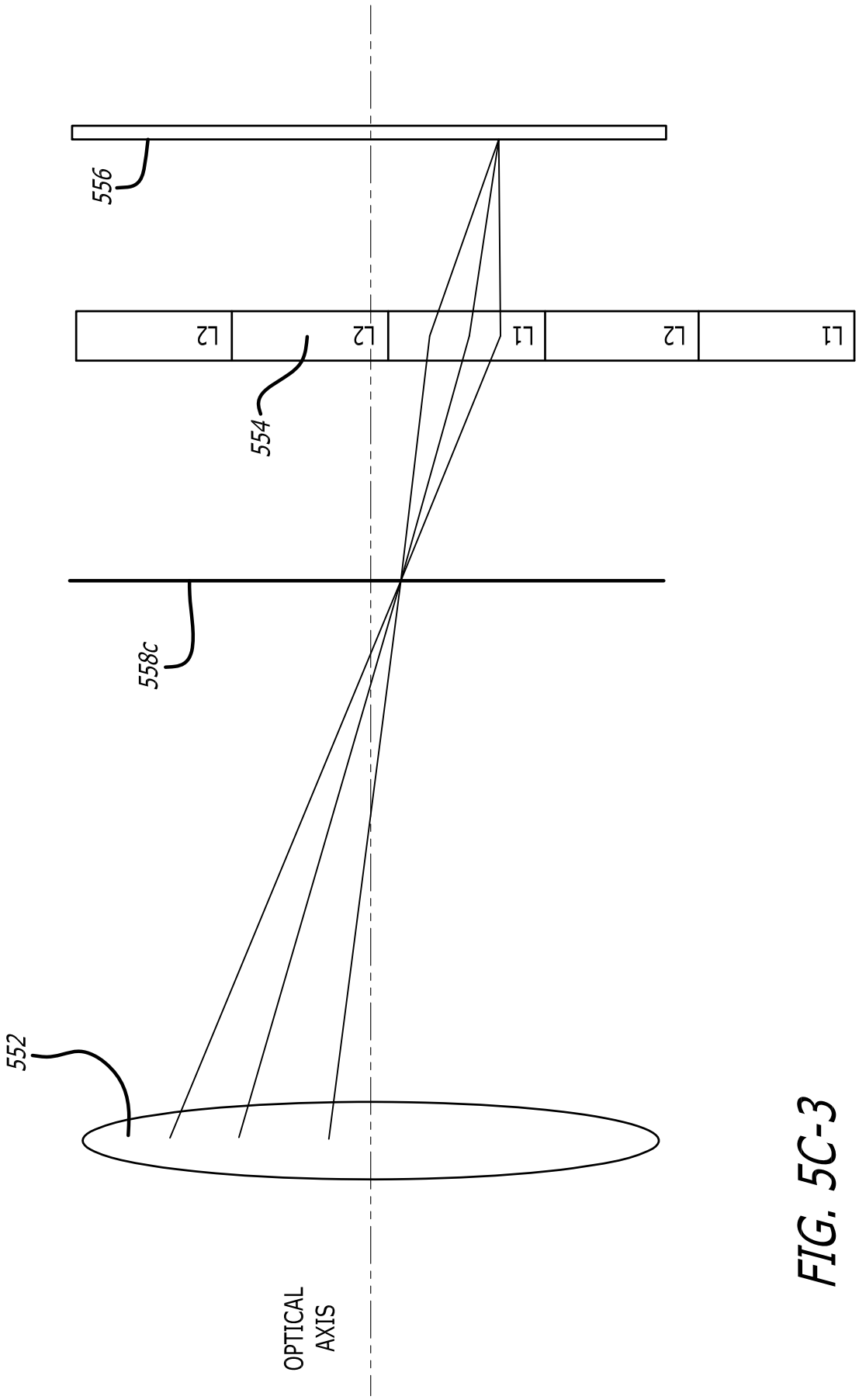


FIG. 5C-3

FIG. 6A

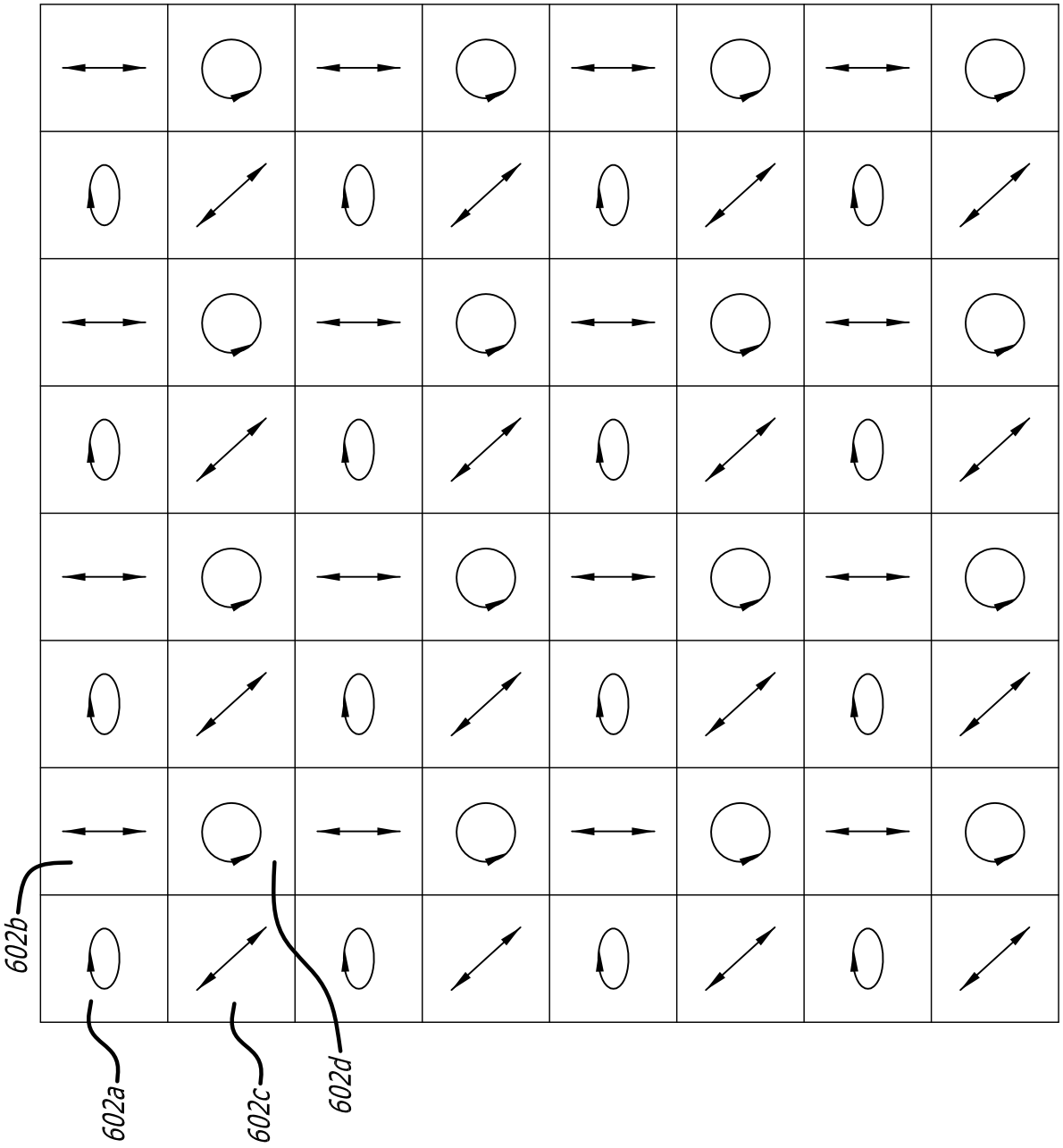
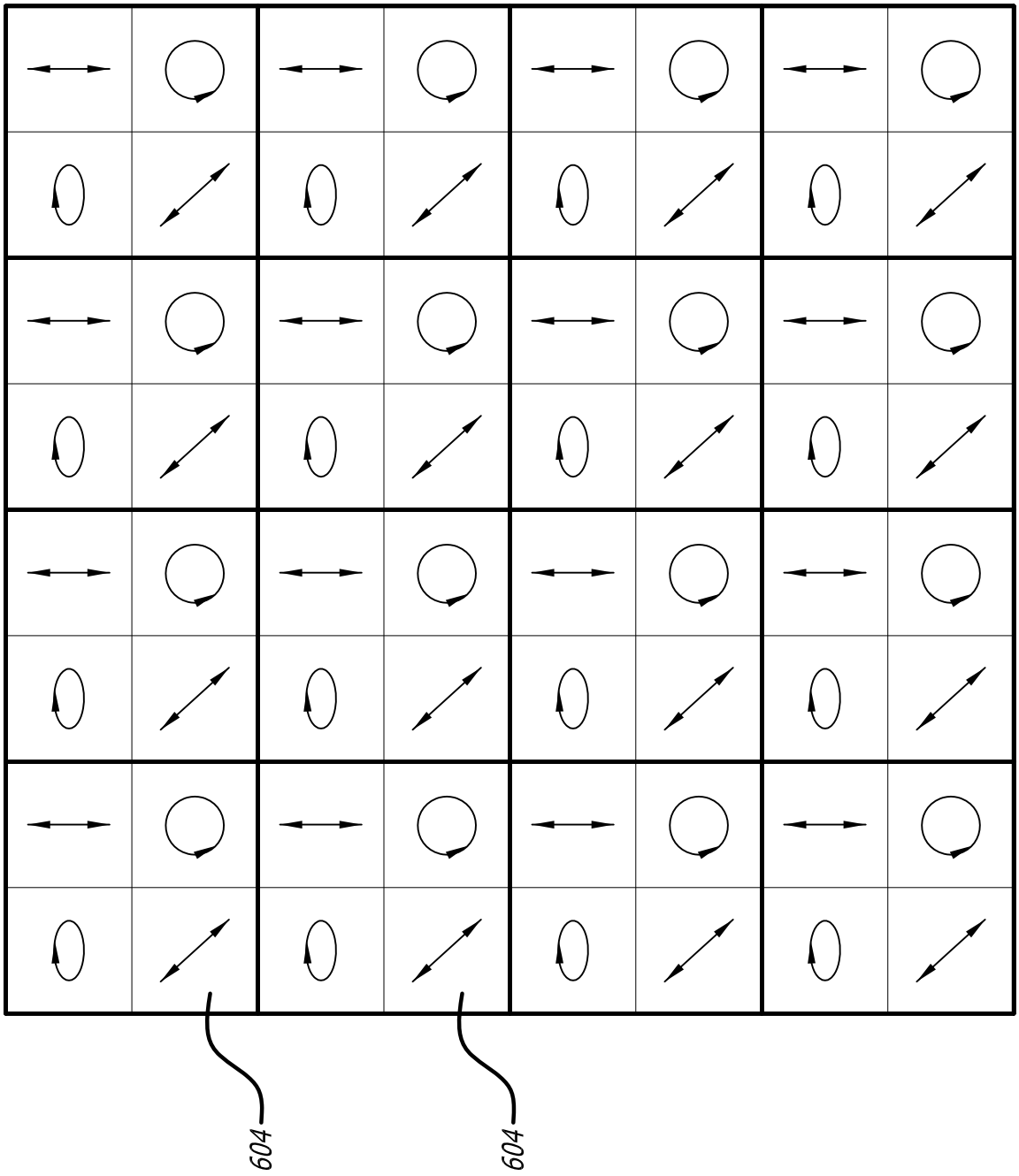


