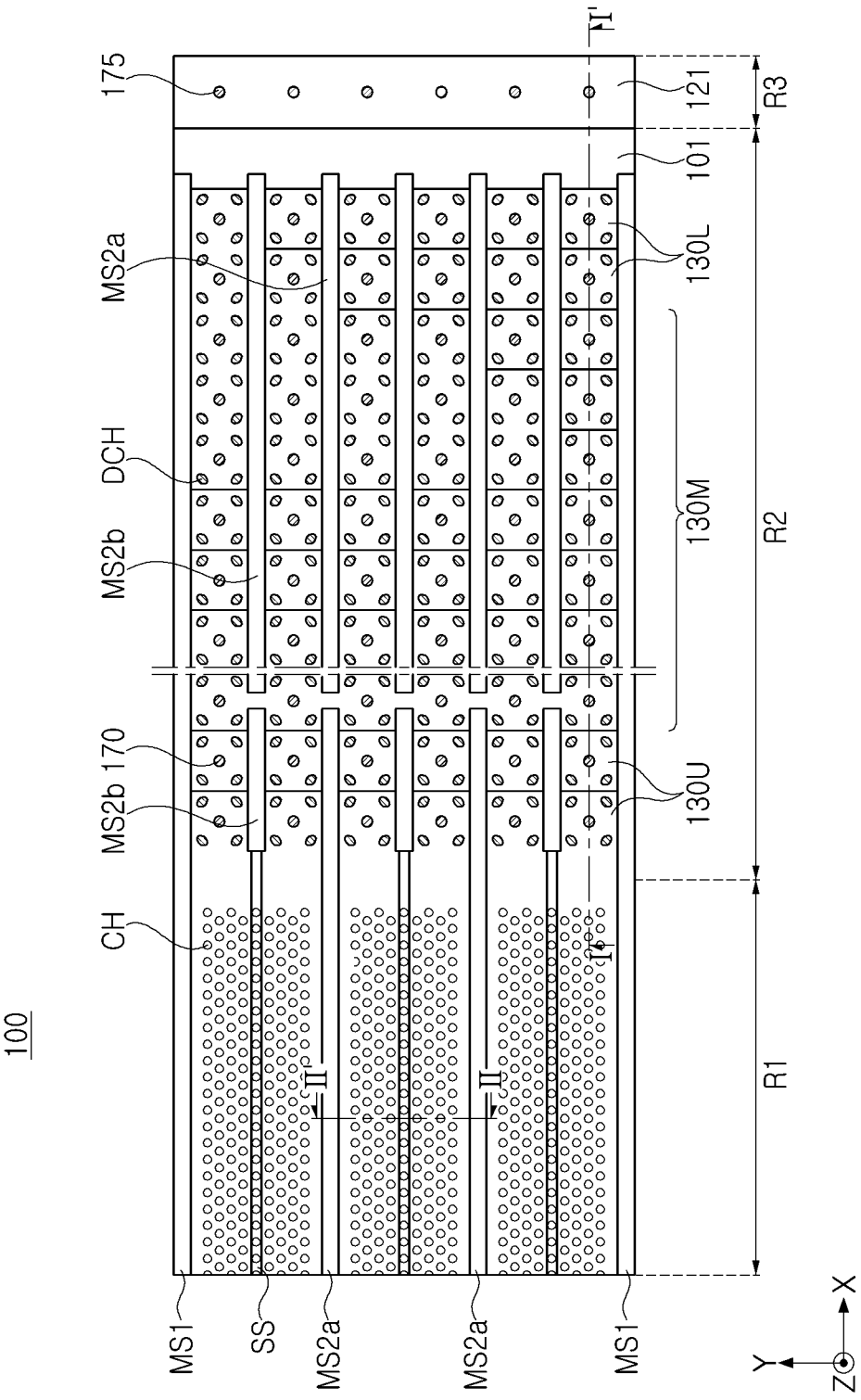

100
175
121
R3
101
MS2a
130L
DCH
MS2b
130M
R2
170
MS2b
130U
CH
R1
II'
II
MS1
SS
MS2a
MS2a
MS1
Y
X
Z

FIG. 1

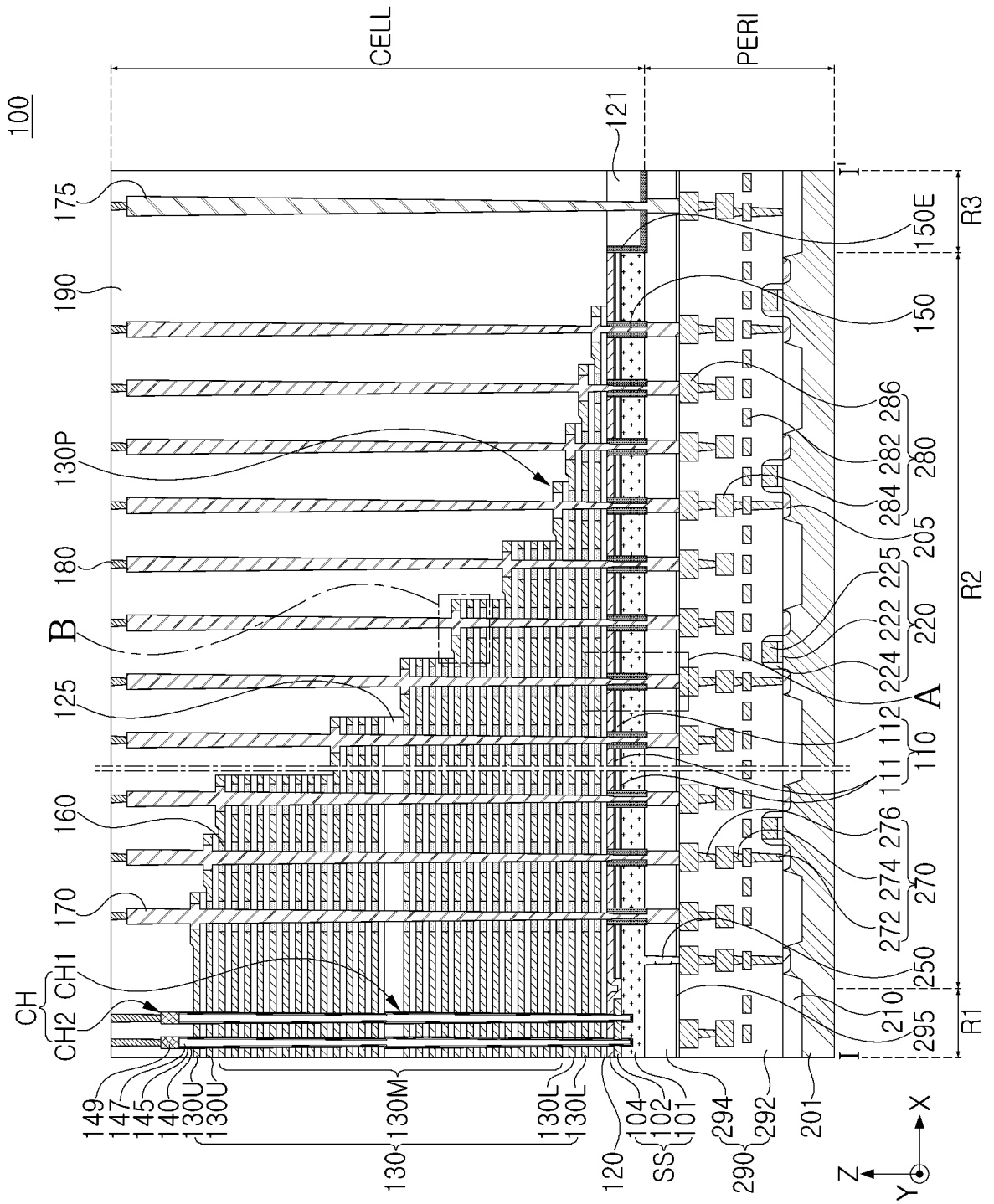

100
CELL
PERI
121
I'
I
175
190
130P
180
B
125
160
170
CH
CH1
CH2
149
147
145
140
130U
130U
130M
130L
130L
130
120
104
102
101
SS
294
292
290
201
210
295
250
272
274
276
270
111
112
110
A
224
222
225
220
205
284
282
286
280
150
150E
R1
R2
R3
Z
Y
X