FIG. 6B



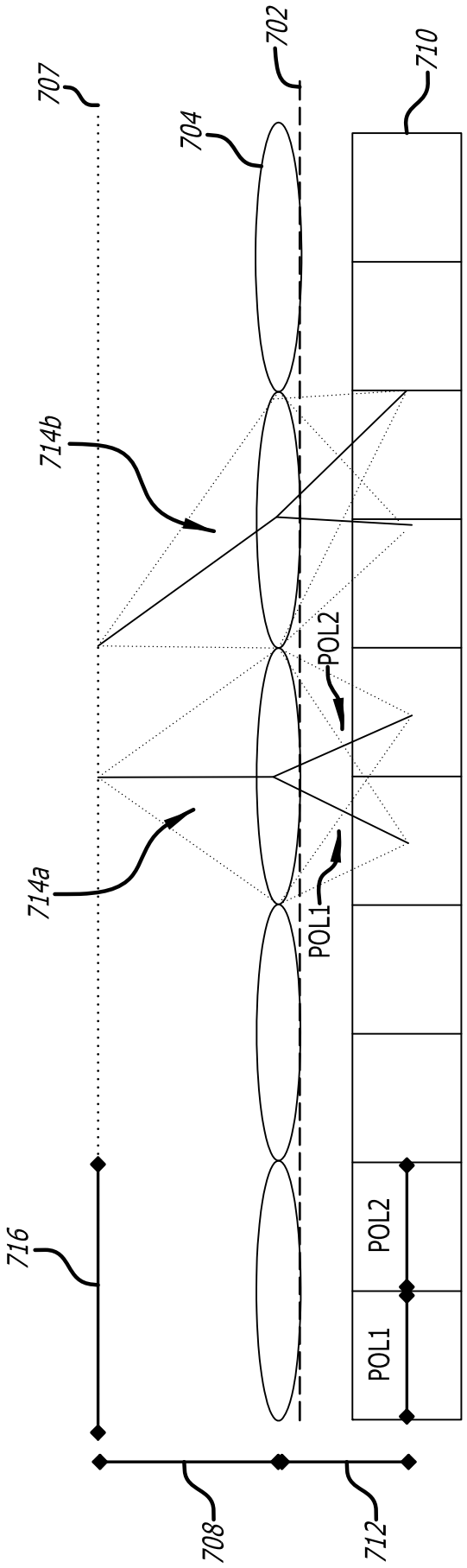


FIG. 7

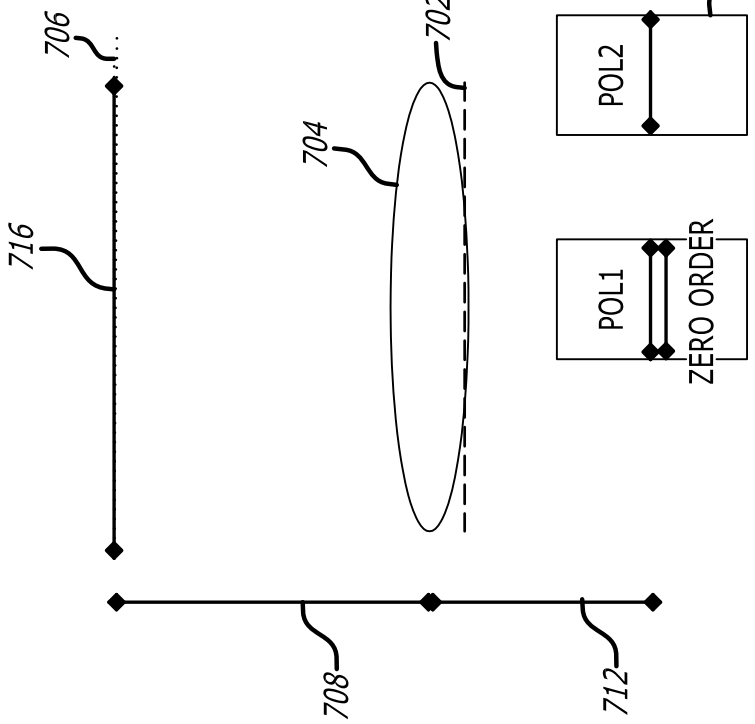

706
716
704
702
708
712
POL2
710
POL1
ZERO ORDER

FIG. 8B

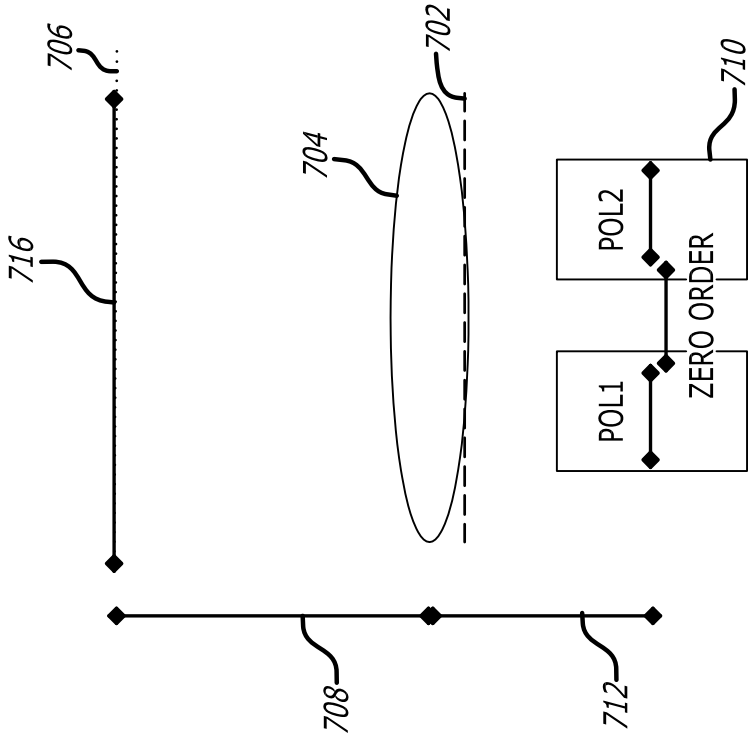

706
716
704
702
708
712
POL2
710
POL1
ZERO ORDER

FIG. 8A

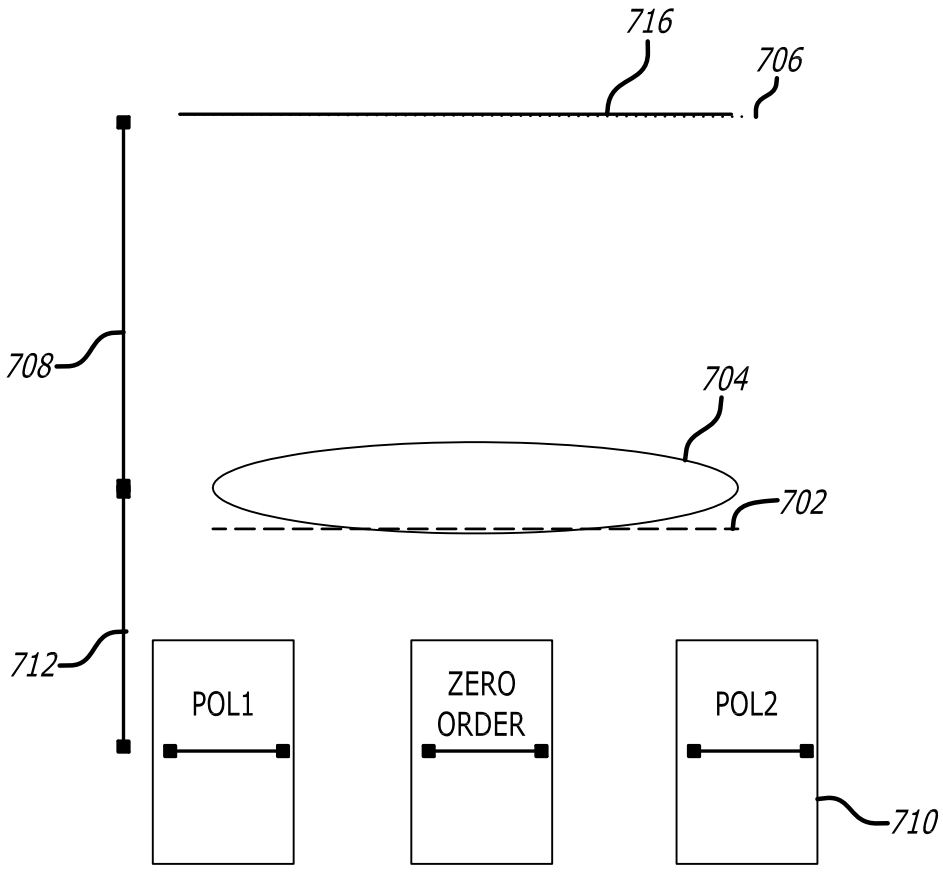


FIG. 9A

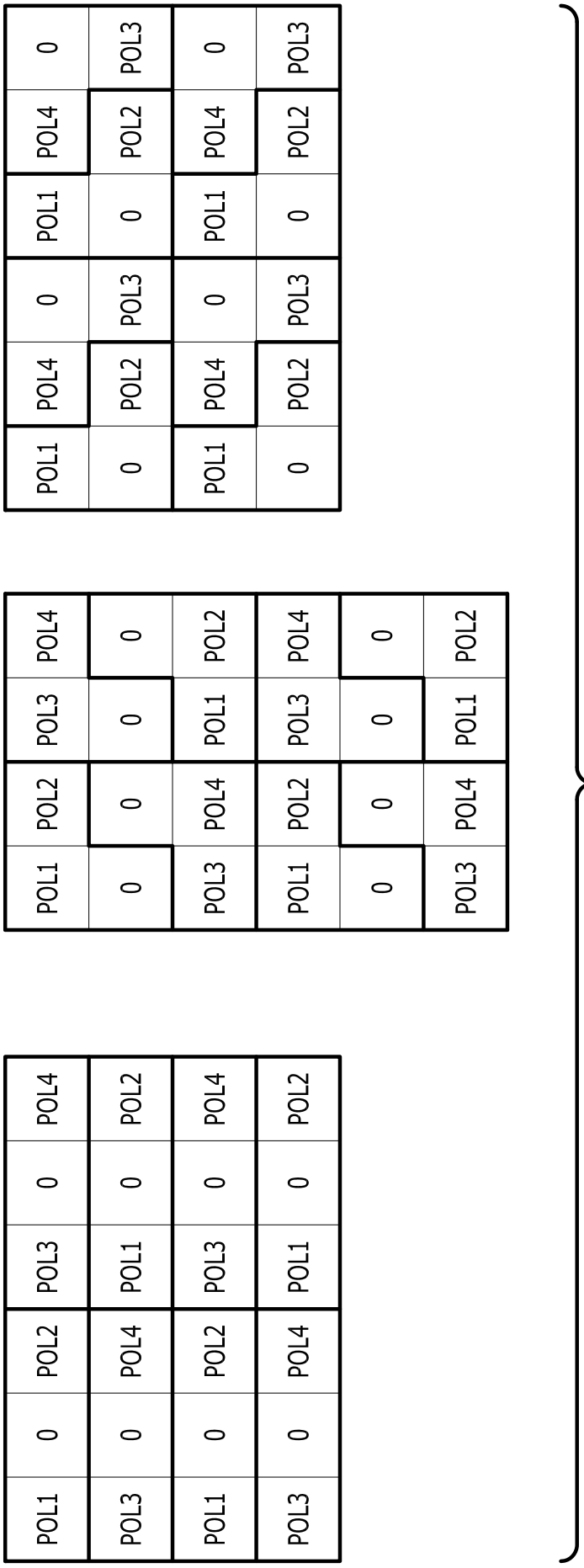
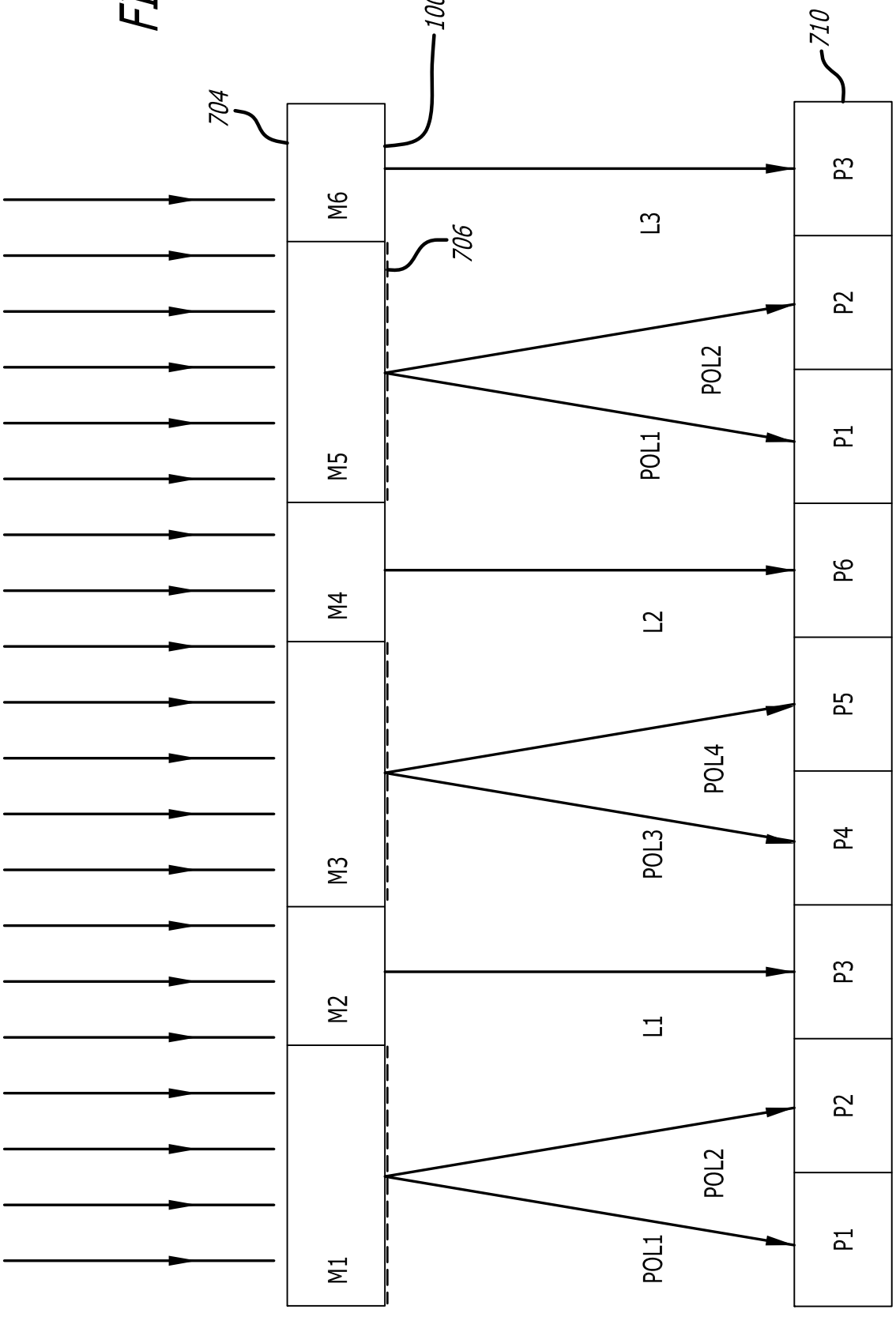

POL1 0 POL2 0 POL3 0 POL4 0
0 POL2 0 POL3 0 POL4 0 POL1 POL2
POL1 0 POL2 0 POL3 0 POL4 0
0 POL2 0 POL3 0 POL4 0 POL1 POL2
POL1 0 POL2 0 POL3 0 POL4 0
0 POL2 0 POL3 0 POL4 0 POL1 POL2
POL1 0 POL2 0 POL3 0 POL4 0
0 POL2 0 POL3 0 POL4 0 POL1 POL2

FIG. 9B

FIG. 10A


704
1002
710
706
M6
M5
M4
M3
M2
M1
L3
L2
L1
POL1
POL2
POL3
POL4
P3
P2
P1
P6
P5
P4

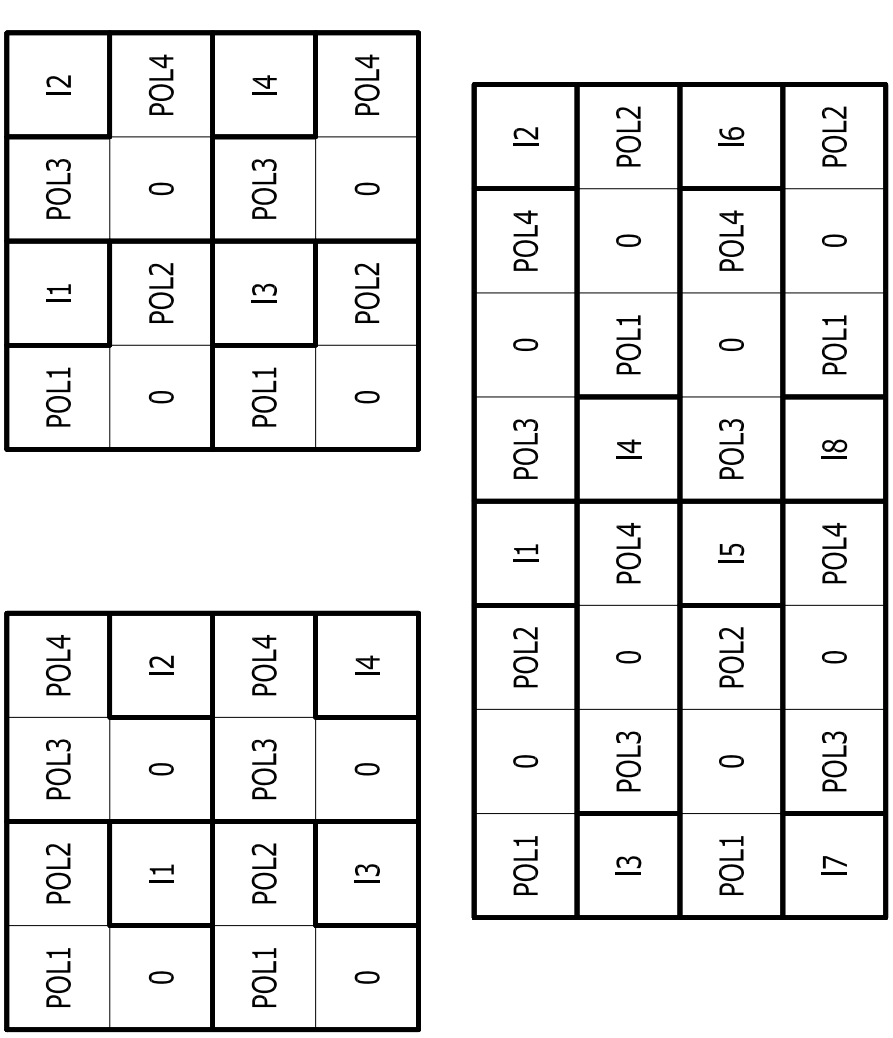

POL1 | 0 | I1 | POL2 | POL3 | 0 | I2 | POL4
POL1 | 0 | I3 | POL2 | POL3 | 0 | I4 | POL4
POL1 | 0 | POL2 | I1 | POL3 | I4 | POL4 | I2
POL1 | 0 | POL2 | I3 | POL3 | I8 | POL4 | I6
I3 | POL3 | 0 | POL4 | I5 | POL3 | 0 | POL2
POL1 | 0 | POL2 | I5 | POL4 | 0 | POL1 | 0
I7 | POL3 | 0 | POL4 | POL1 | 0 | POL2 | POL1
POL1 | POL2 | I1 | POL4 | I3 | POL3 | I2 | POL4
I3 | POL3 | I4 | POL1 | POL4 | I5 | POL2 | I6
POL1 | POL2 | I5 | POL3 | POL4 | I8 | POL1 | POL2
I7 | POL3 | I8 | POL4 | POL1 | POL2 | I6 | POL3

FIG. 10B

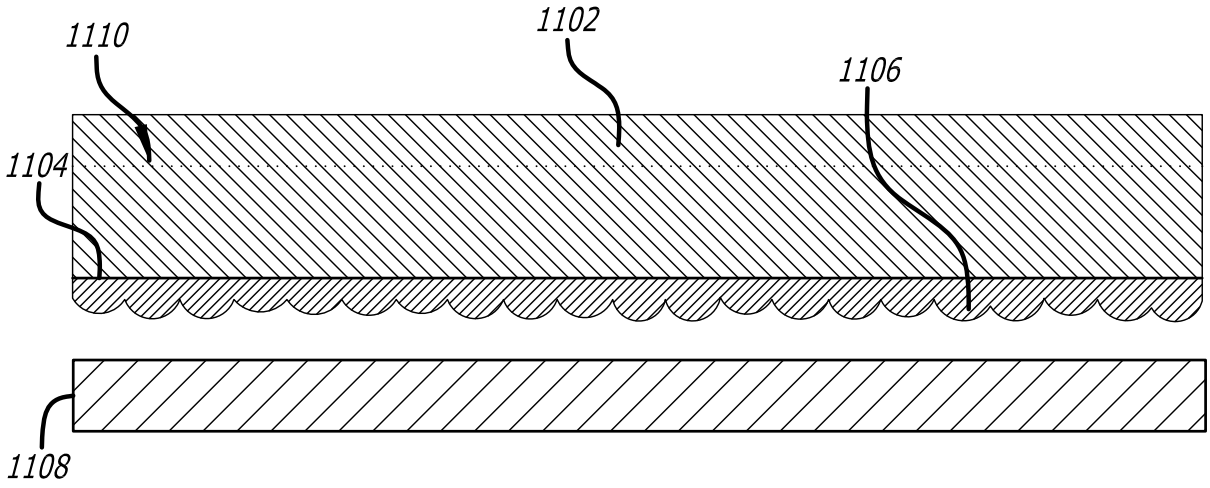


FIG. 11A

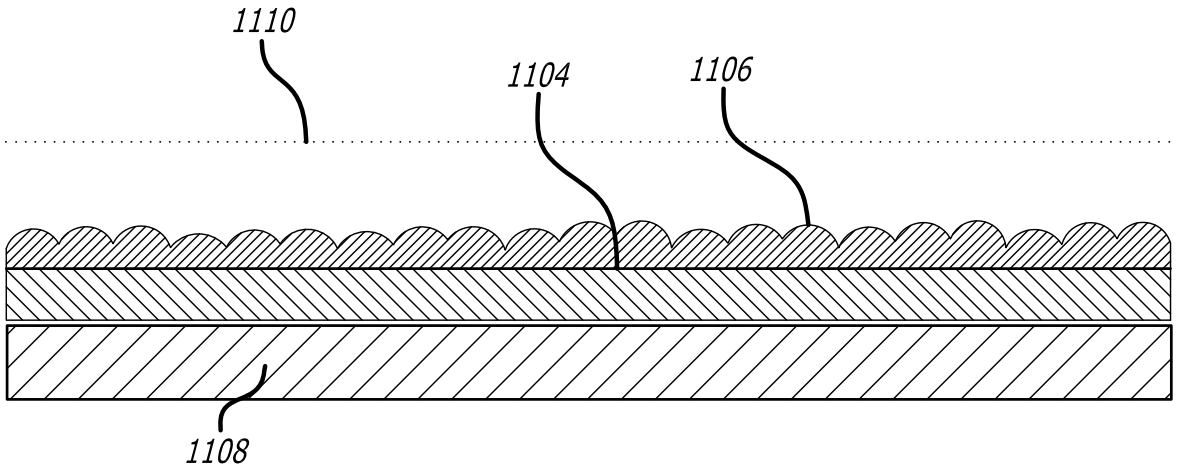


FIG. 11B

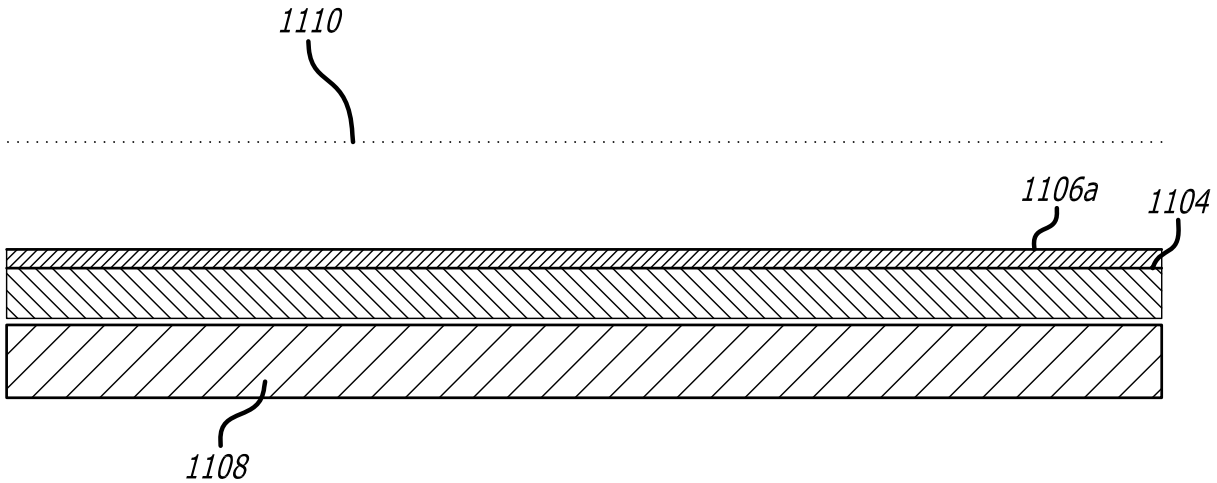


FIG. 11C

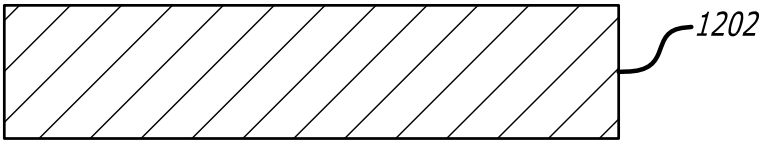


FIG. 12A

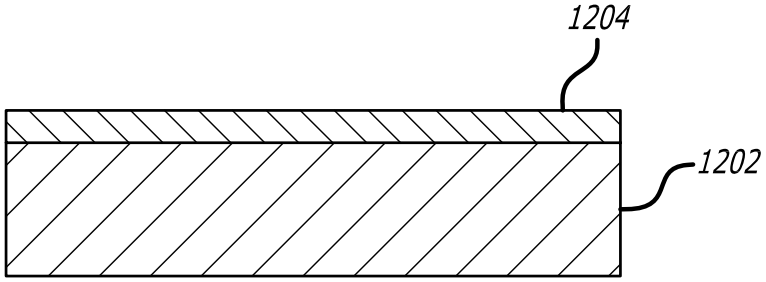


FIG. 12B

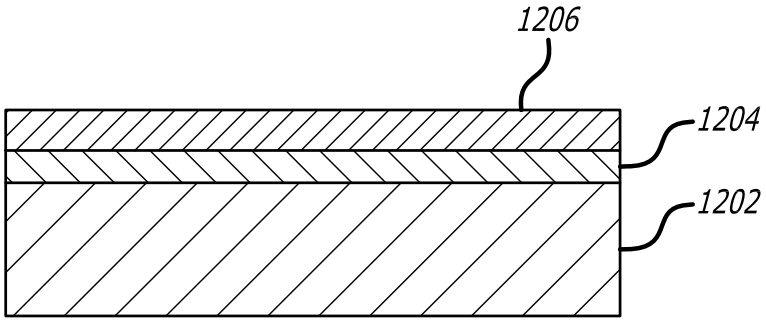


FIG. 12C

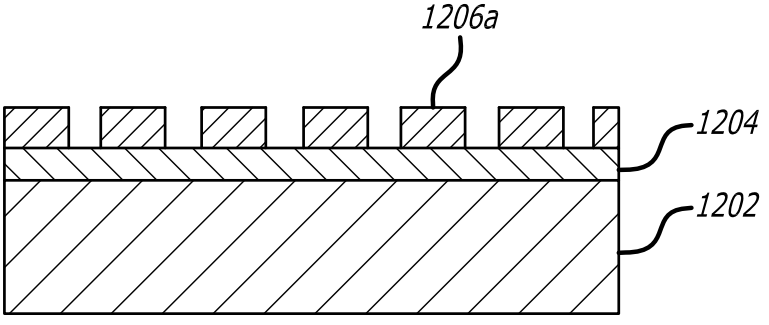


FIG. 12D

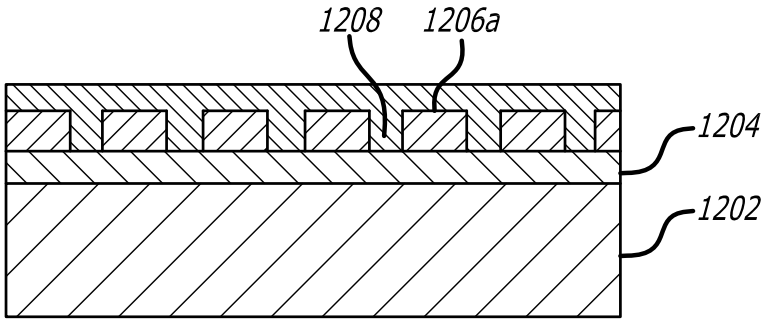


FIG. 12E

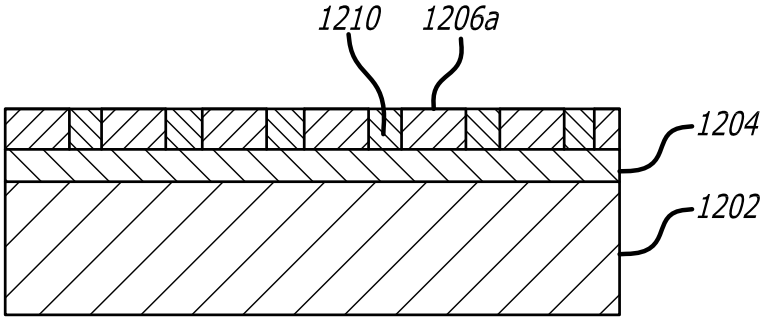


FIG. 12F

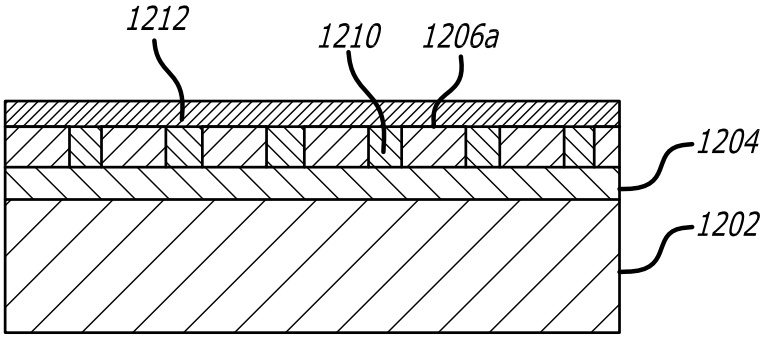


FIG. 12G

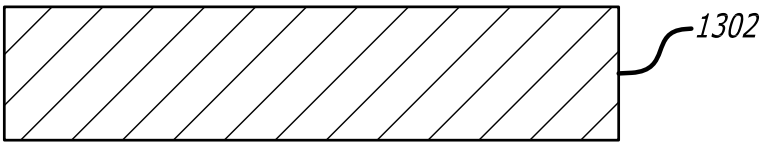


FIG. 13A

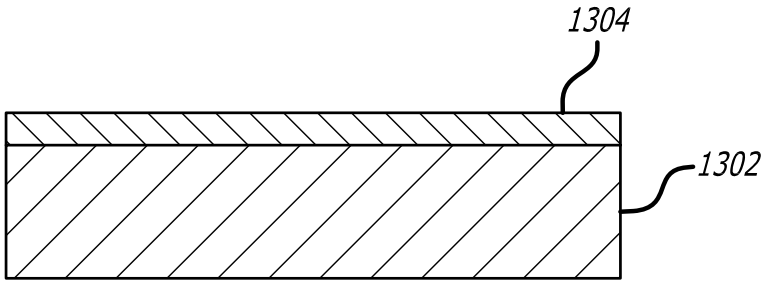


FIG. 13B

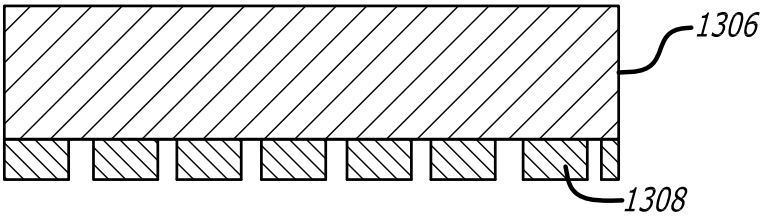
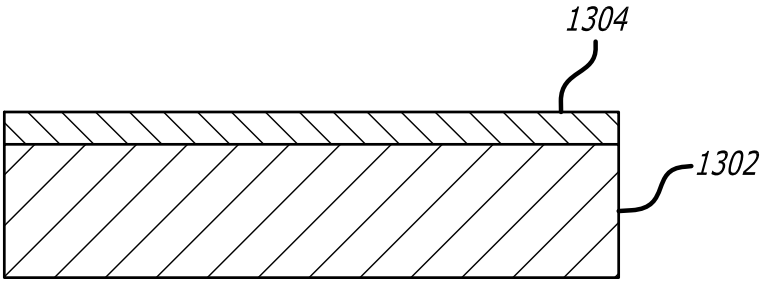