FIG. 2A

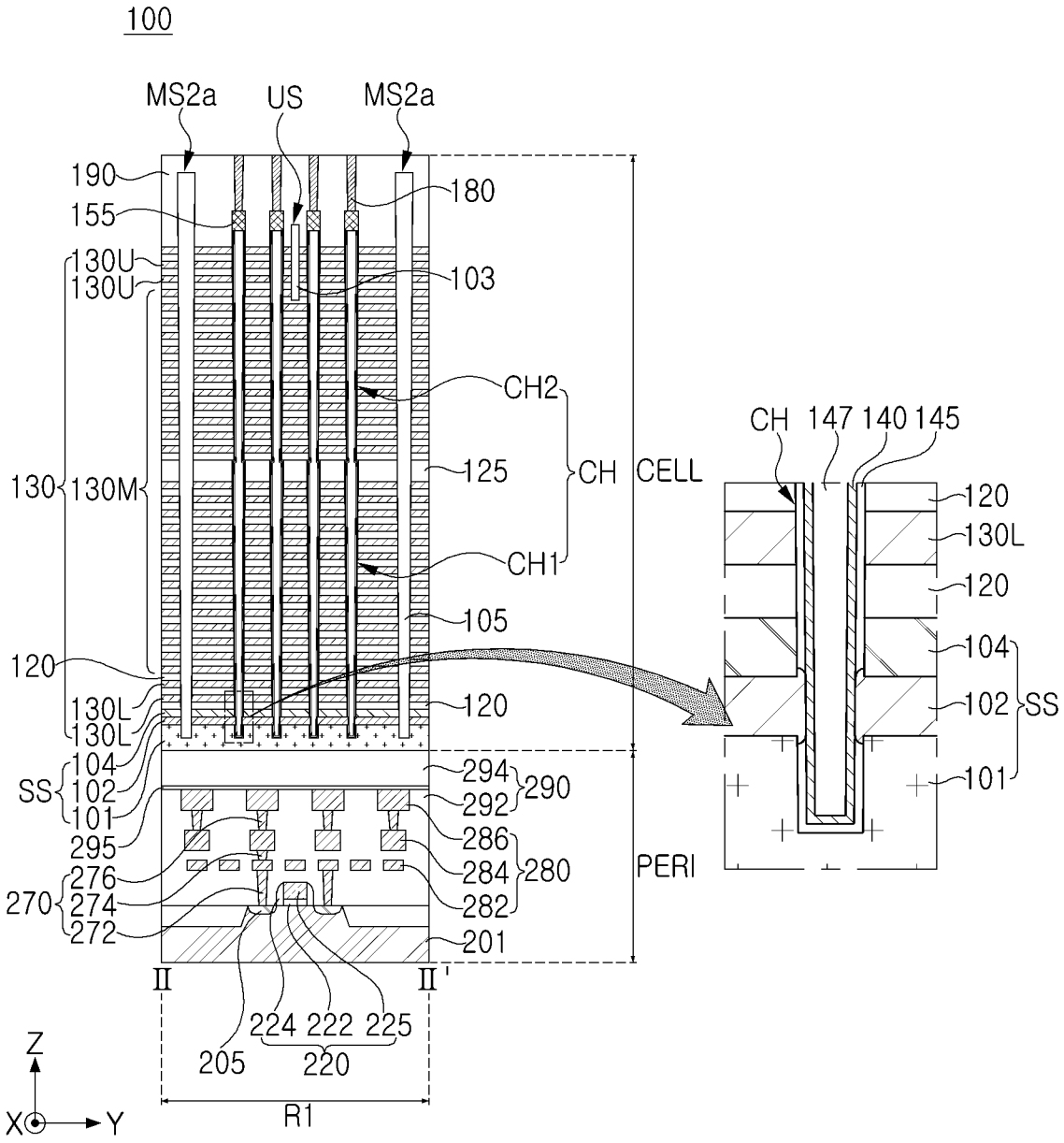

100
MS2a
US
MS2a
190
155
180
130U
130U
103
CH2
125
CH
CH1
CELL
130
130M
105
120
130L
130L
120
104
102
101
SS
294
290
292
295
286
276
284
280
270
274
282
272
201
PERI
II
II'
224 222 225
205
220
R1
Z
X
Y
CH 147 140 145
120
130L
120
104
102
SS
101