FIG. 13C



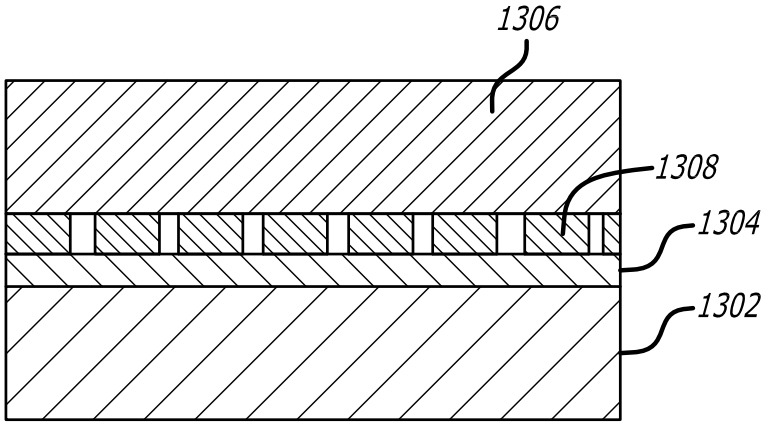


FIG. 13D

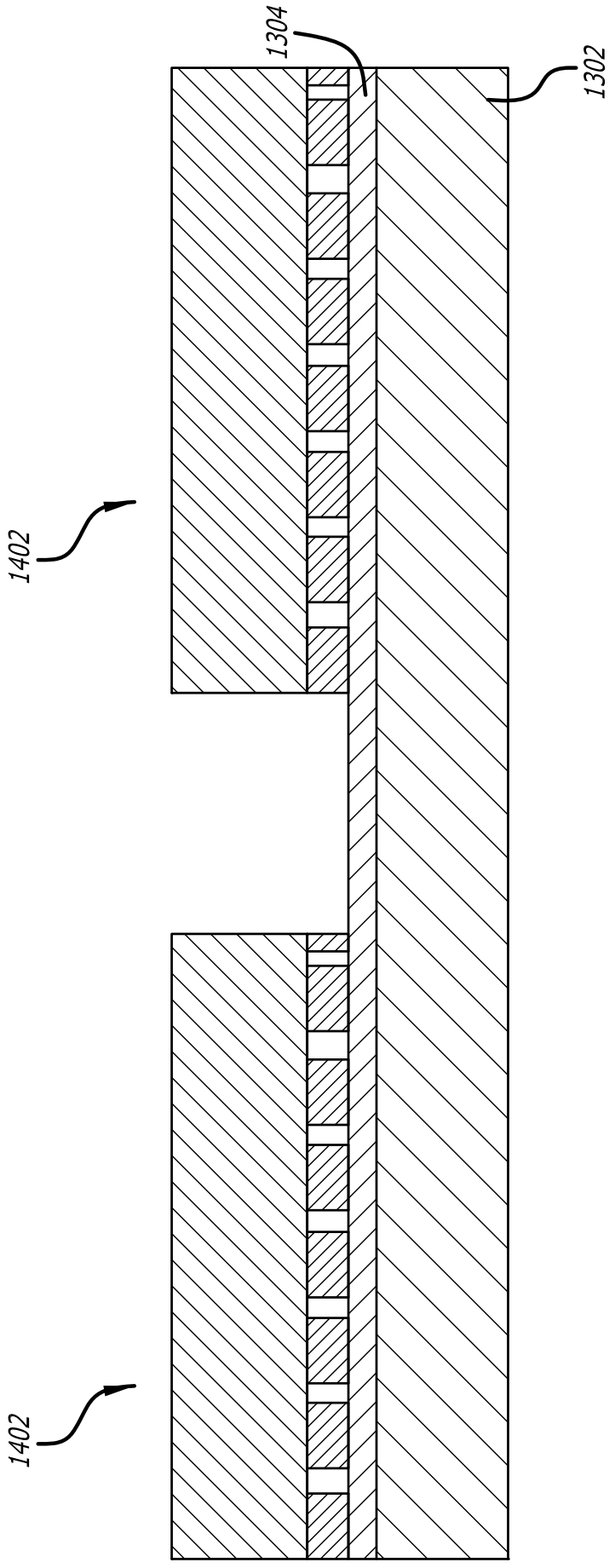


FIG. 14A

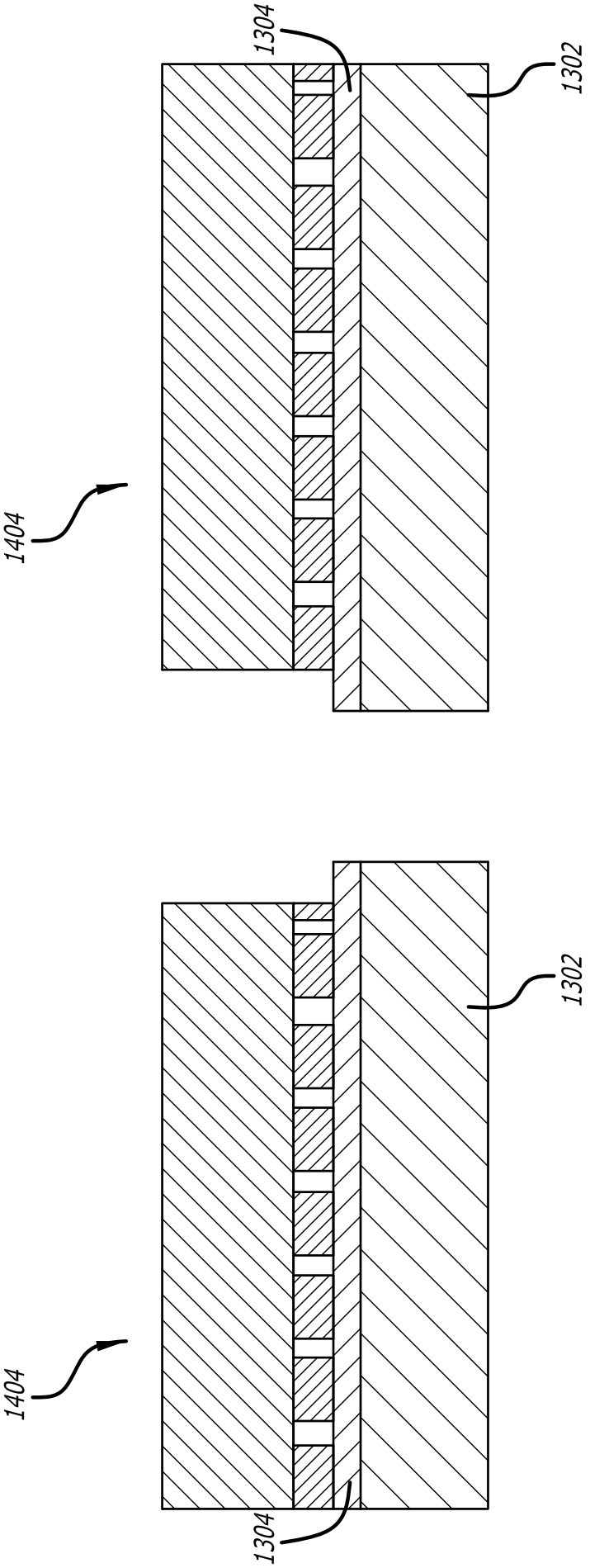


FIG. 14B

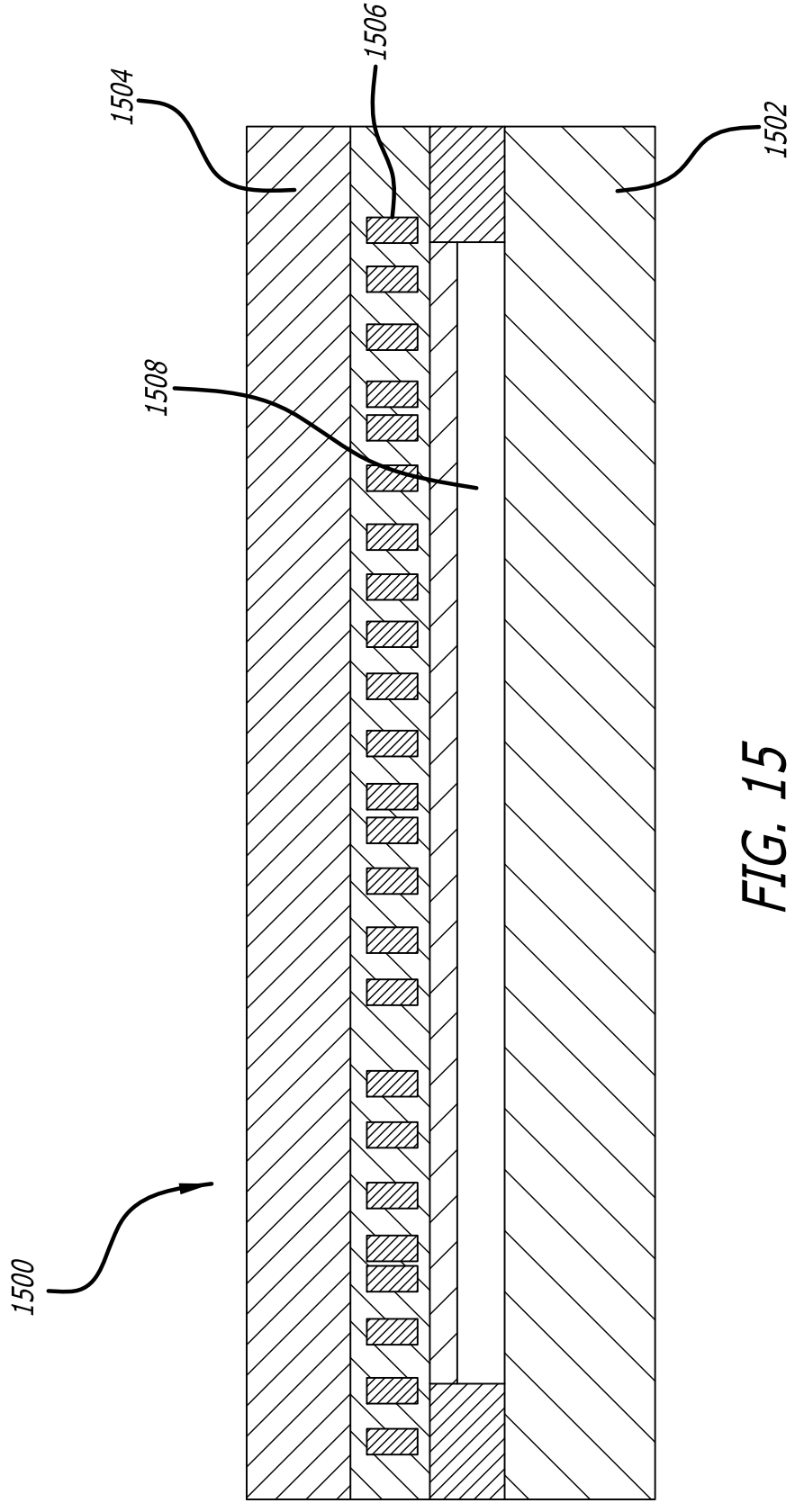


FIG. 15

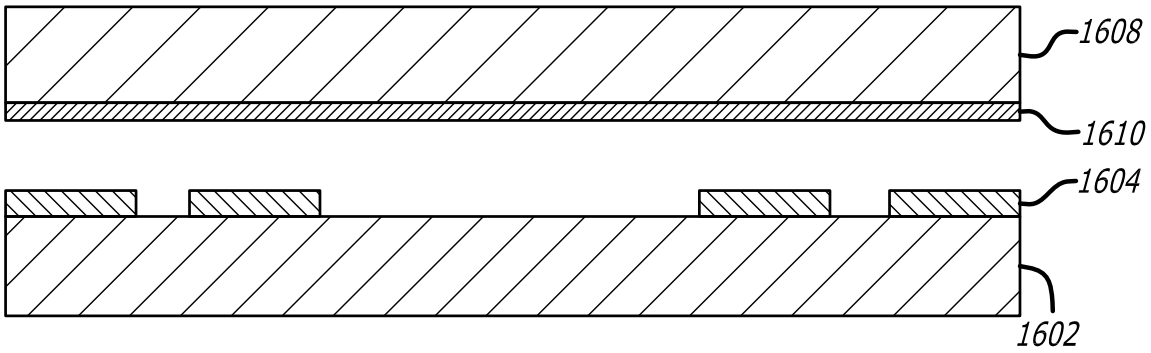


FIG. 16A

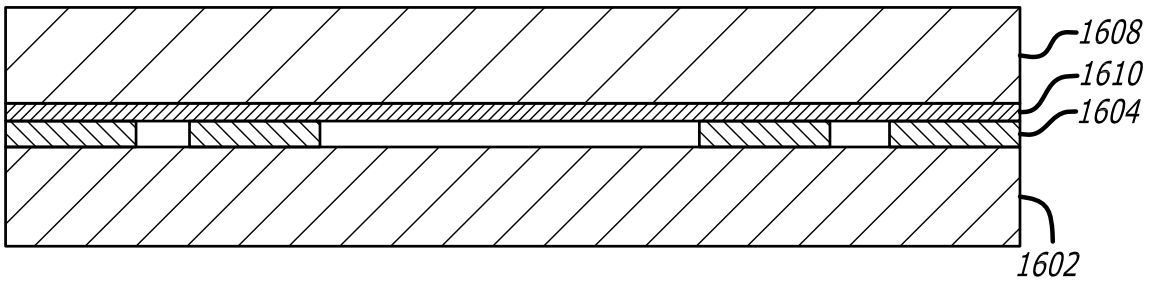


FIG. 16B

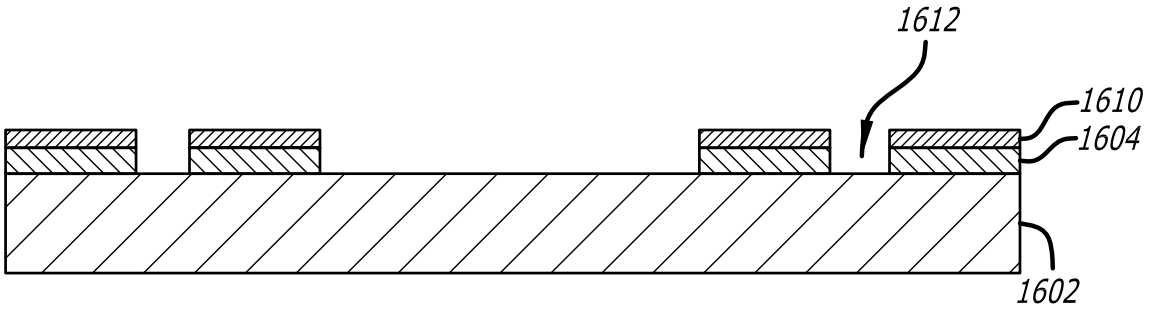


FIG. 16C

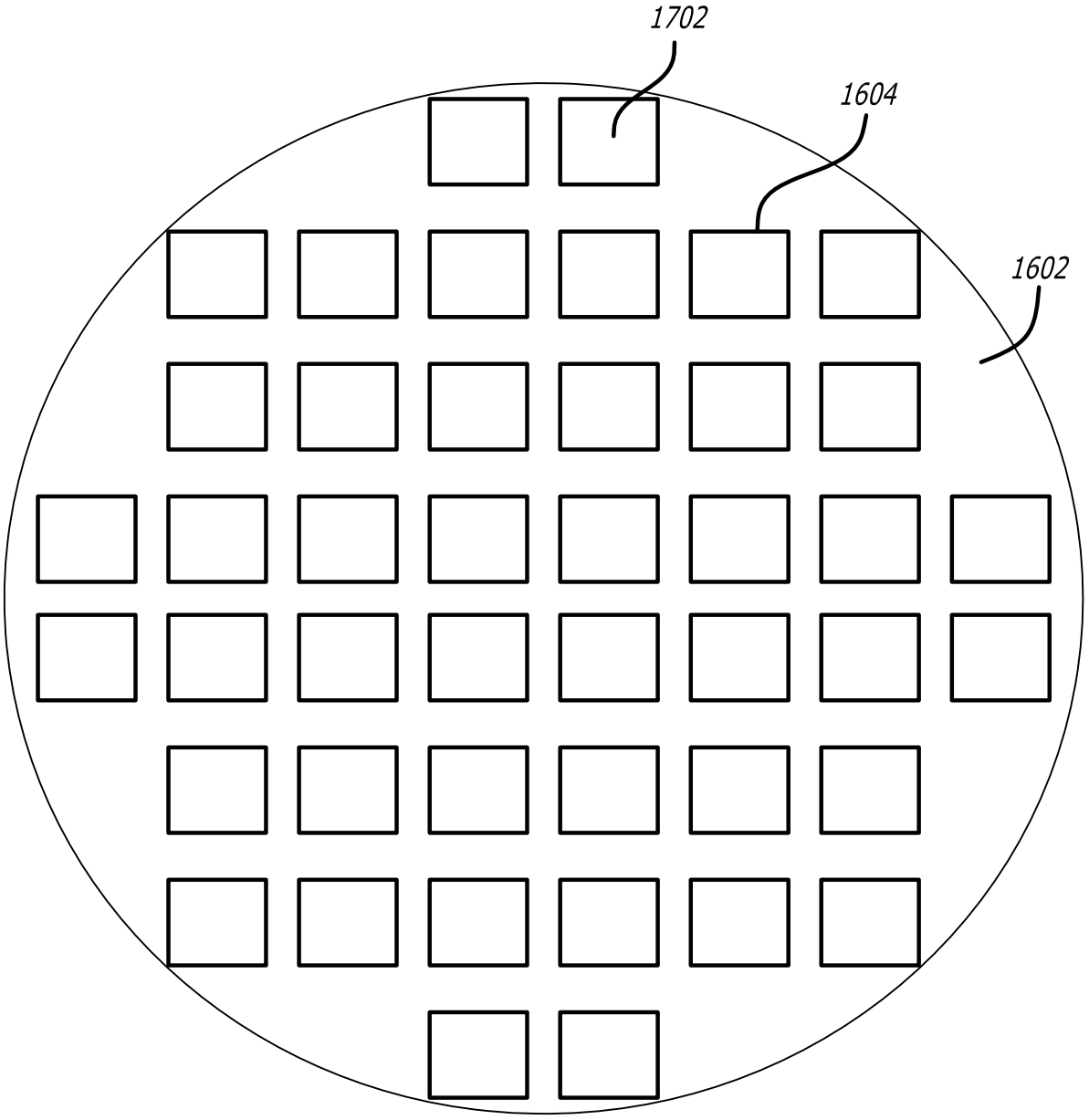


FIG. 17

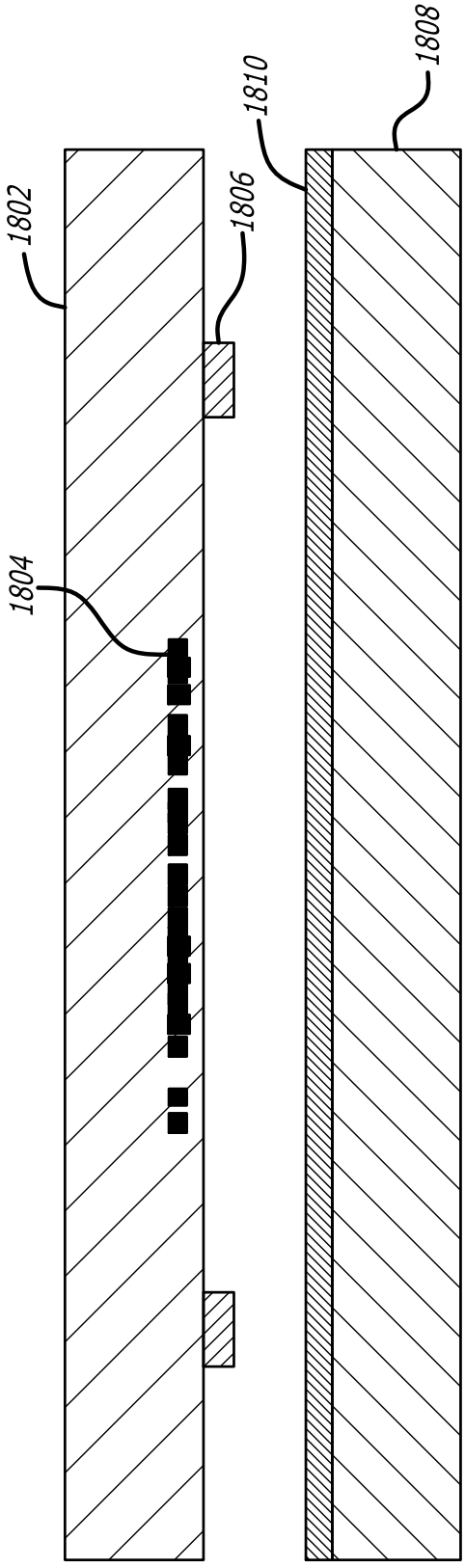


FIG. 18A

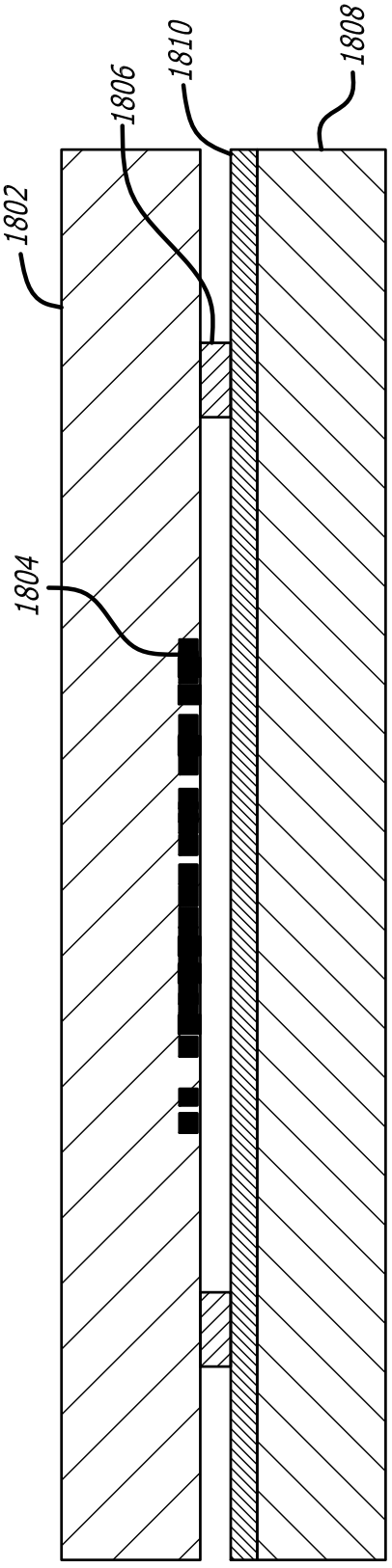


FIG. 18B

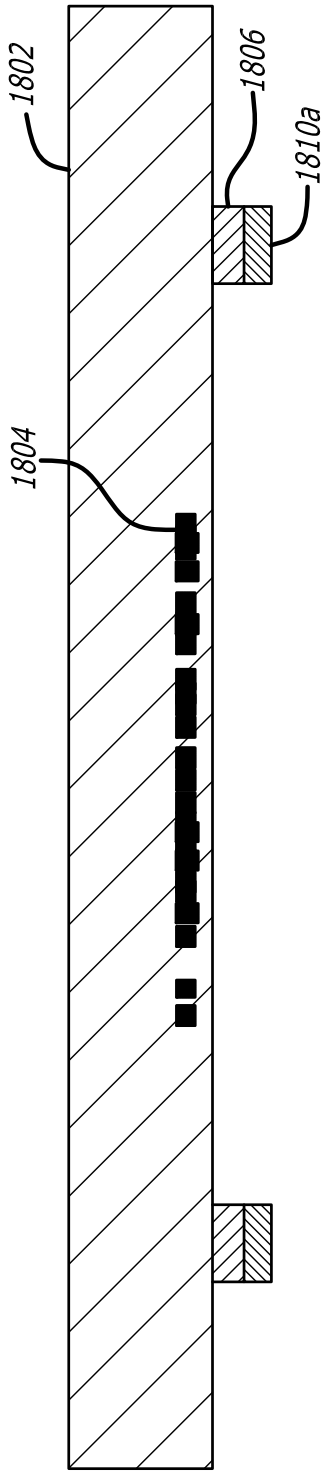


FIG. 18C

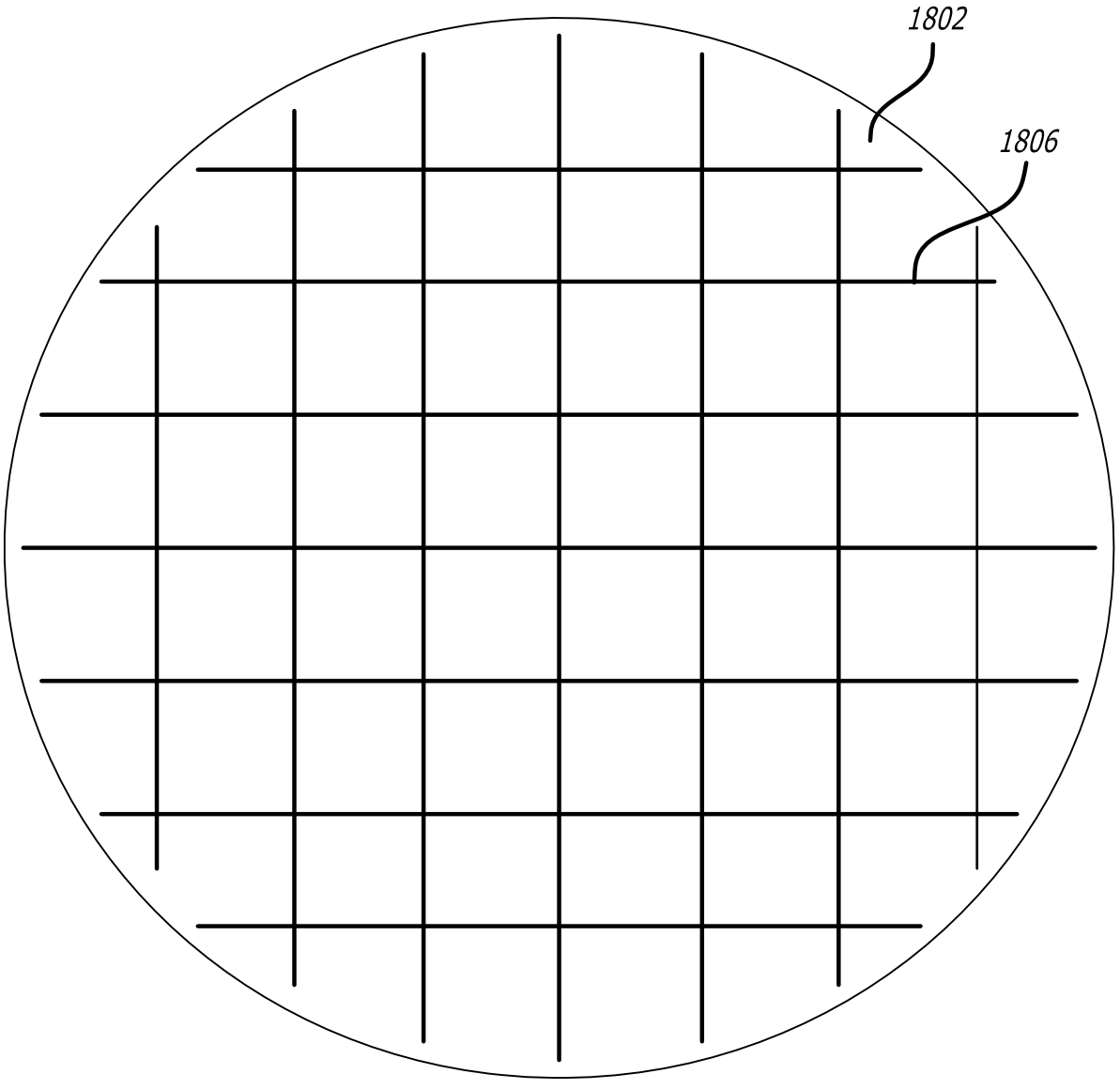


FIG. 19

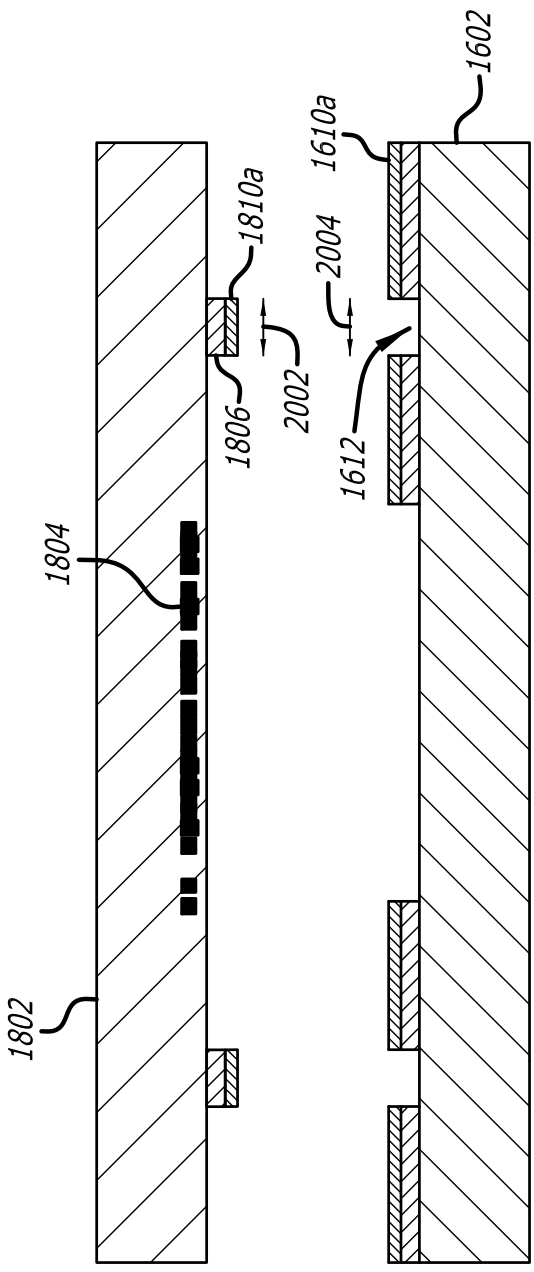


FIG. 20A