FIG. 2B

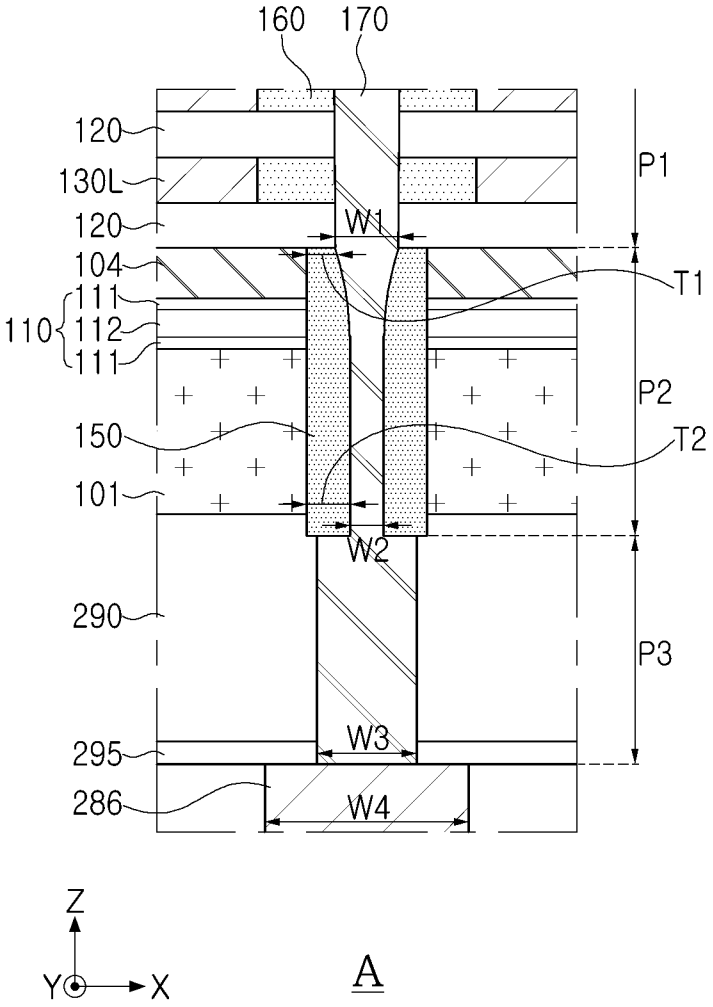

160
170
120
130L
120
104
111
110
112
111
150
101
290
295
286
W1
W2
W3
W4
P1
P2
P3
T1
T2
Z
Y
X
A

FIG. 3A

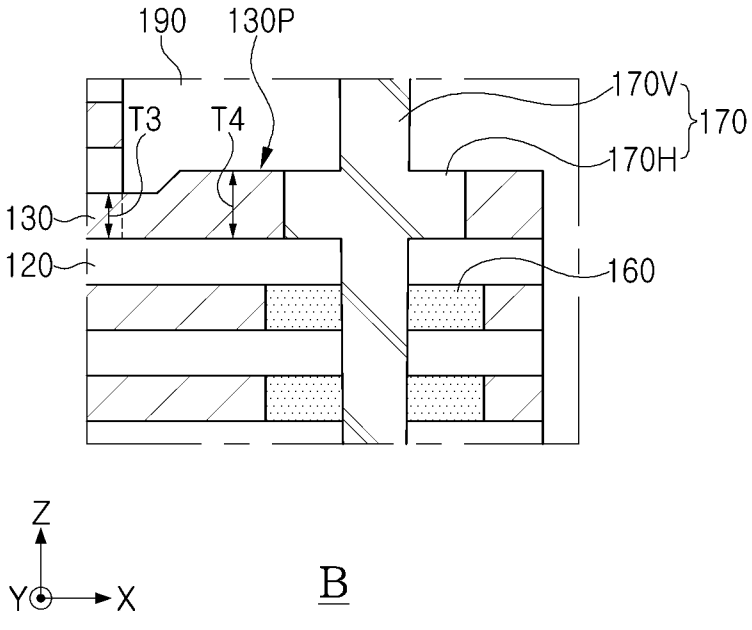

190
130P
T3
T4
130
120
170V
170
170H
160
Z
Y
X
B

FIG. 3B

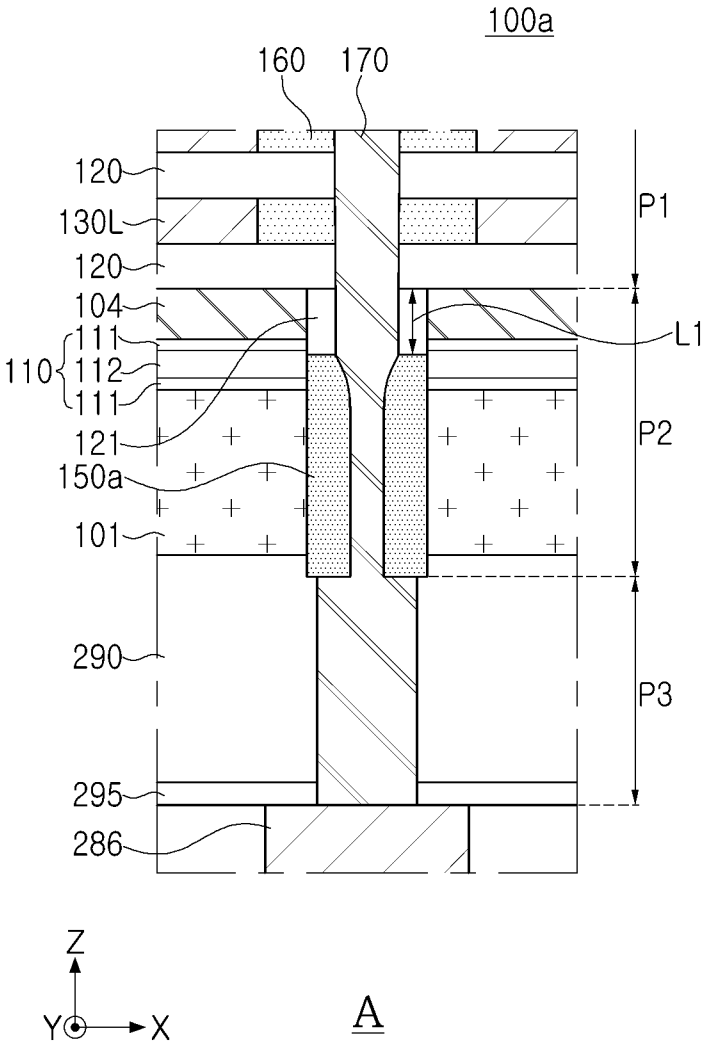

100a
160
170
120
130L
120
104
111
110
112
111
121
150a
101
290
295
286
P1
L1
P2
P3
Z
Y
X
A

FIG. 4A

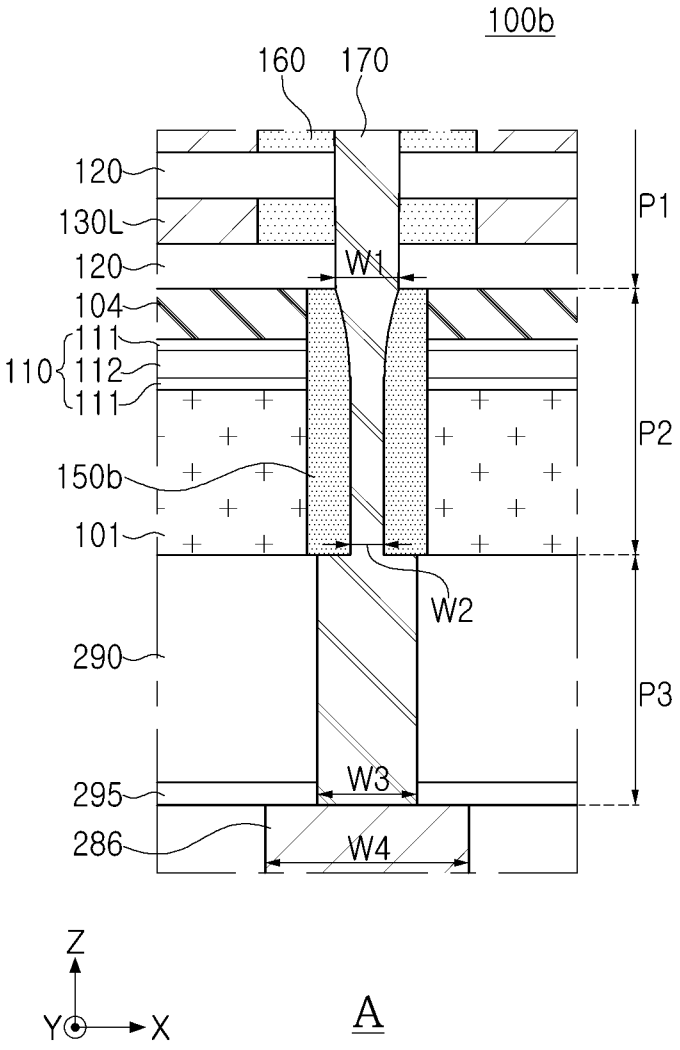

100b
160
170
120
130L
120
104
111
110
112
111
150b
101