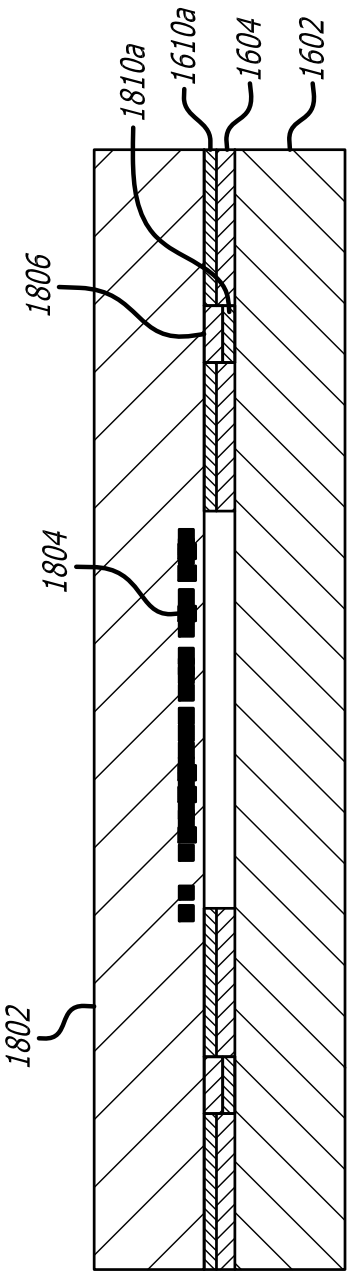


FIG. 20B

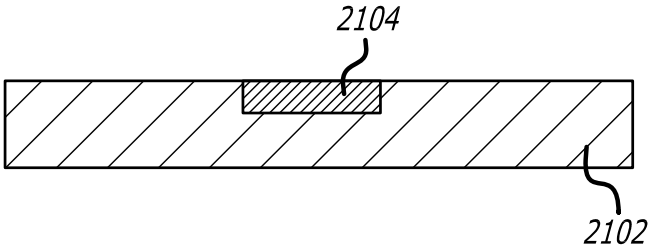


FIG. 21A

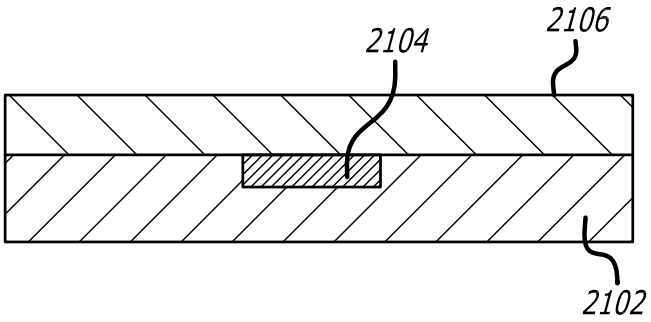


FIG. 21B

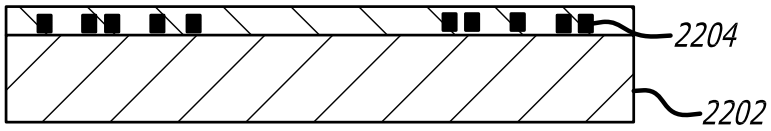


FIG. 22A

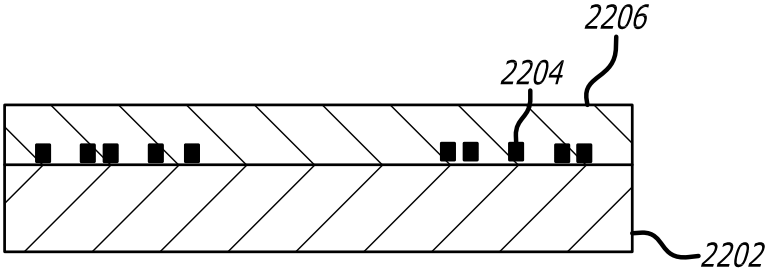


FIG. 22B

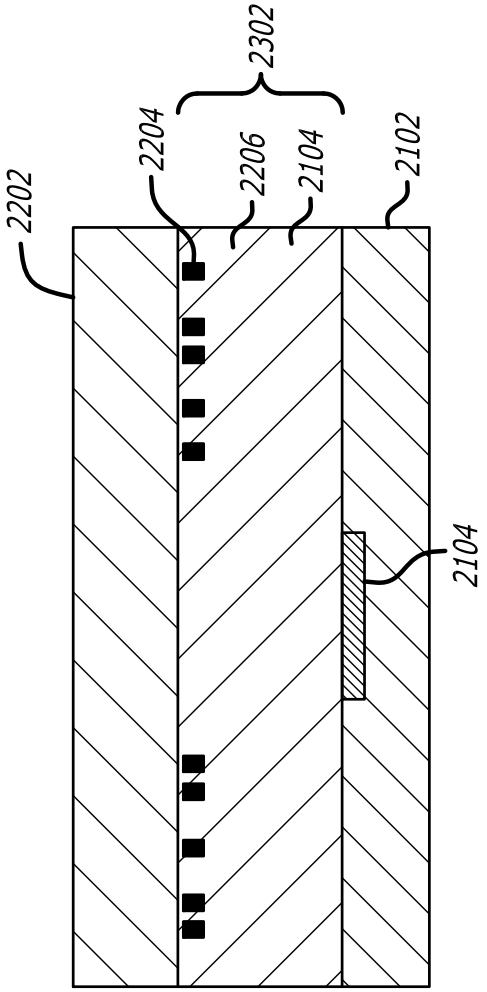


FIG. 23A

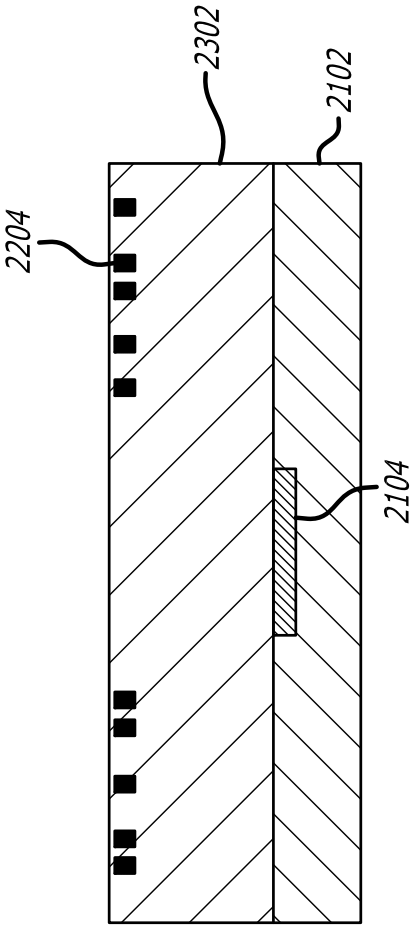


FIG. 23B

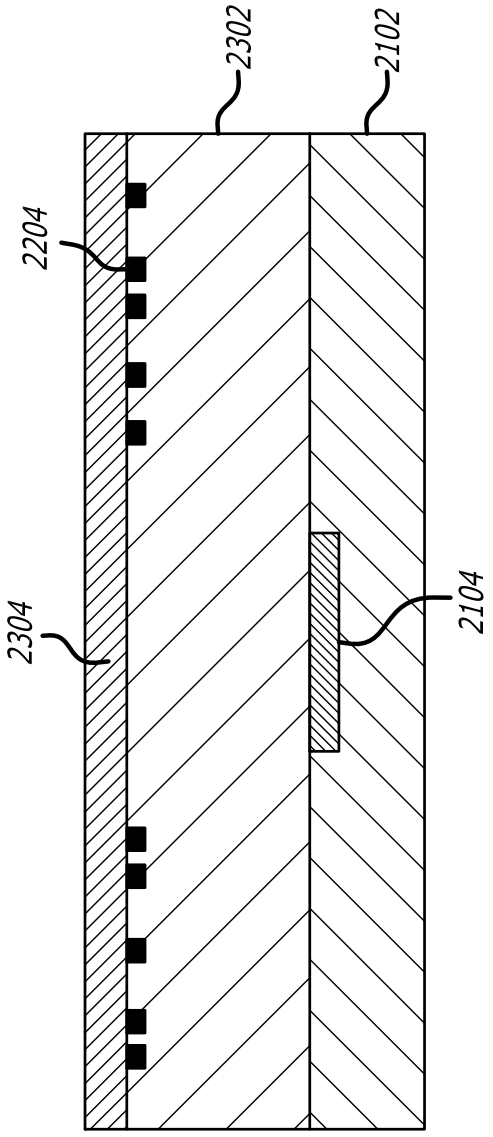


FIG. 23C

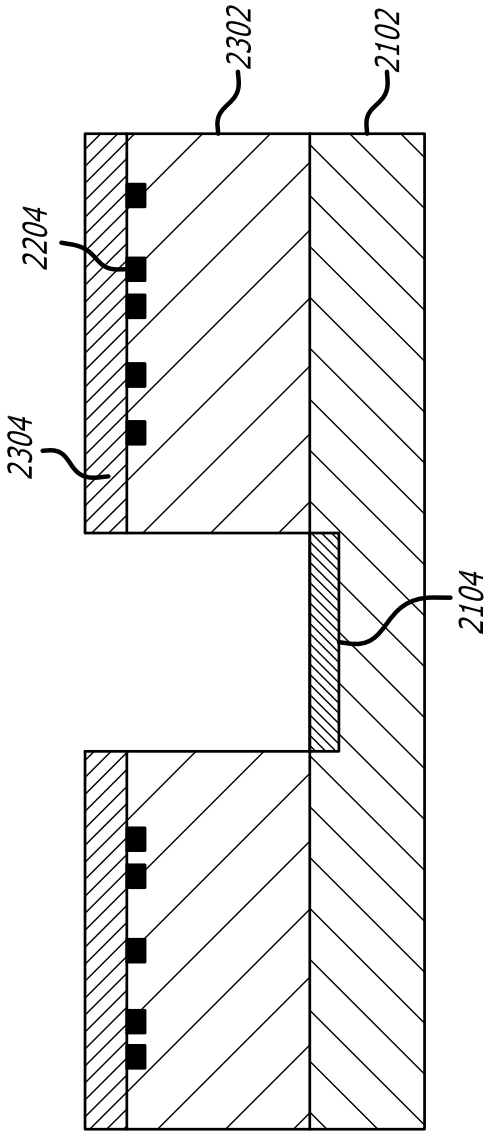


FIG. 23D

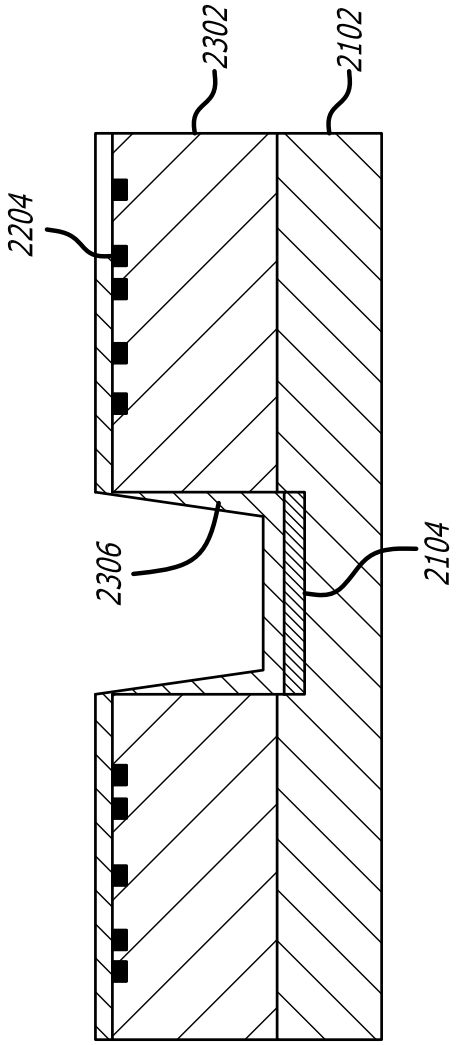


FIG. 23E

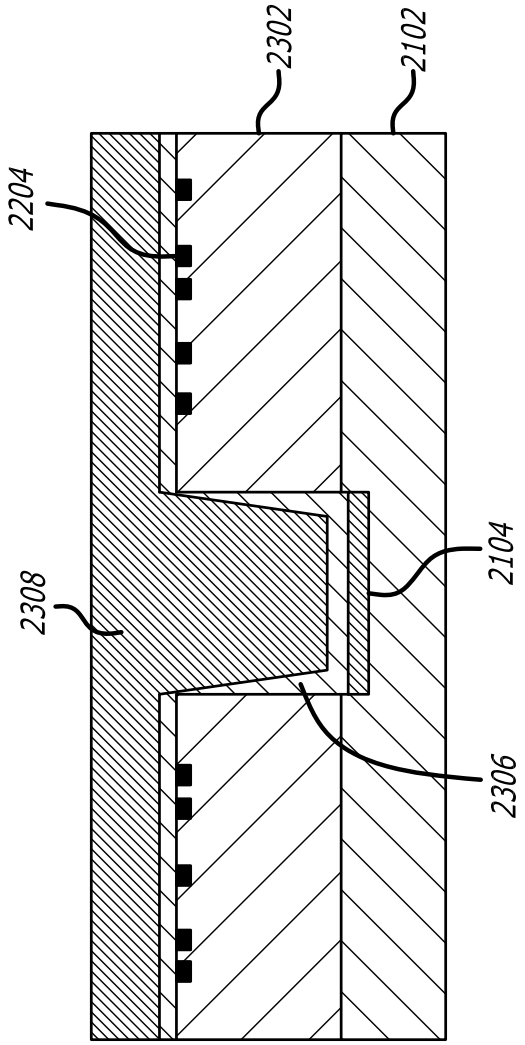


FIG. 23F

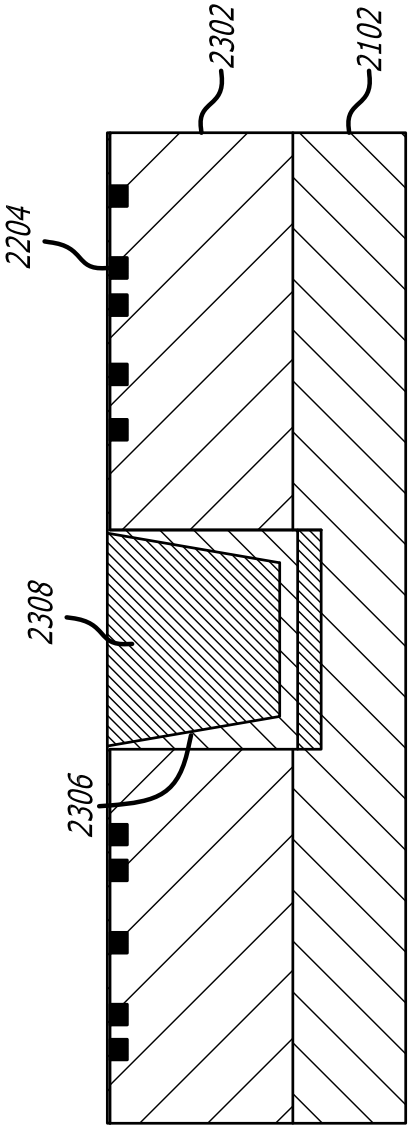


FIG. 23G

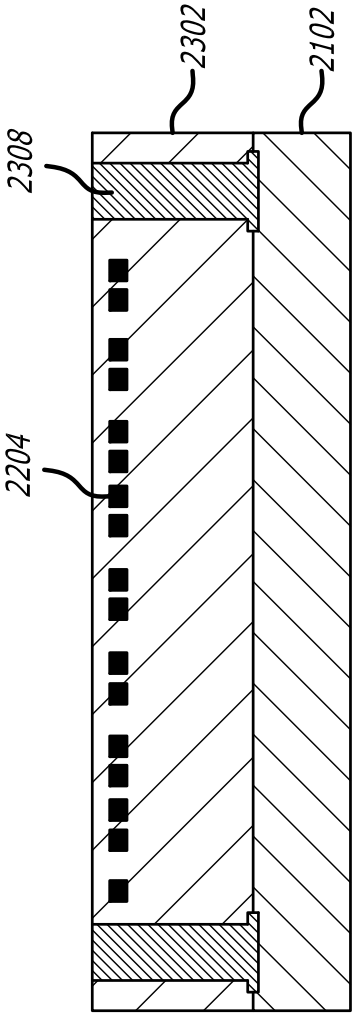


FIG. 23H

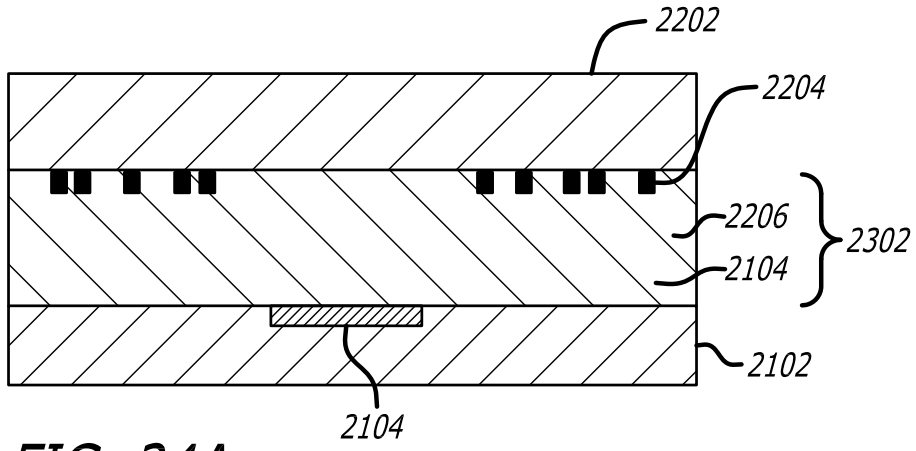


FIG. 24A

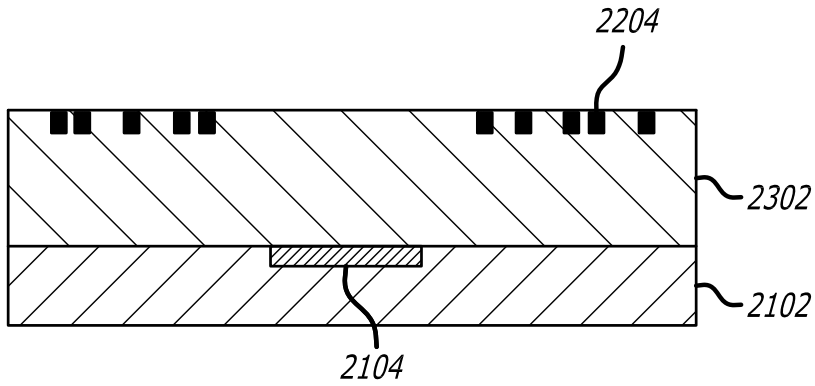


FIG. 24B

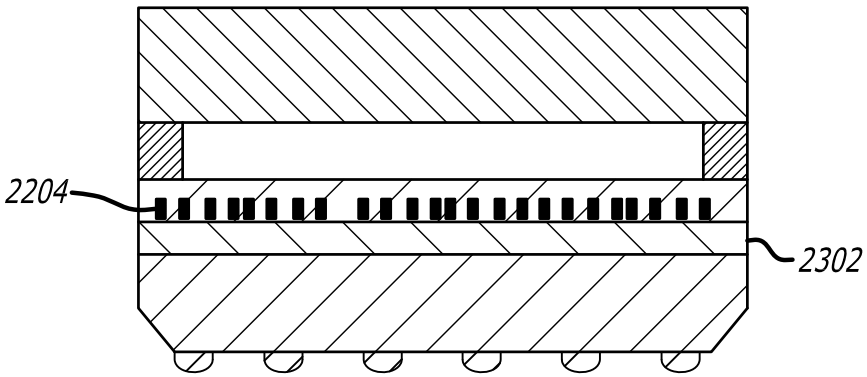


FIG. 24C

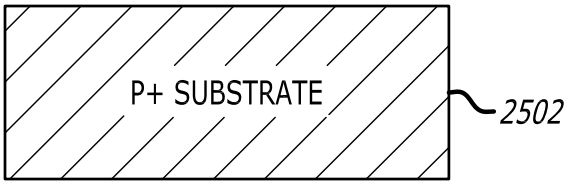


FIG. 25A

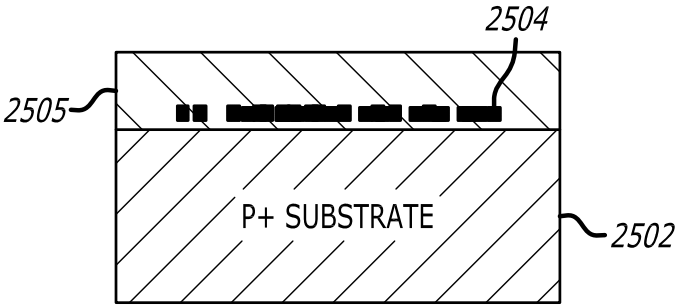


FIG. 25B

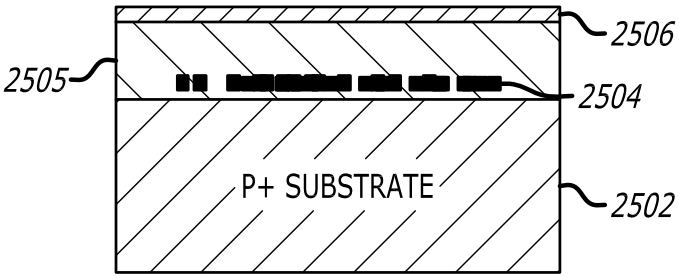


FIG. 25C

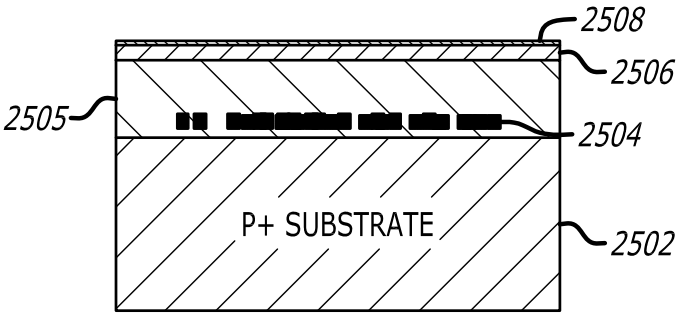


FIG. 25D

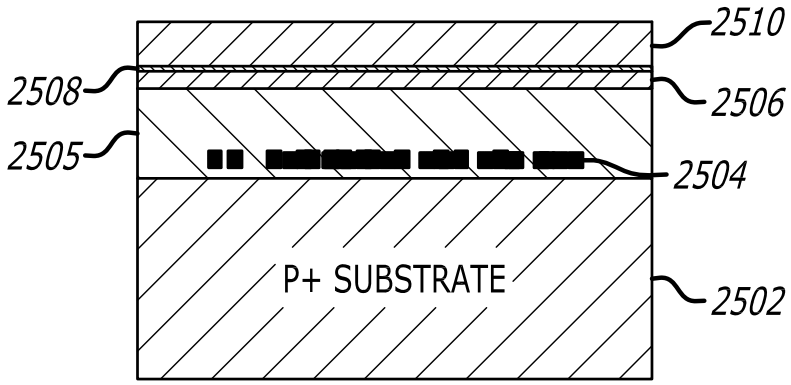


FIG. 25E

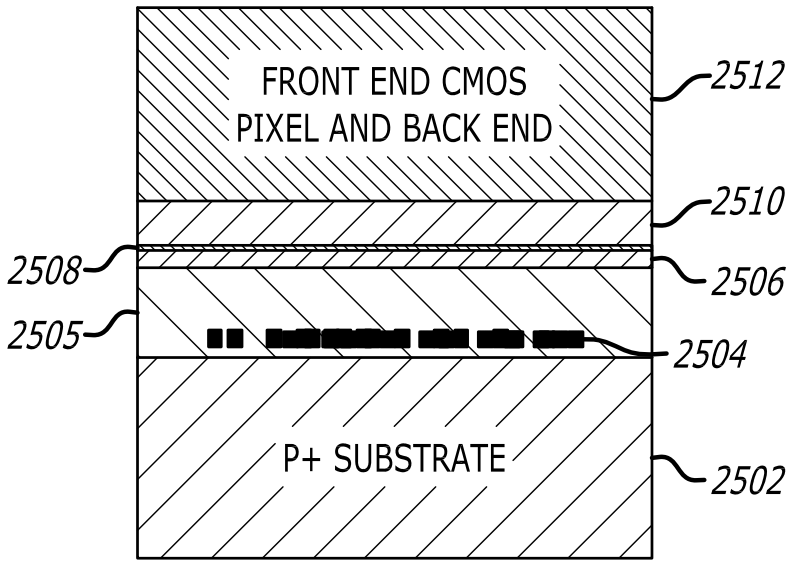


FIG. 25F

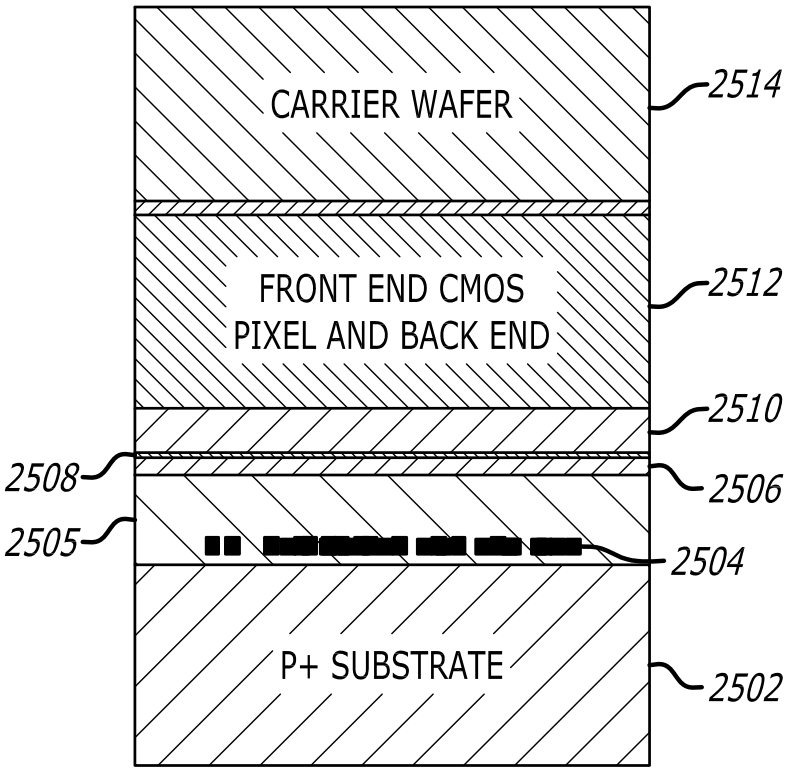


FIG. 25G

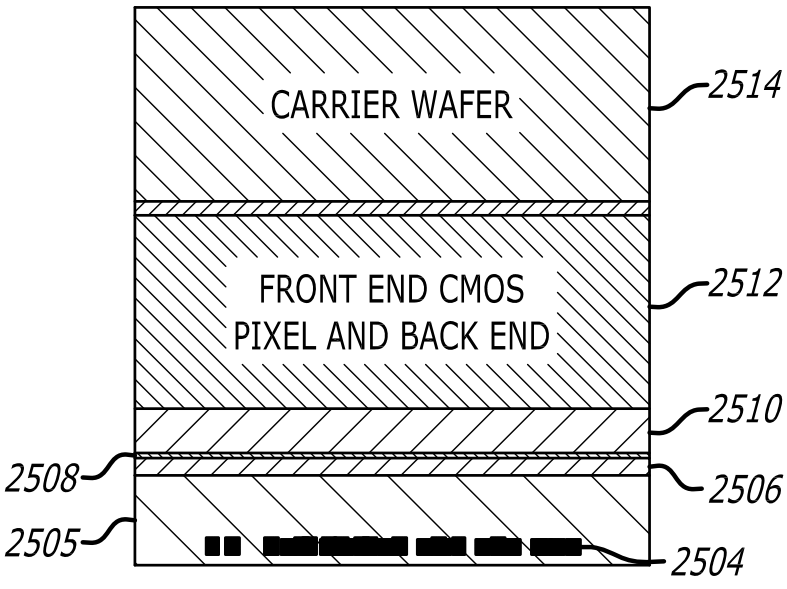


FIG. 25H

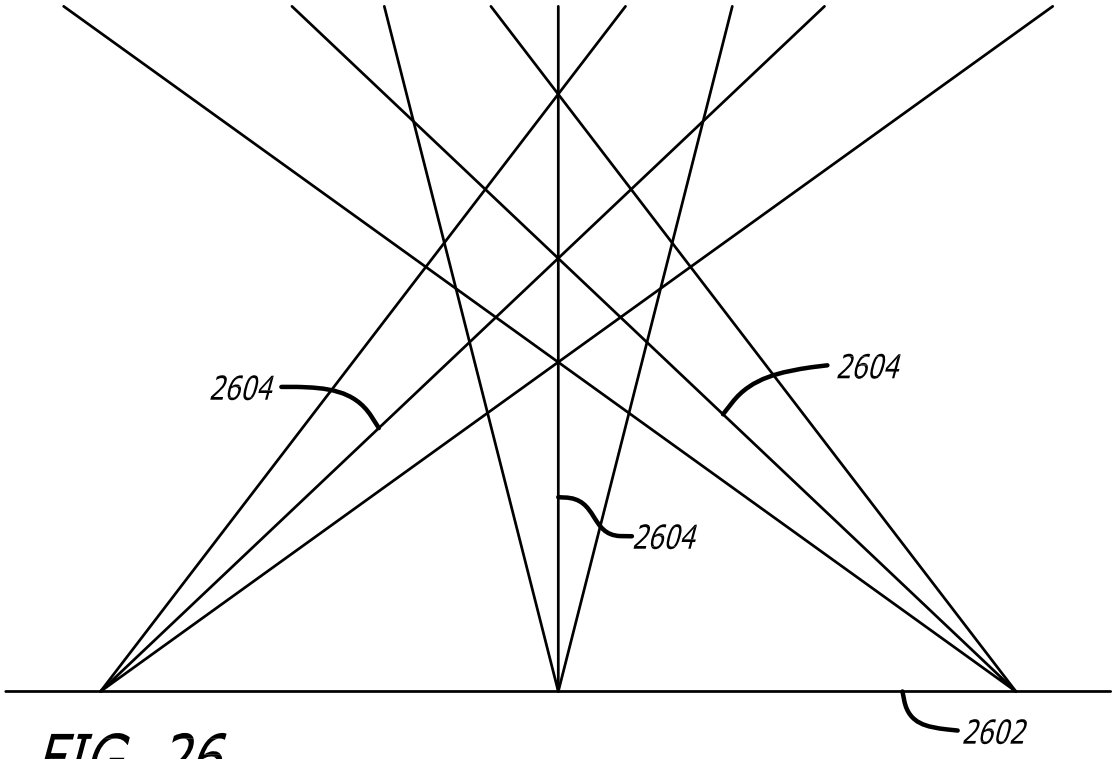


FIG. 26

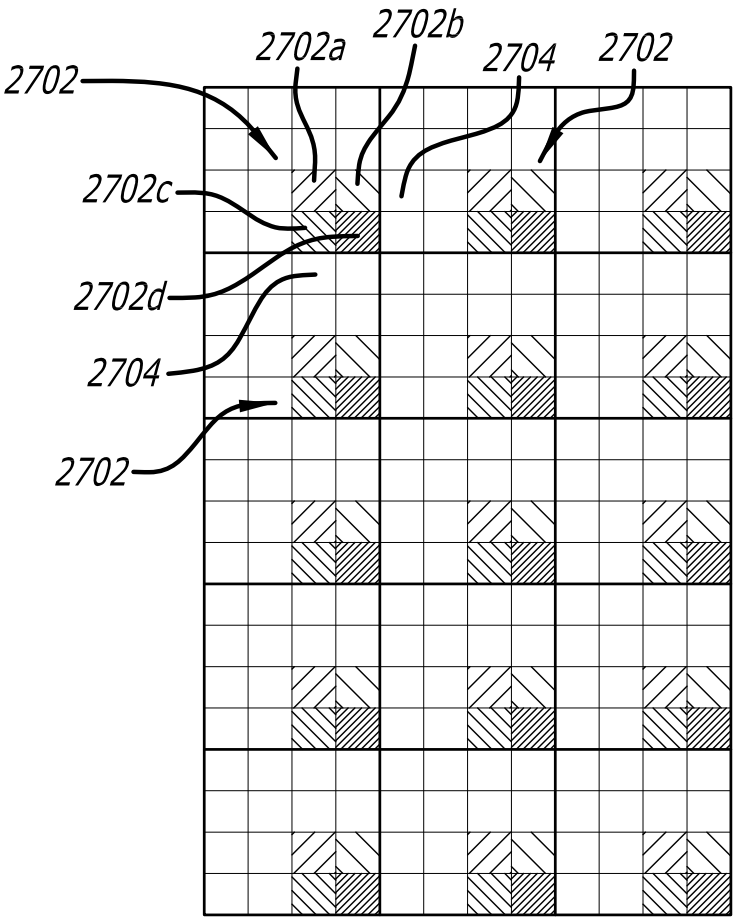


FIG. 27A

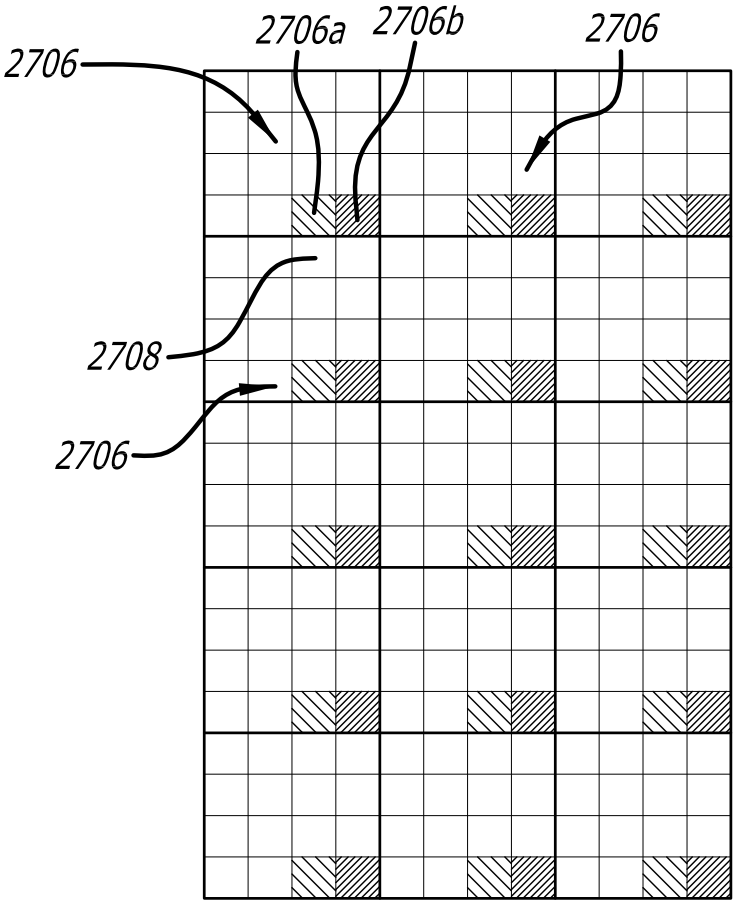