290
295
286
W1
W2
W3
W4
P1
P2
P3
Z
Y
X
A

FIG. 4B

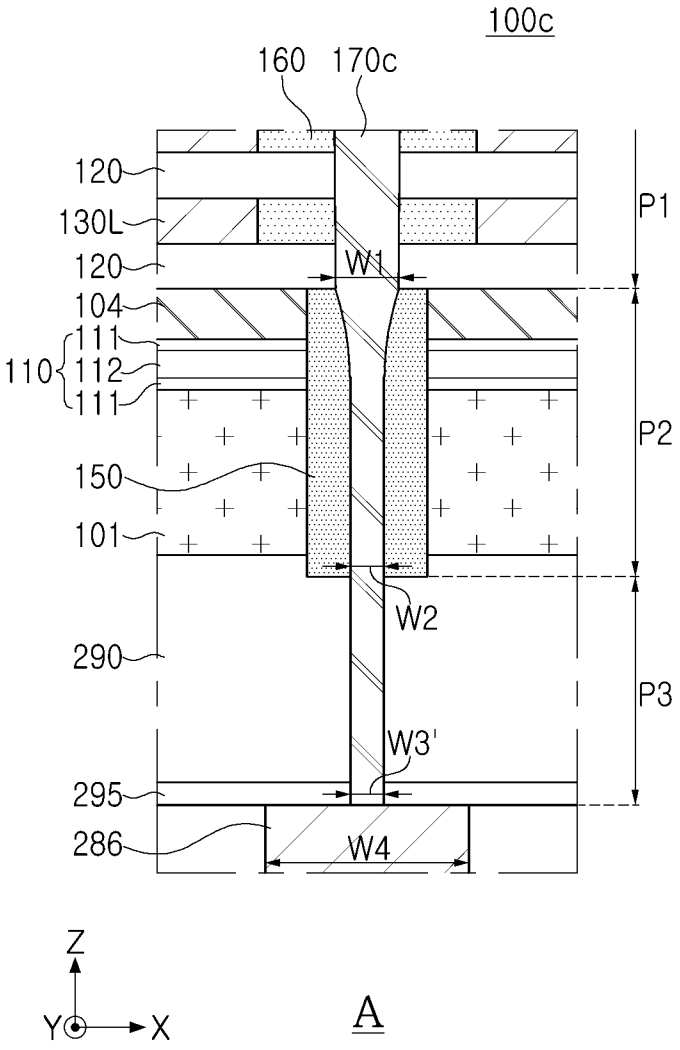

100c
160
170c
120
130L
120
104
111
110
112
111
150
101
290
295
286
W1
W2
W3'
W4
P1
P2
P3
Z
Y
X
A

FIG. 4C

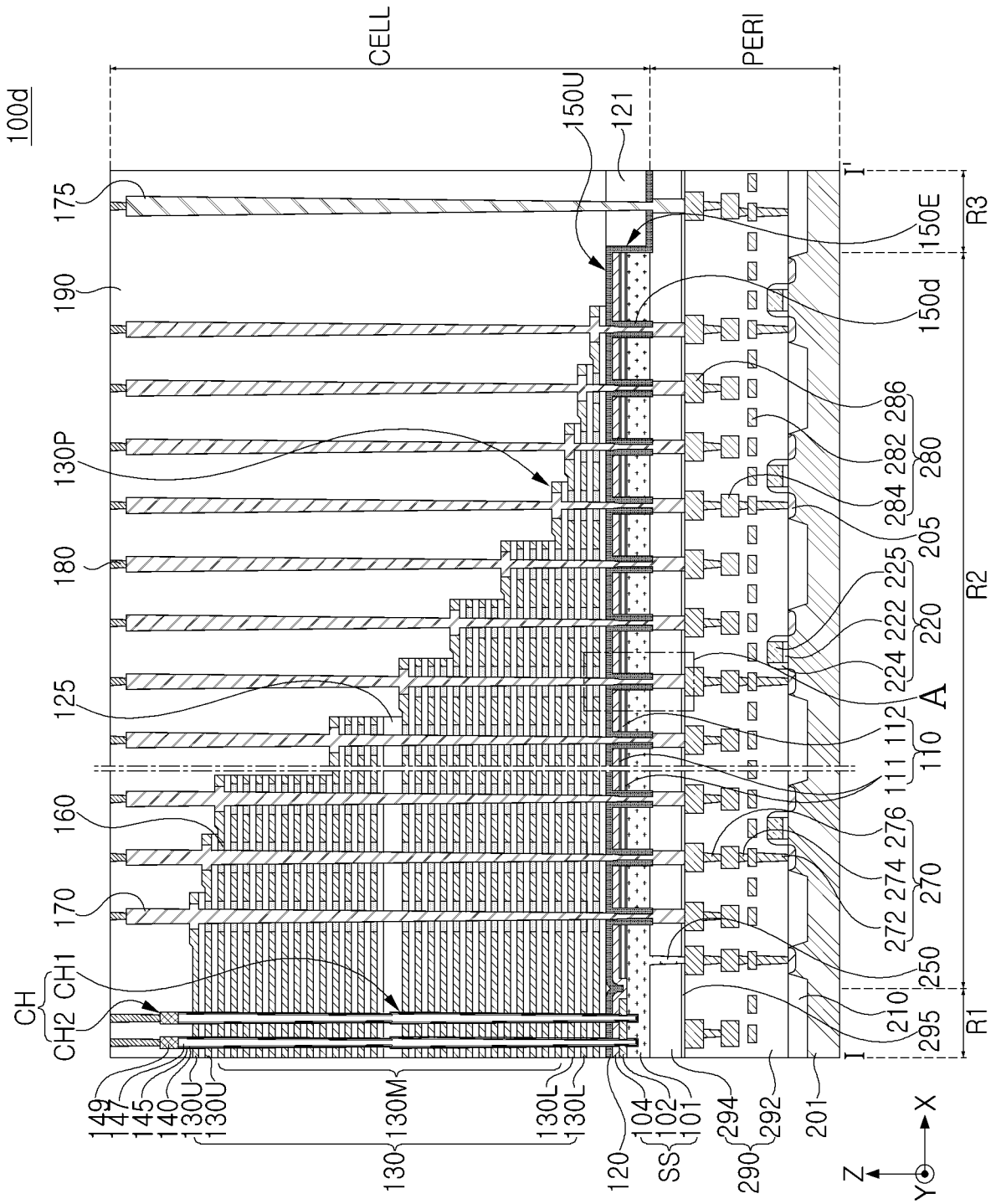

100d
CELL
PERI
150U
121
175
190
130P
180
125
160
170
CH
CH1
CH2
149
147
145
140
130U
130U
130
130M
130L
130L
120
104
102
101
SS
294
290
292
201
I
I'
150E
150d
R3
R2
R1
286
284
282
280
205
225
222
220
224
A
112
111
110
276
274
272
270
250
210
295
Z
Y
X