FIG. 27B

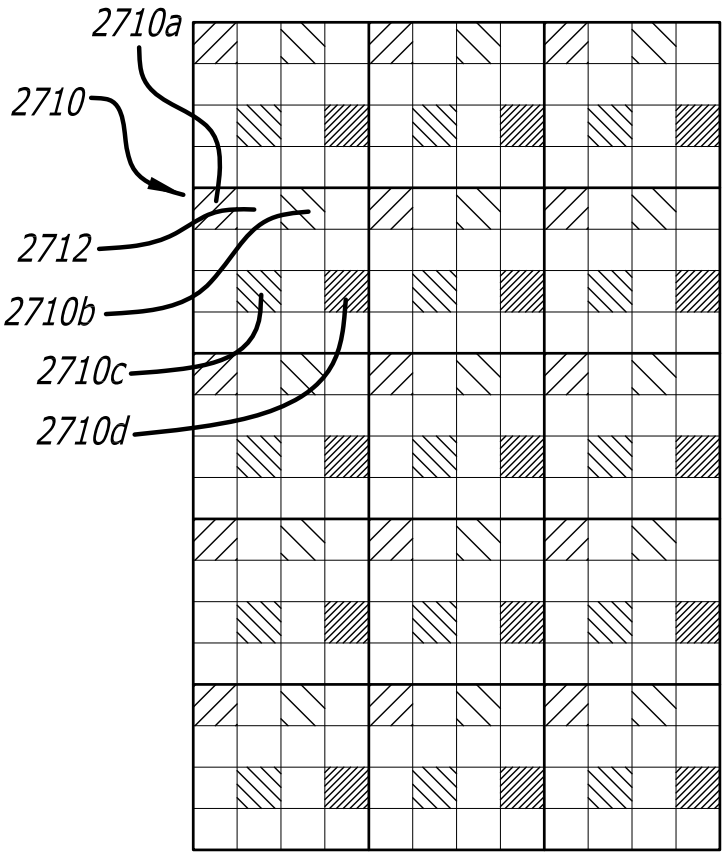


FIG. 27C

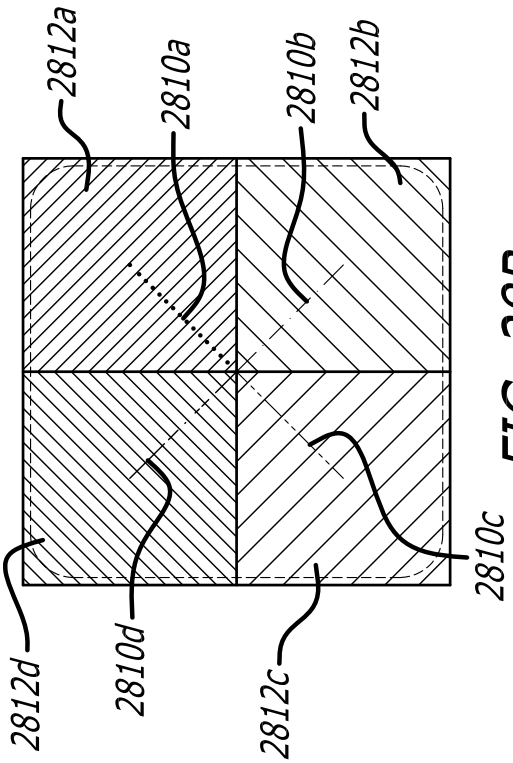


FIG. 28B

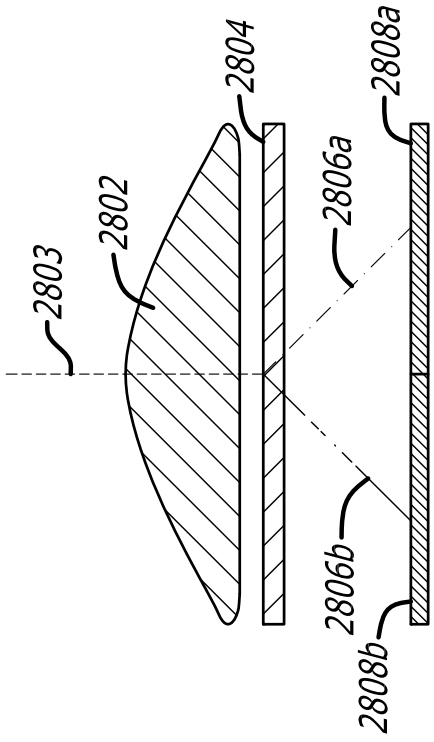


FIG. 28A

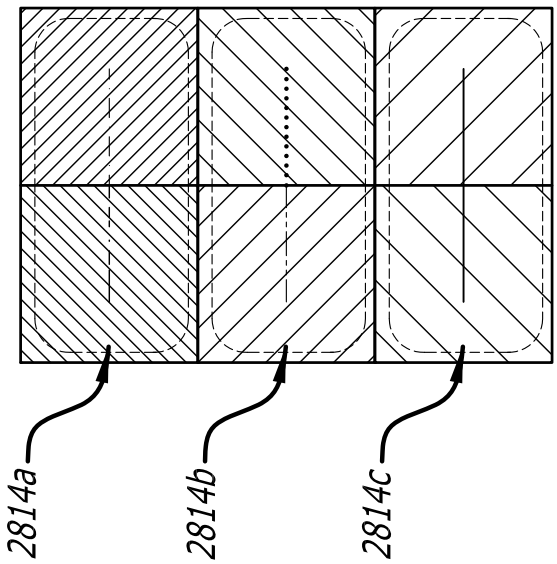


FIG. 28C

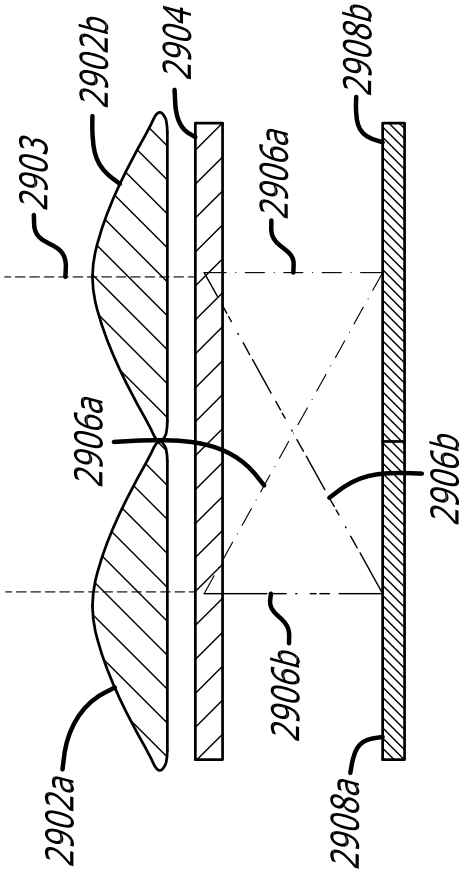


FIG. 29A

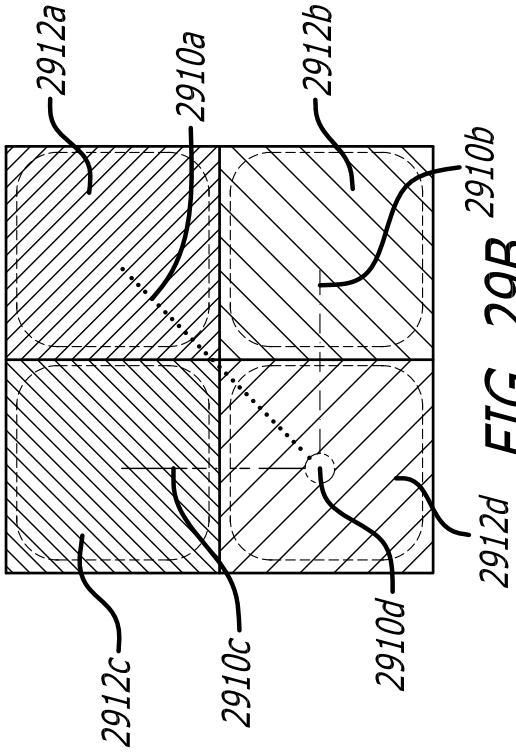


FIG. 29B

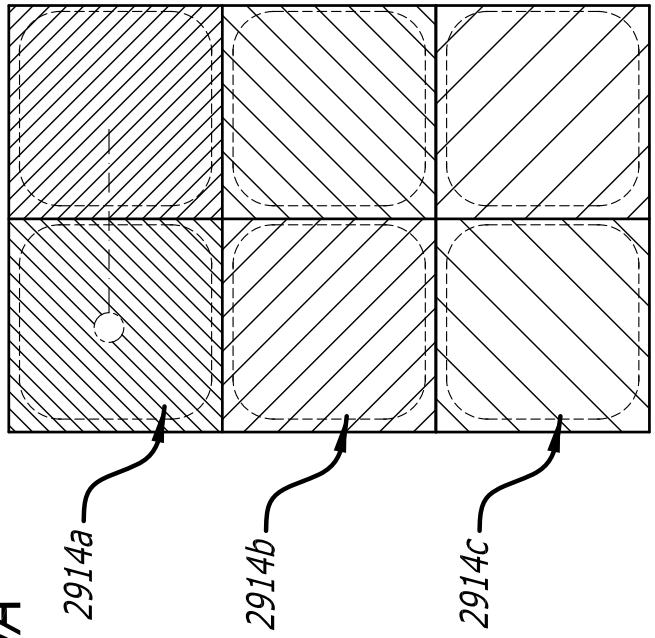


FIG. 29C

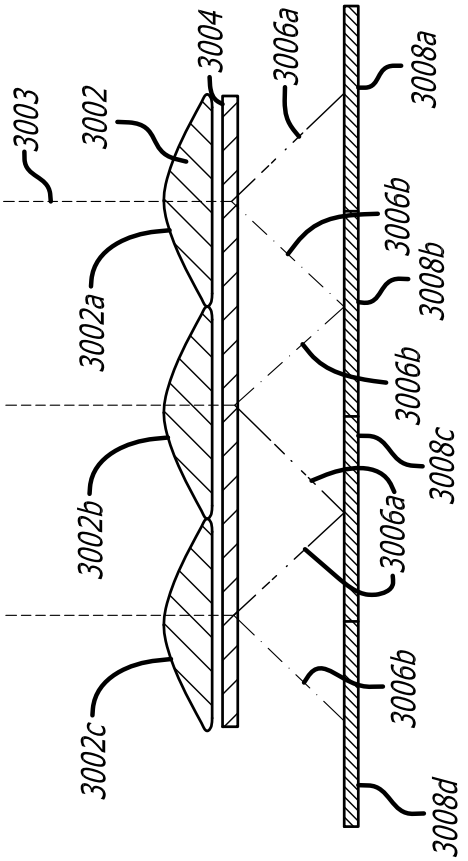


FIG. 30A

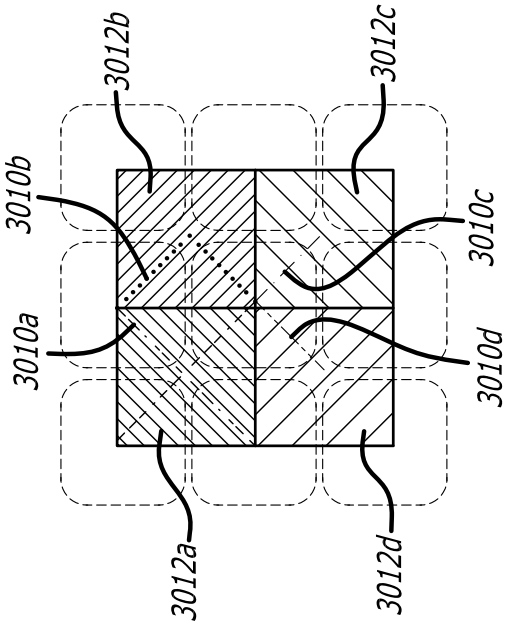


FIG. 30B

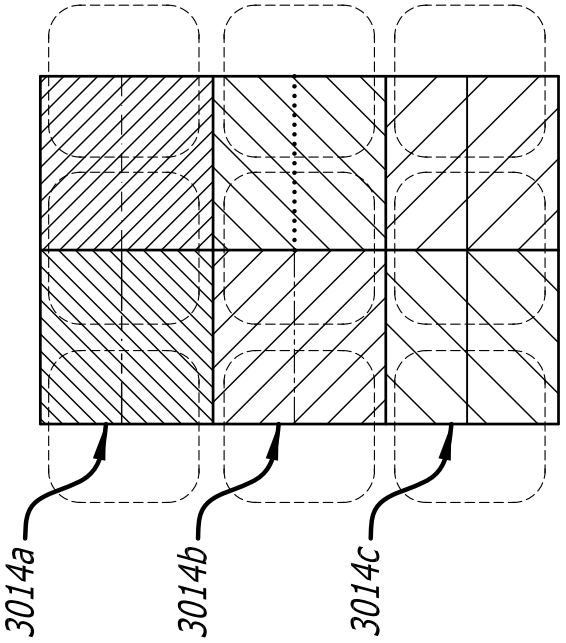


FIG. 30C

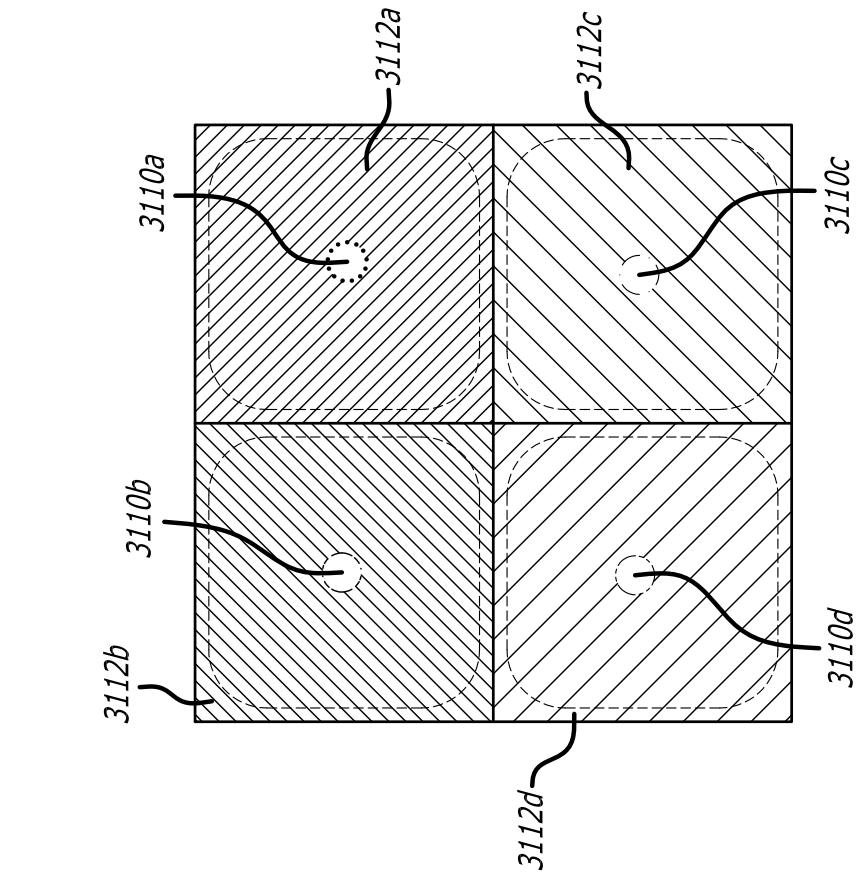


FIG. 31B

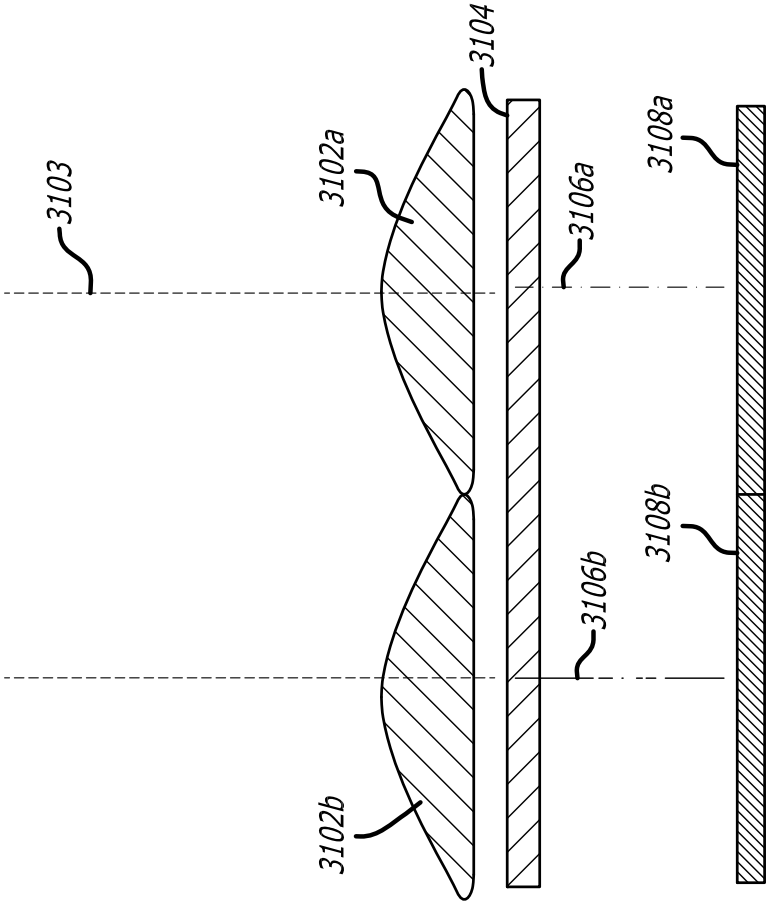


FIG. 31A

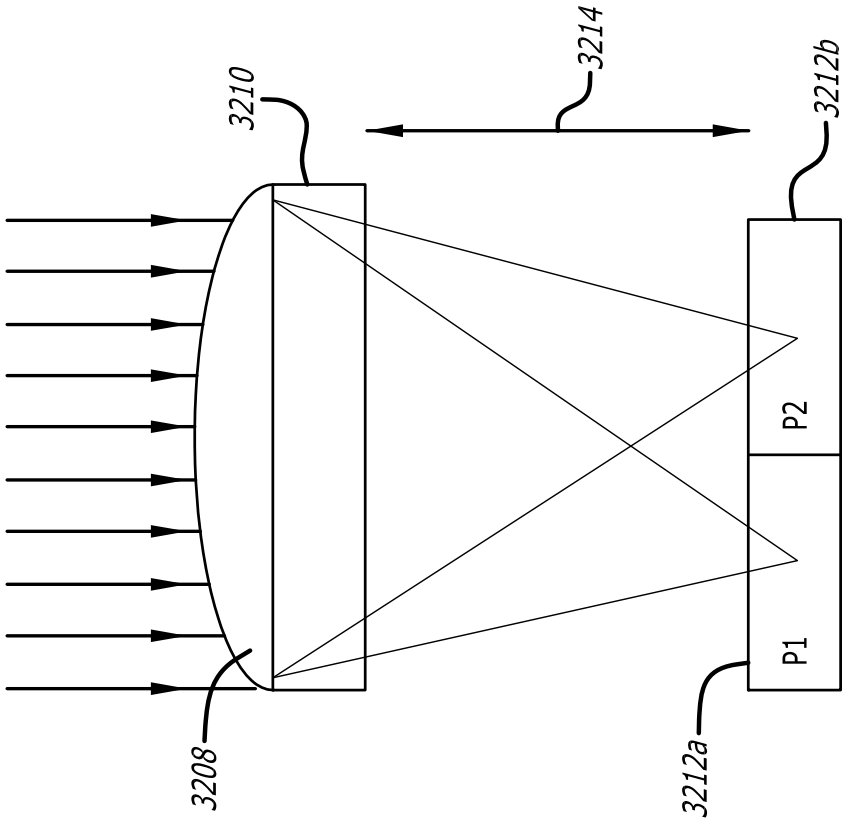


FIG. 32B

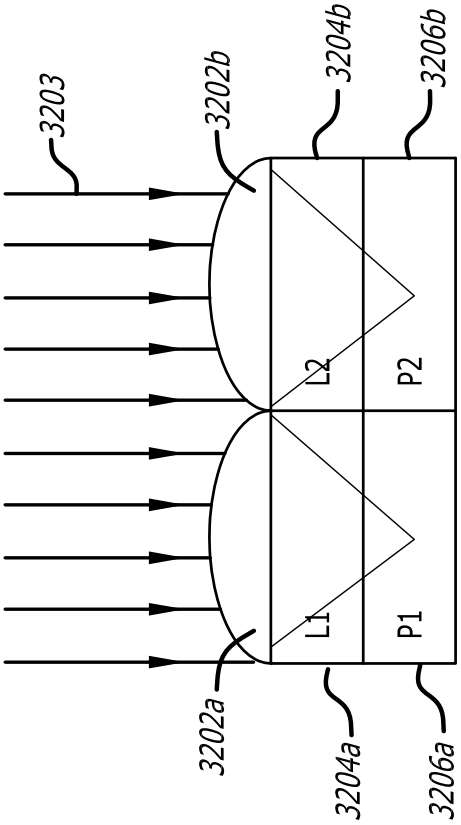


FIG. 32A

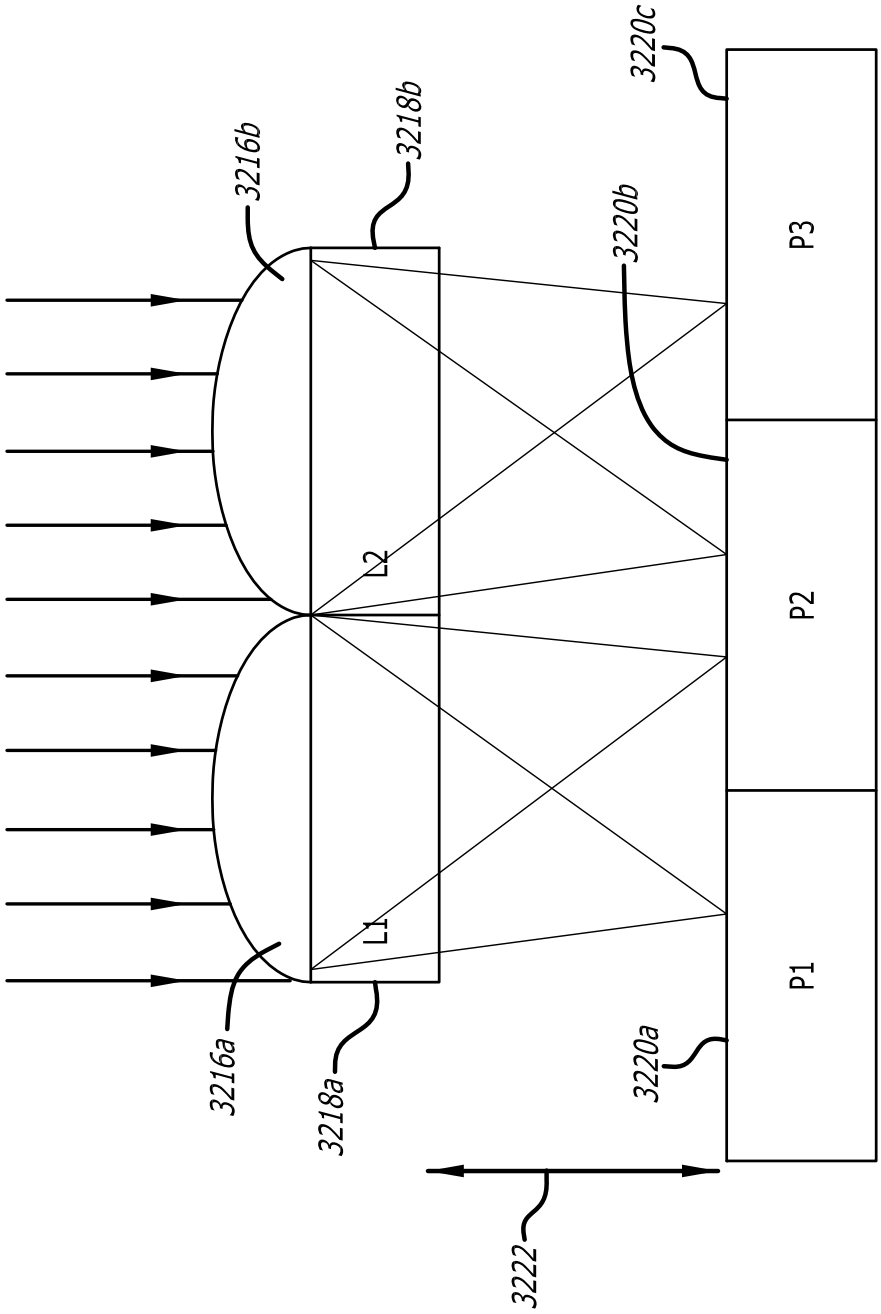


FIG. 32C

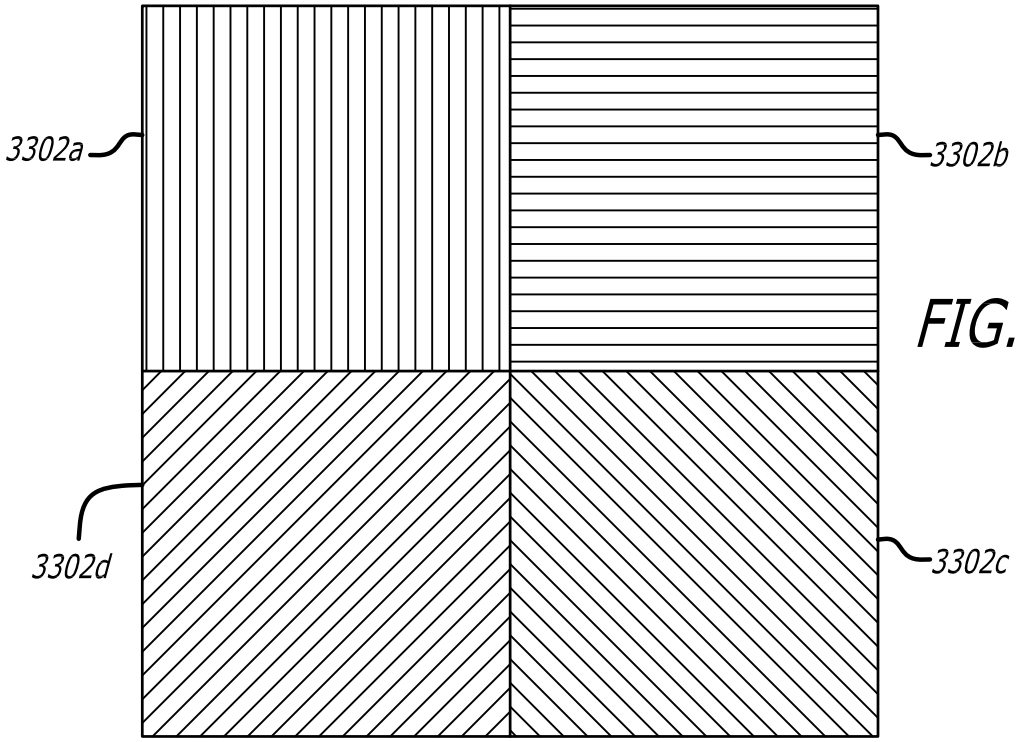


FIG. 33A

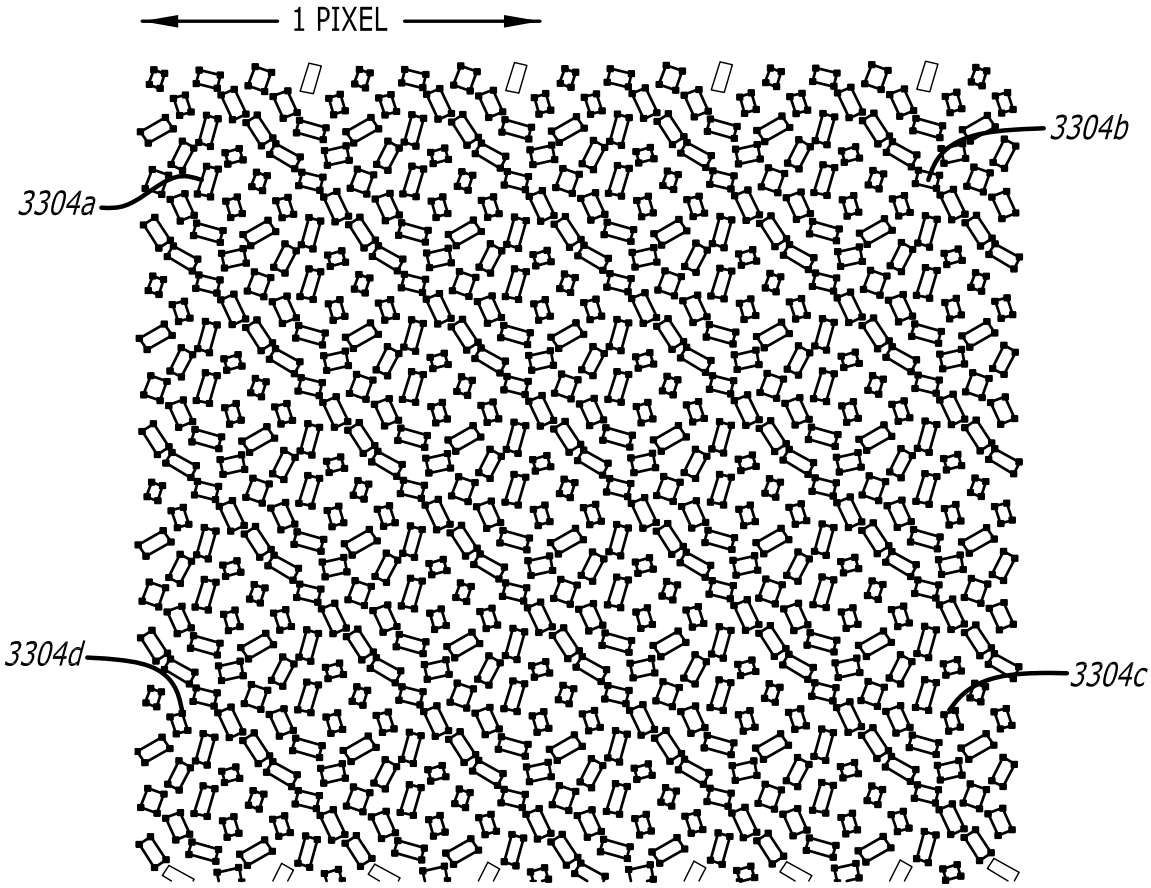


FIG. 33B

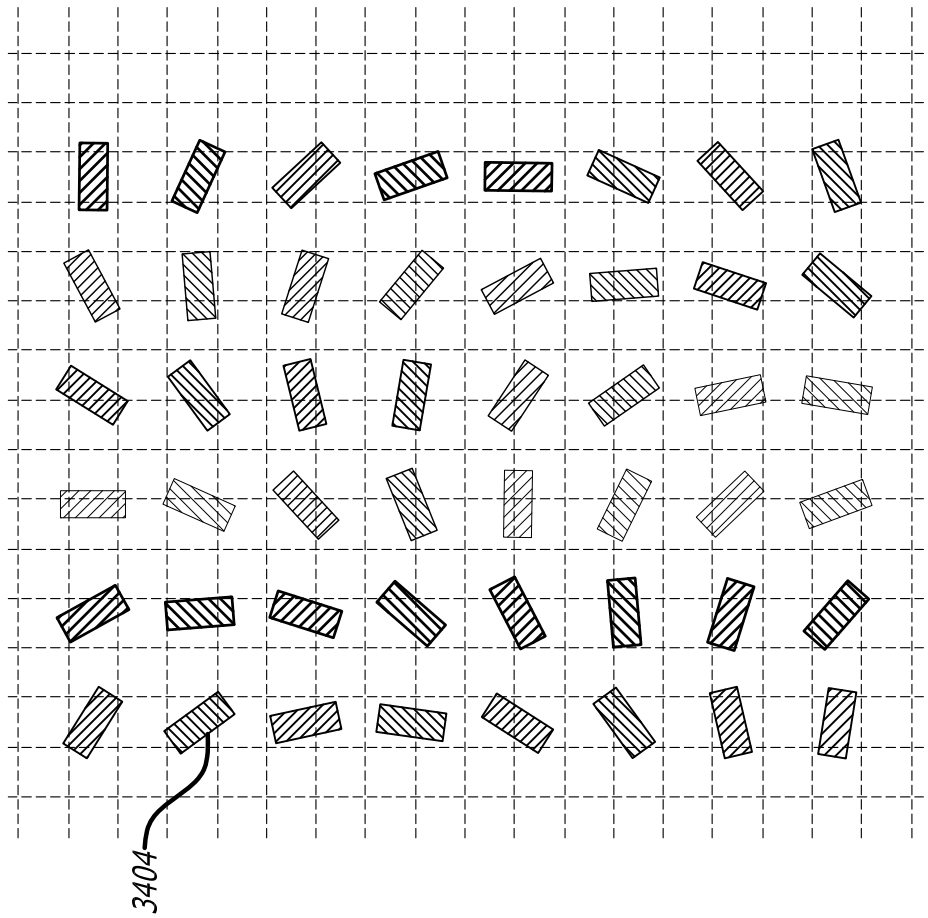


FIG. 34B

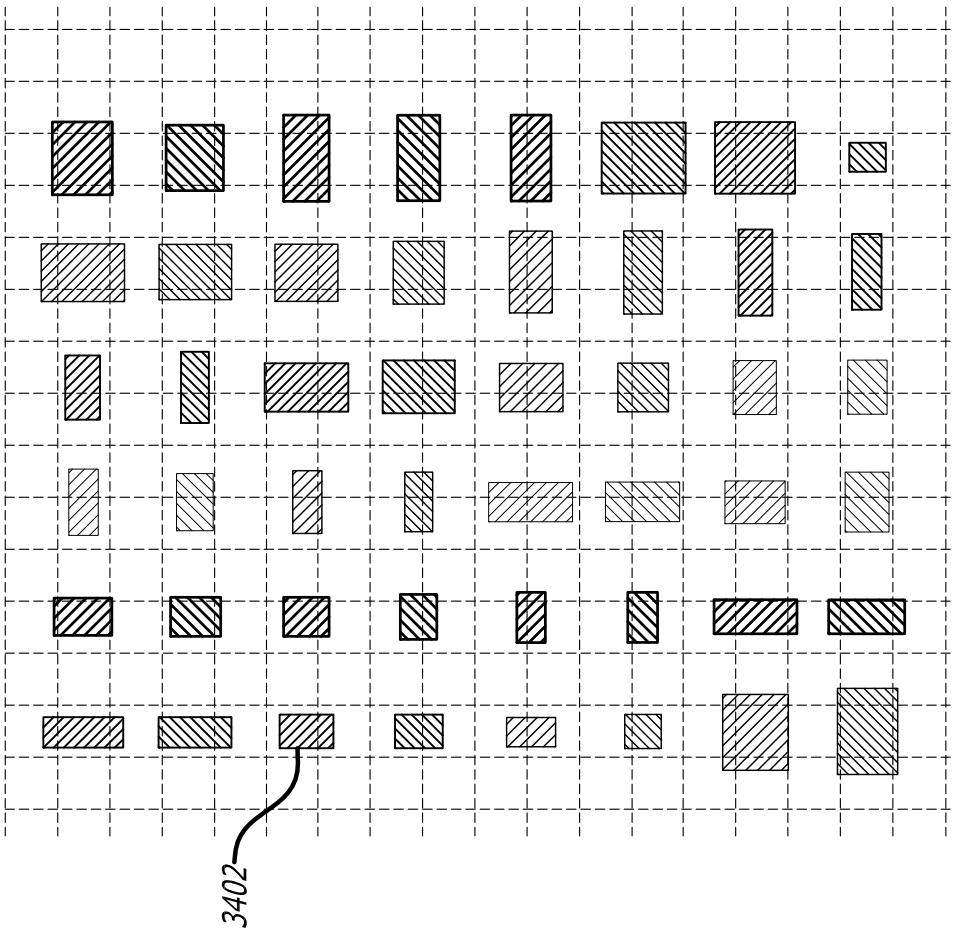


FIG. 34A

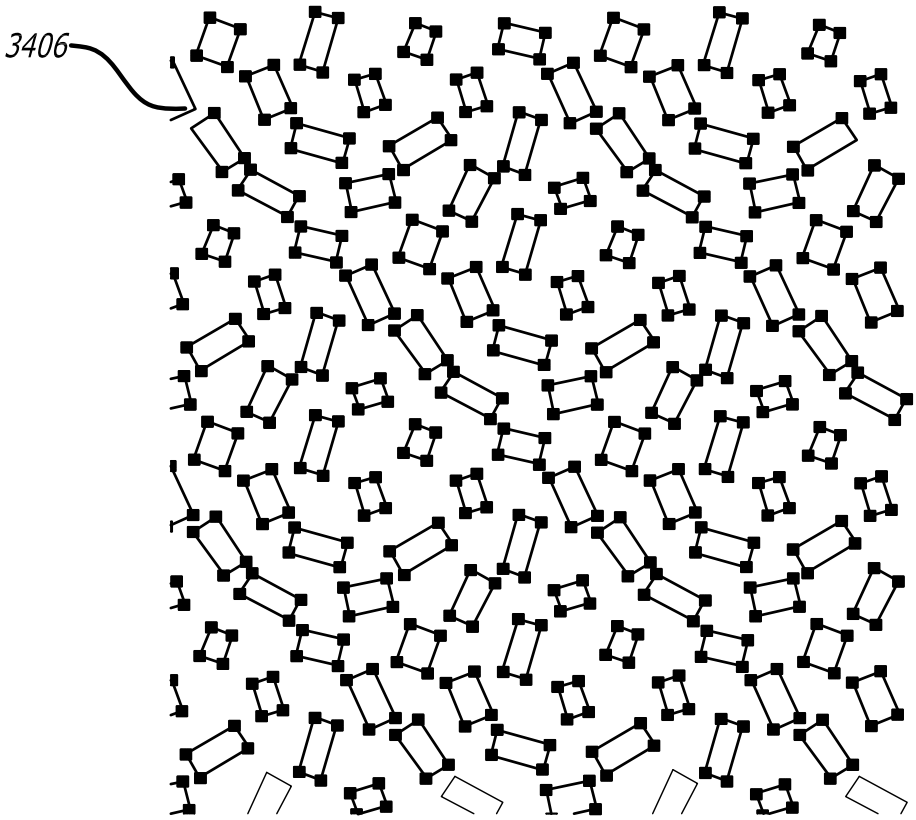


FIG. 34C

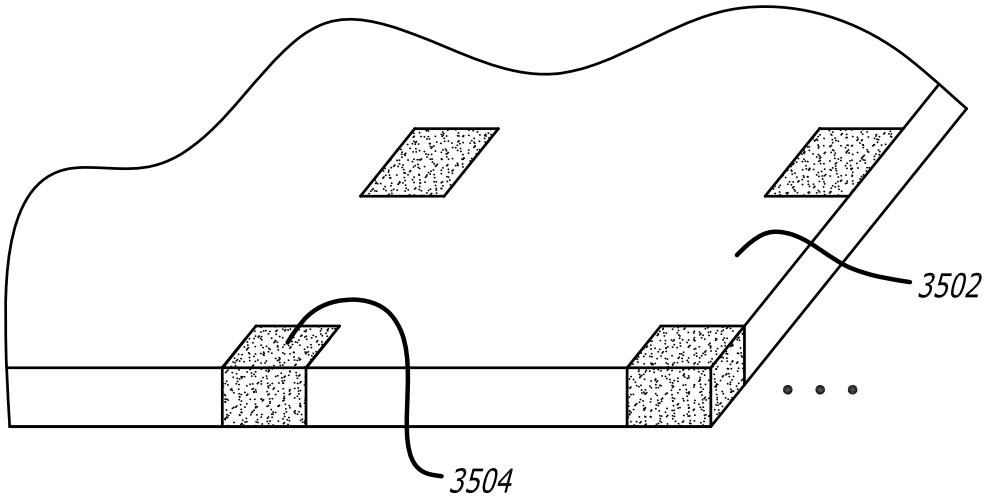
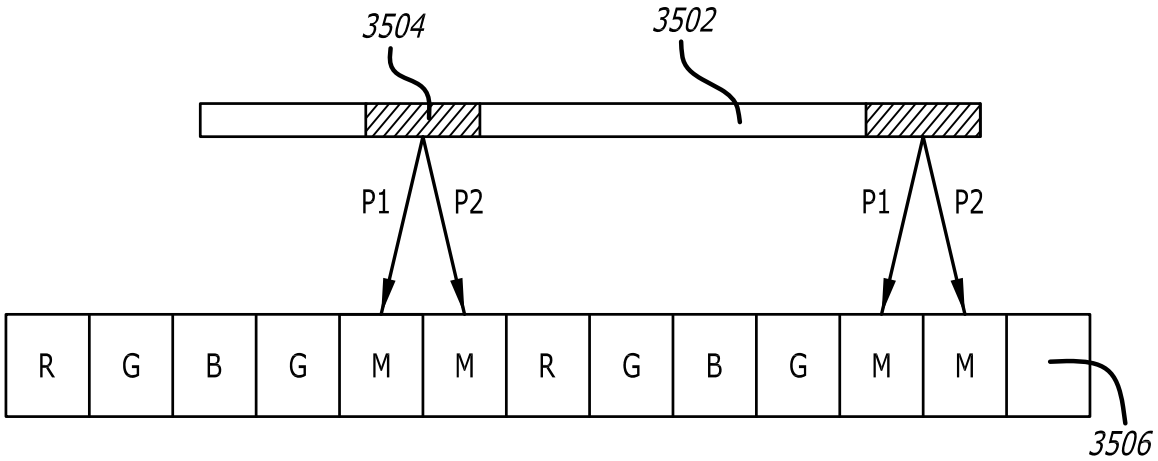


FIG. 35A



R= RED
G= GREEN
B= BLUE
M=MONOCHROME OR NIR

FIG. 35B

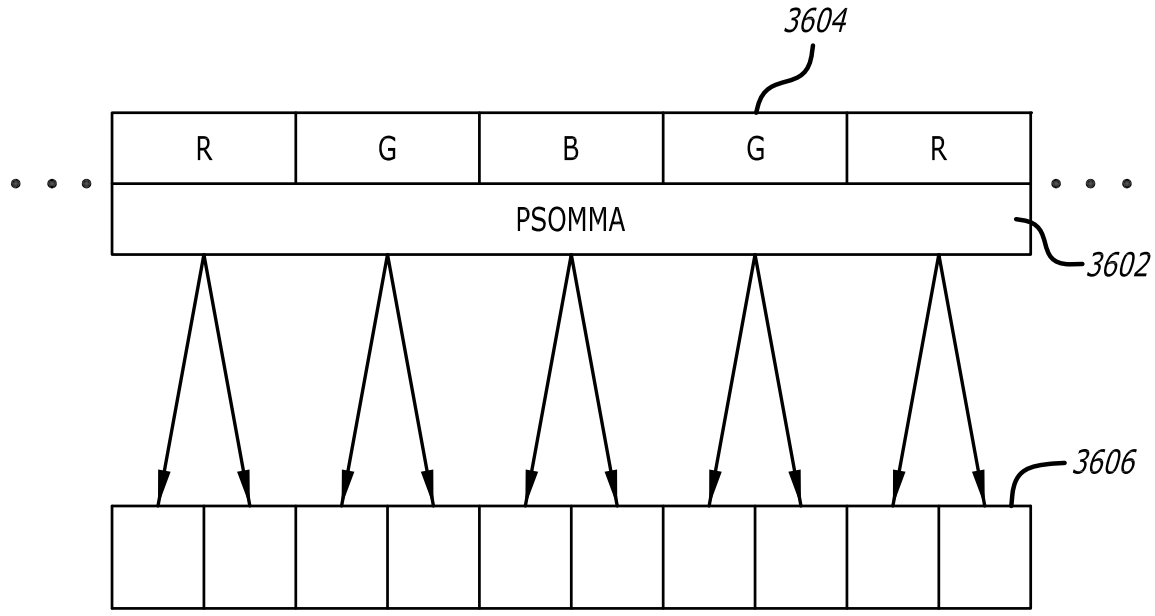


FIG. 36A

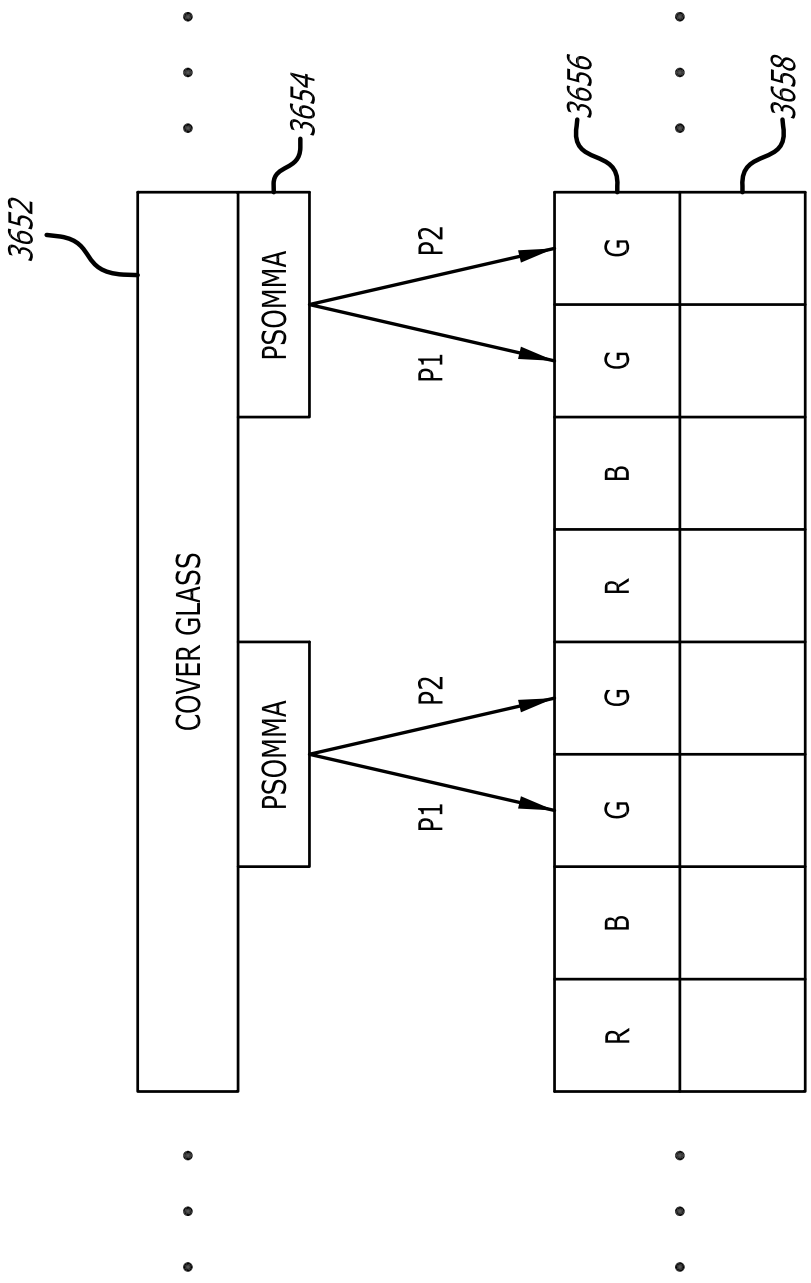

3652
3654
3656
3658
COVER GLASS
PSOMMA
PSOMMA
P1
P2
P1
P2
R
B
G
G
R
B
G
G

FIG. 36B