FIG. 5A

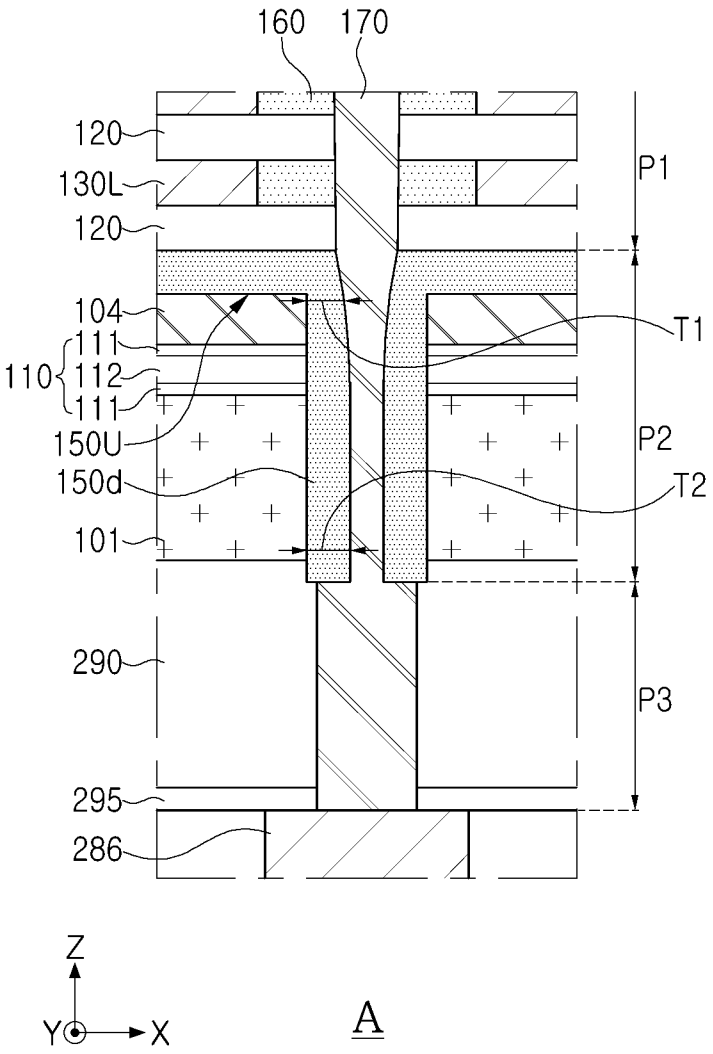

160
170
120
130L
120
104
111
110
112
111
150U
150d
101
290
295
286
P1
T1
P2
T2
P3
Z
Y
X
A

FIG. 5B

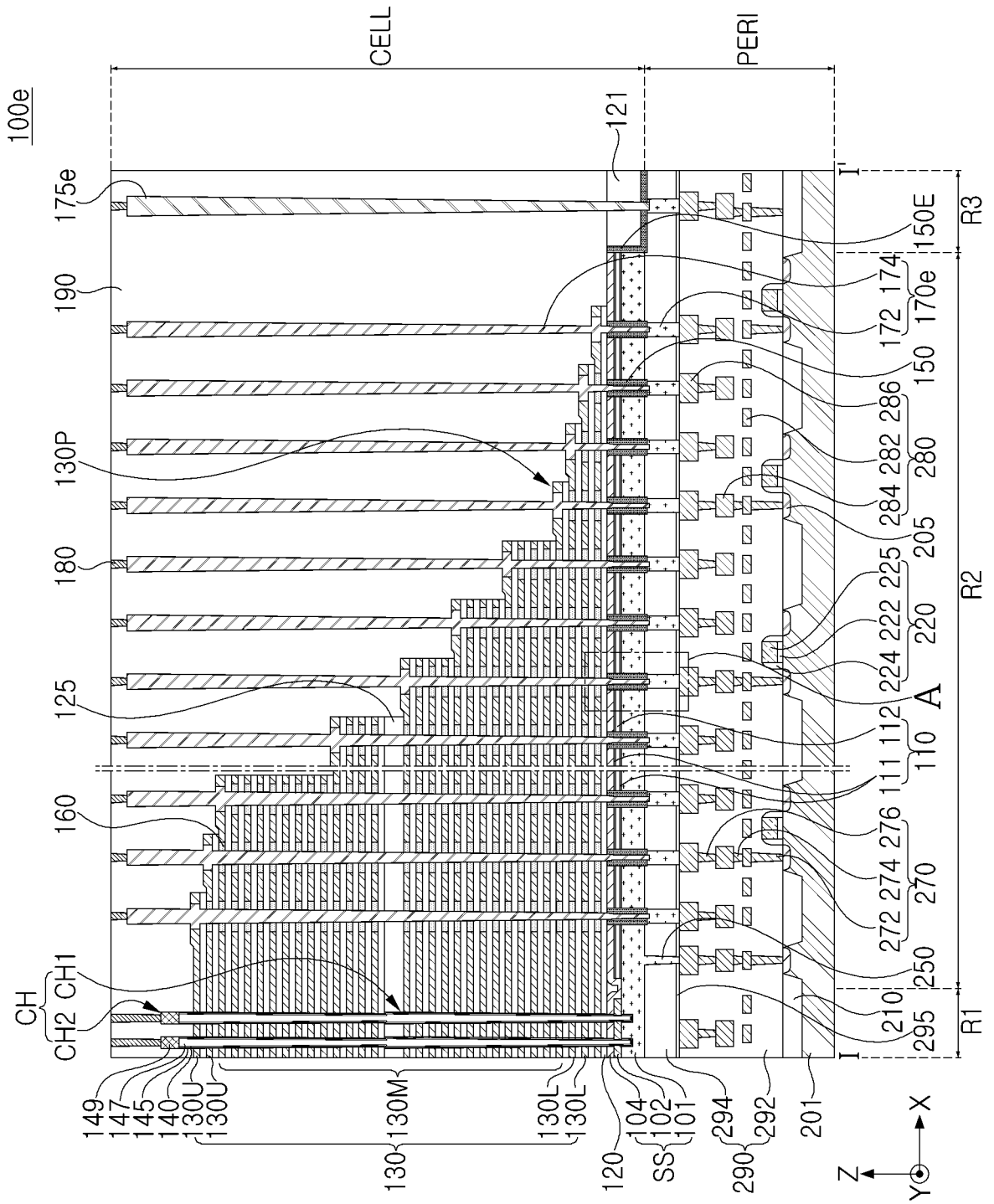

100e
CELL
PERI
121
I'
I
175e
190
130P
180
125
160
CH
CH1
CH2
149
147
145
140
130U
130U
130
130M
130L
130L
120
104
102
101
SS
294
292
290
201
210
295
250
272
274
276
270
111
112
110
A
224
222
220
225
205
284
282
286
280
150
172
174
170e
150E
R1
R2
R3
Z
X
Y

FIG. 6A

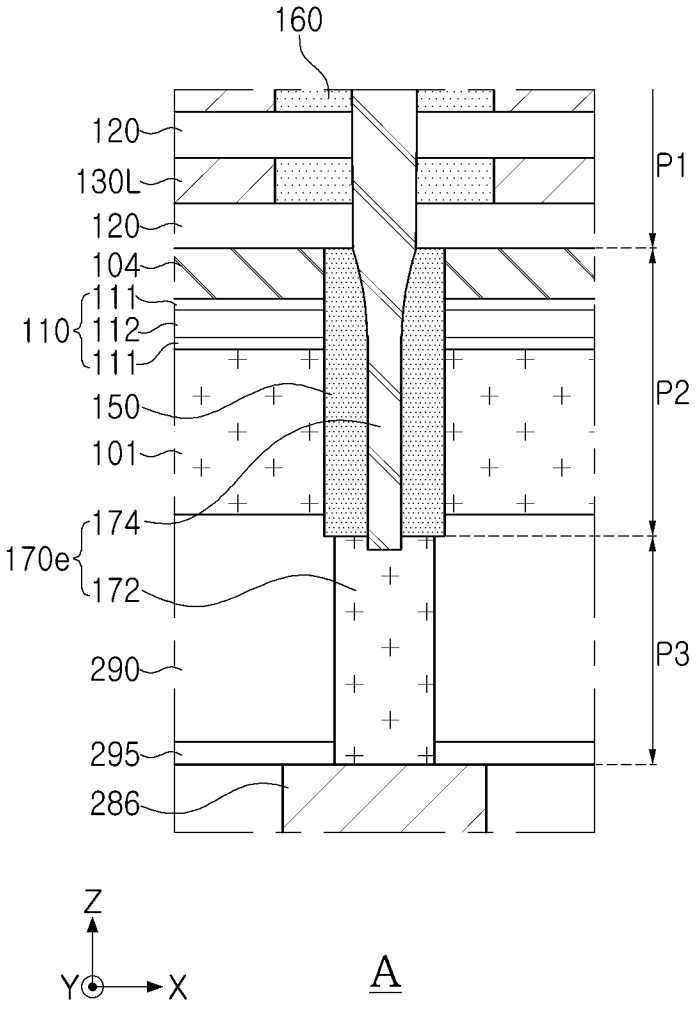

160
120
130L
120
104
111
110
112
111
150
101
174
170e
172
290
295
286
P1
P2
P3
Z
Y
X
A

FIG. 6B

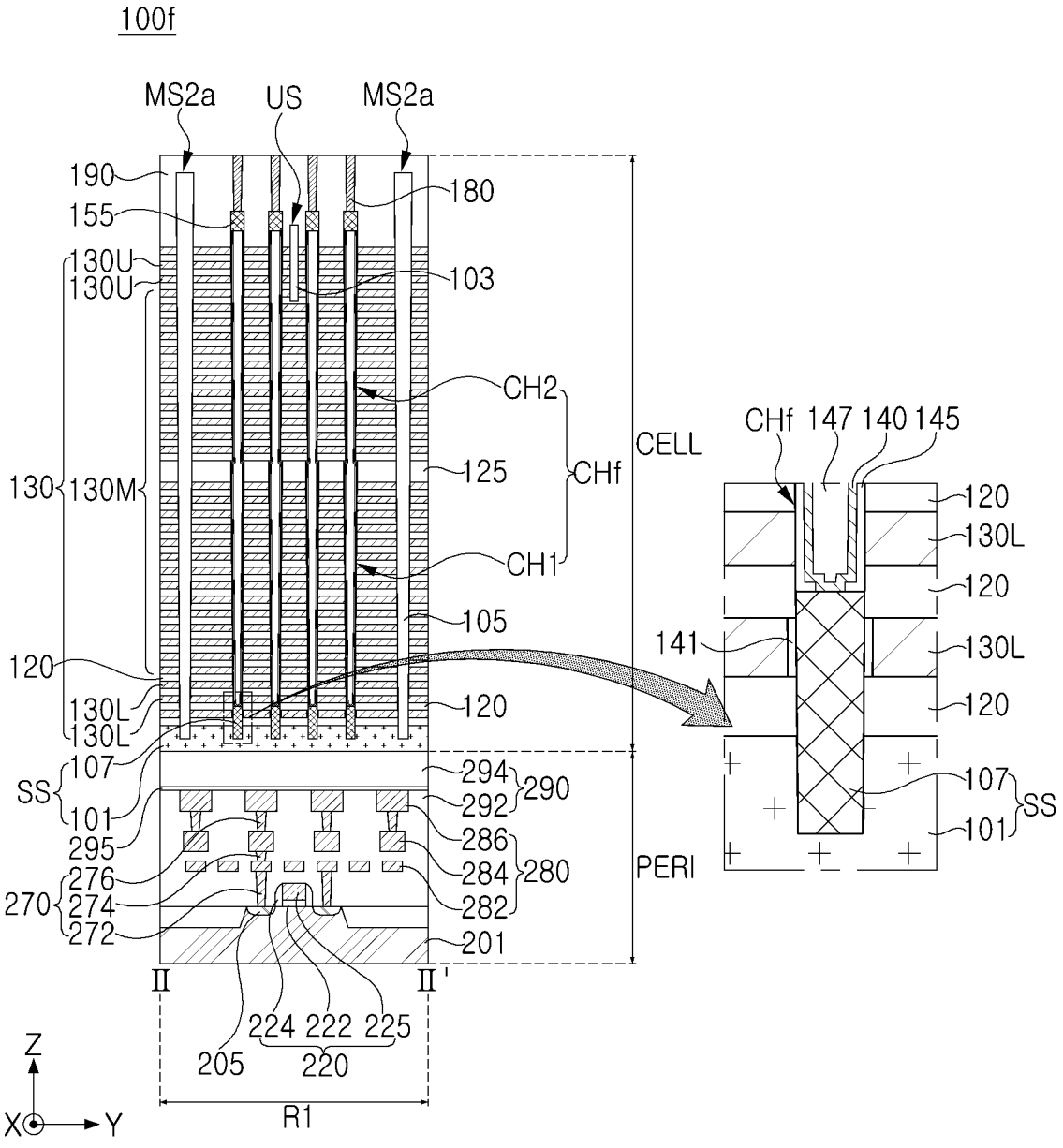

100f
MS2a
US
MS2a
190
155
180
130U
130U
103
CH2
CHf
CELL
130
130M
125
CH1
105
120
130L
130L
120
107
SS
101
294
290
292
295
286
276
284
280
270
274
282
272
201
PERI
II
II'
224 222 225
205
220
R1
Z
X
Y
CHf 147 140 145
120
130L
120
141
130L
120
107
SS
101

FIG. 7

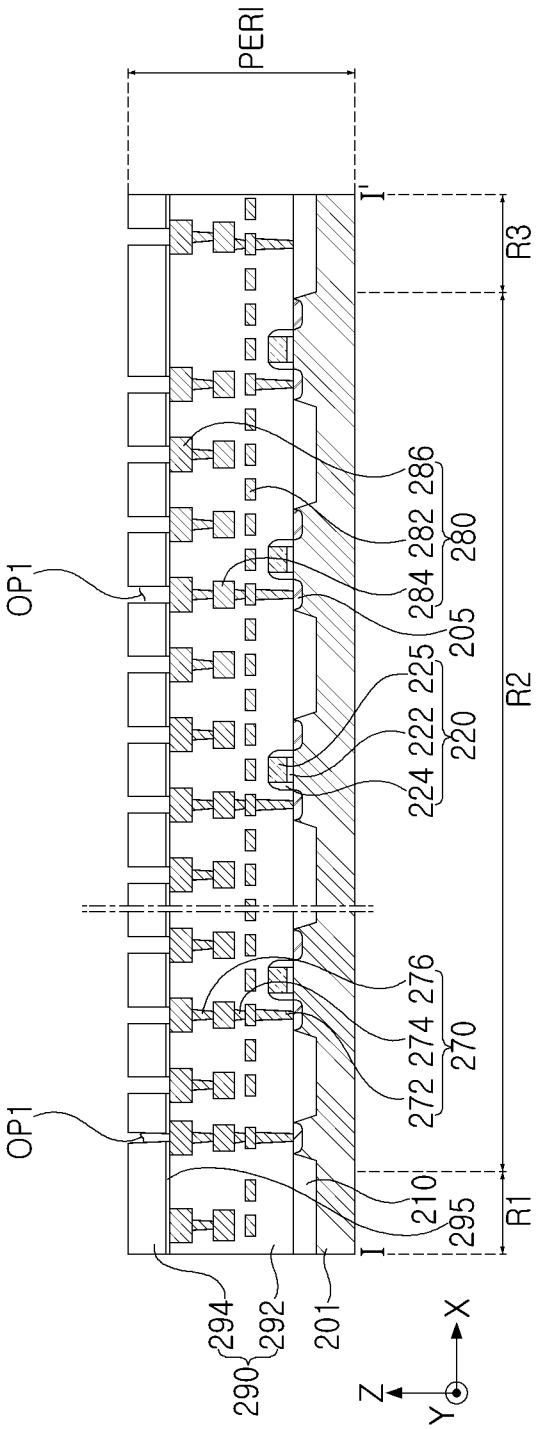

PERI
I'
R3
R2
R1
I
OP1
OP1
286
282
280
284
205
225
220
222
224
276
274
270
272
210
295
294
292
290
201
Z
X
Y

FIG. 8A

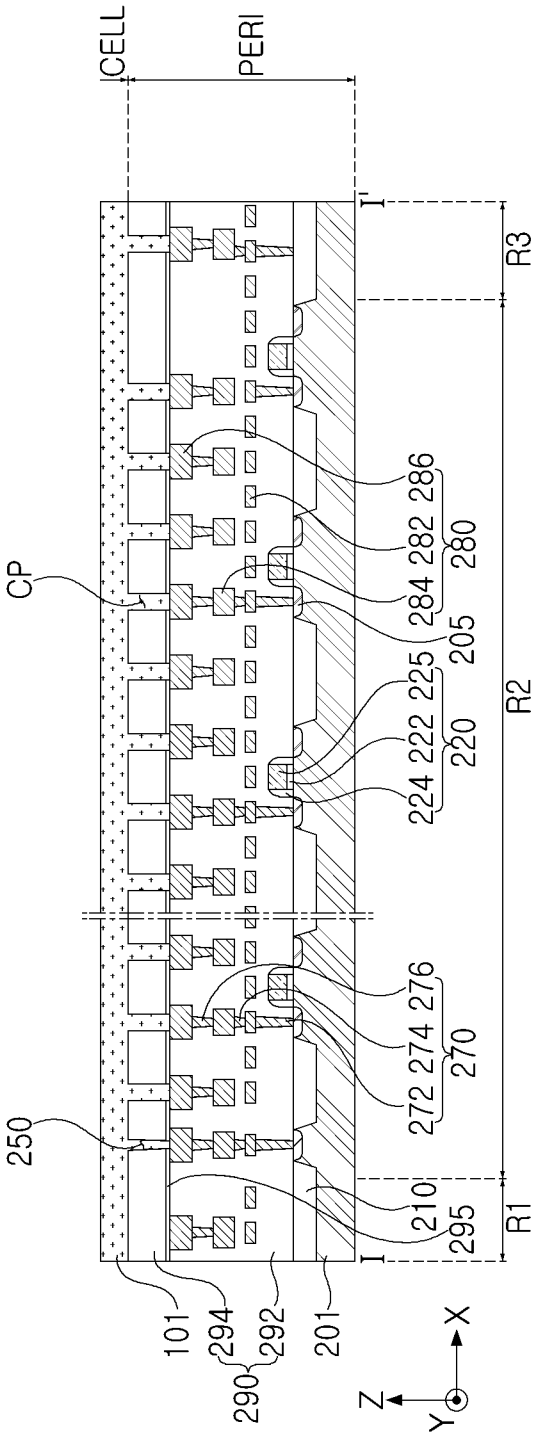

CELL
PERI
I'
I
R3
R2
R1
CP
250
286
282
280
284
205
225
222
220
224
276
274
270
272
210
295
101
294
292
290
201
X
Y
Z

FIG. 8B

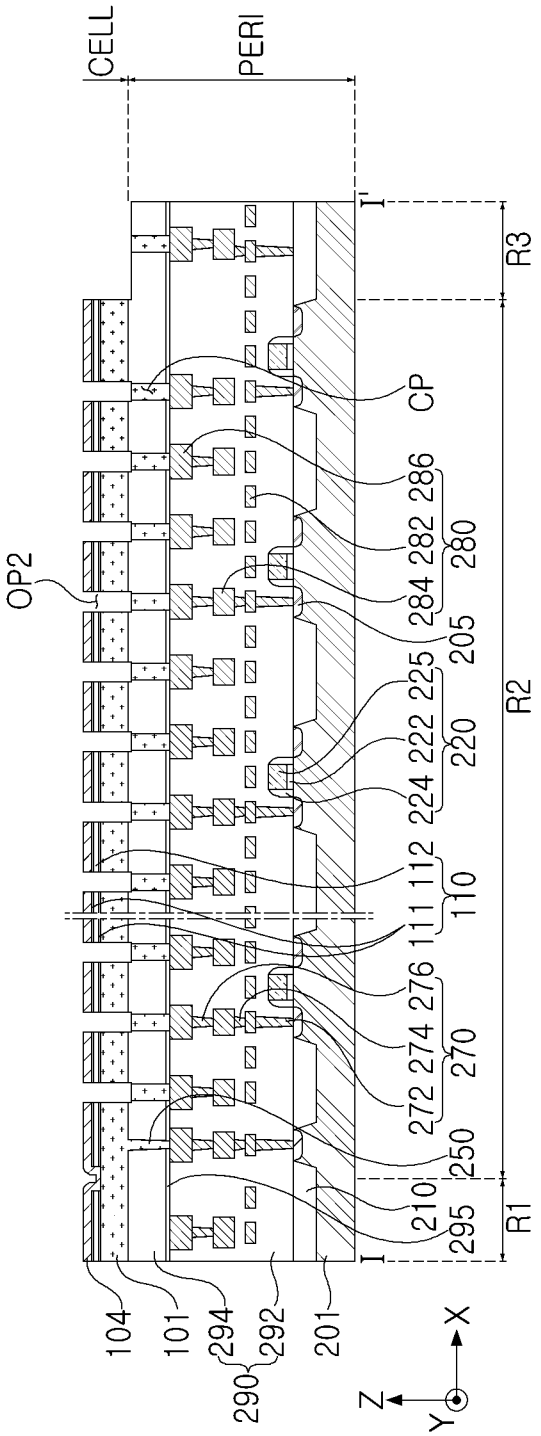

CELL
PERI
I'
I
R3
R2
R1
CP
OP2
286
282
280
284
205
225
222
220
224
112
110
111
276
274
270
272
250
210
295
104
101
294
292
290
201
X
Z
Y

FIG. 8C

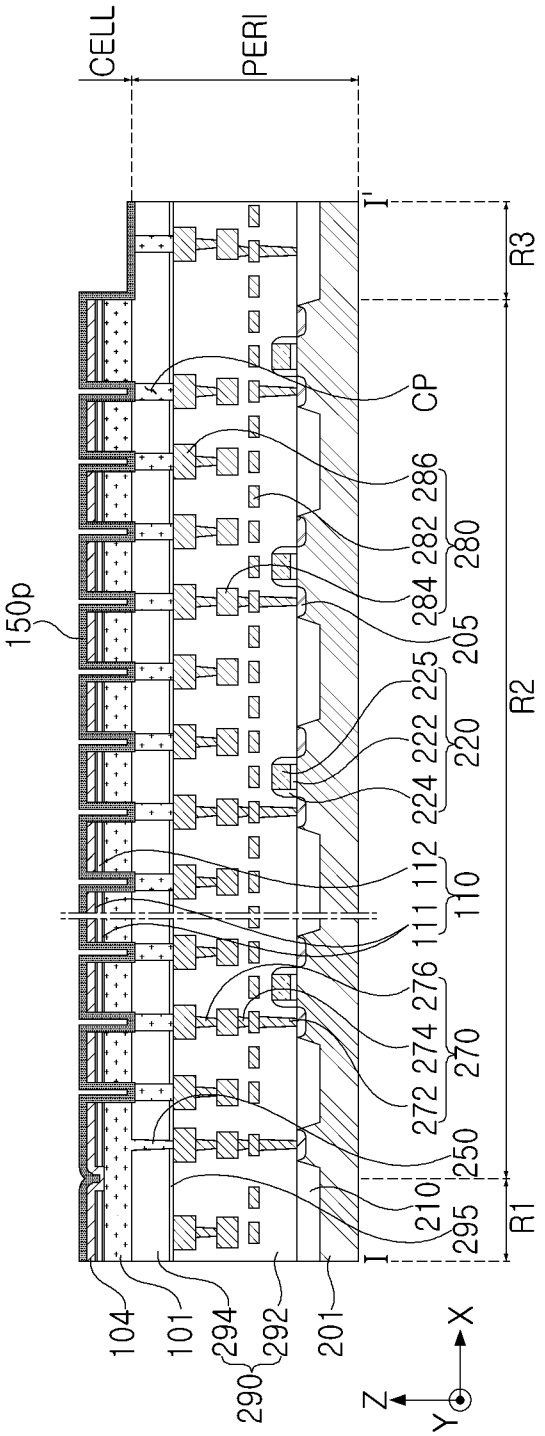

CELL
PERI
I'
I
R3
R2
R1
CP
286
282
280
284
205
225
222
220
224
112
111
110
276
274
270
272
250
210
295
150p
104
101
294
292
290
201
Z
X
Y

FIG. 8D

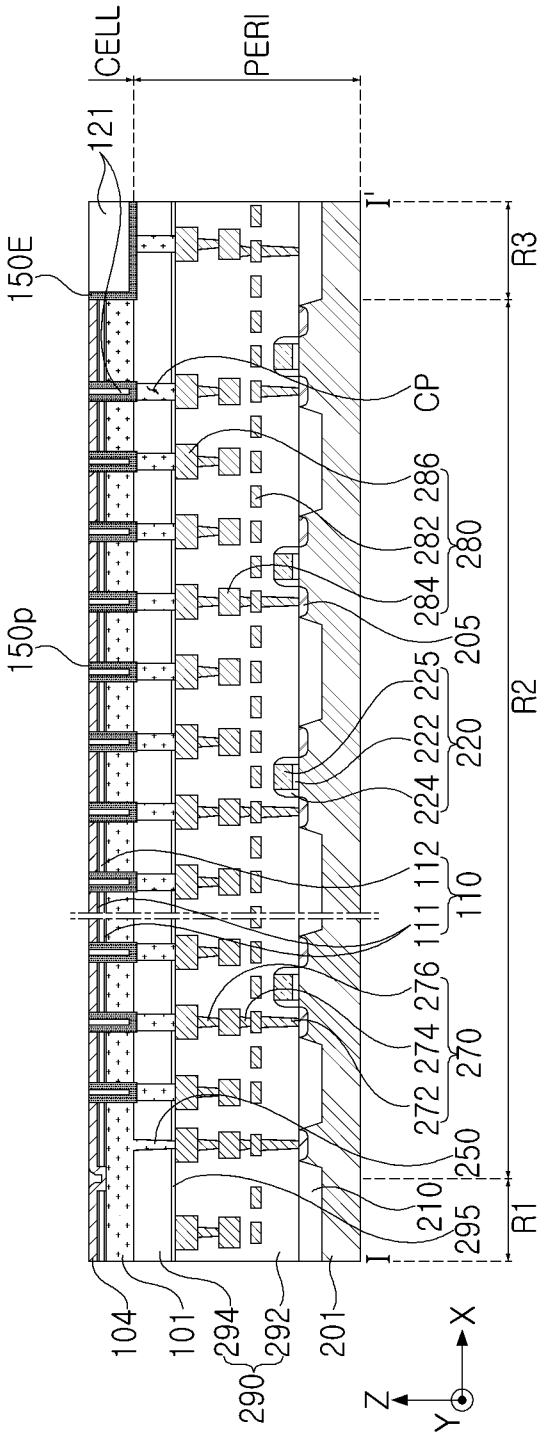

CELL
PERI
121
I'
150E
R3
CP
286
282
280
284
205
150p
225
222
220
224
R2
112
110
111
276
274
270
272
250
210
295
R1
I
104
101
294
292
290
201
Z
X
Y

FIG. 8E

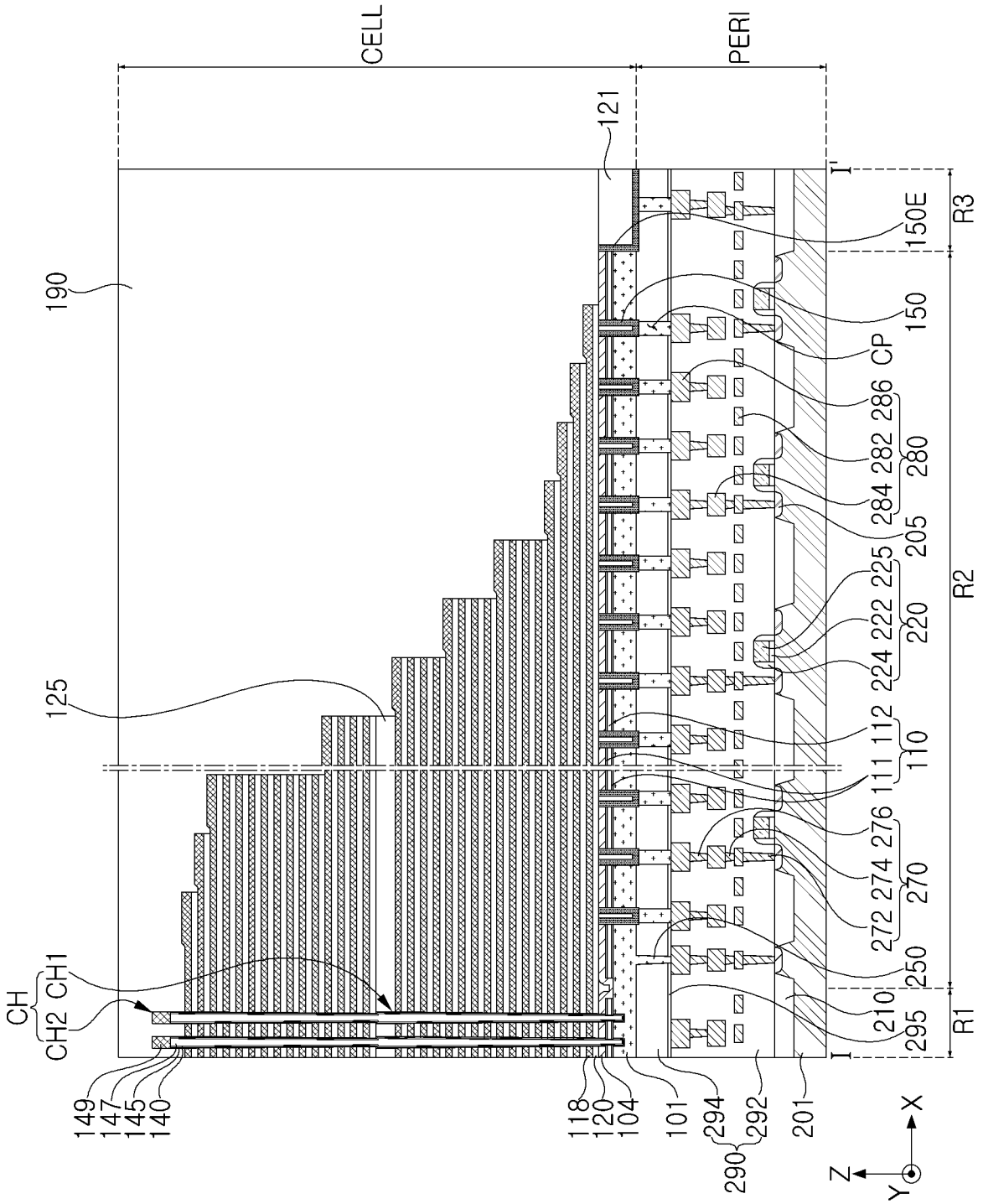

CELL
PERI
121
I'
I
190
125
150E
R3
150
CP
286
282
280
284
205
225
222
220
224
112
110
111
276
274
270
272
250
210
295
R1
R2
CH
CH1
CH2
149
147
145
140
118
120
104
101
294
292
290
201
Z
X
Y

FIG. 8F

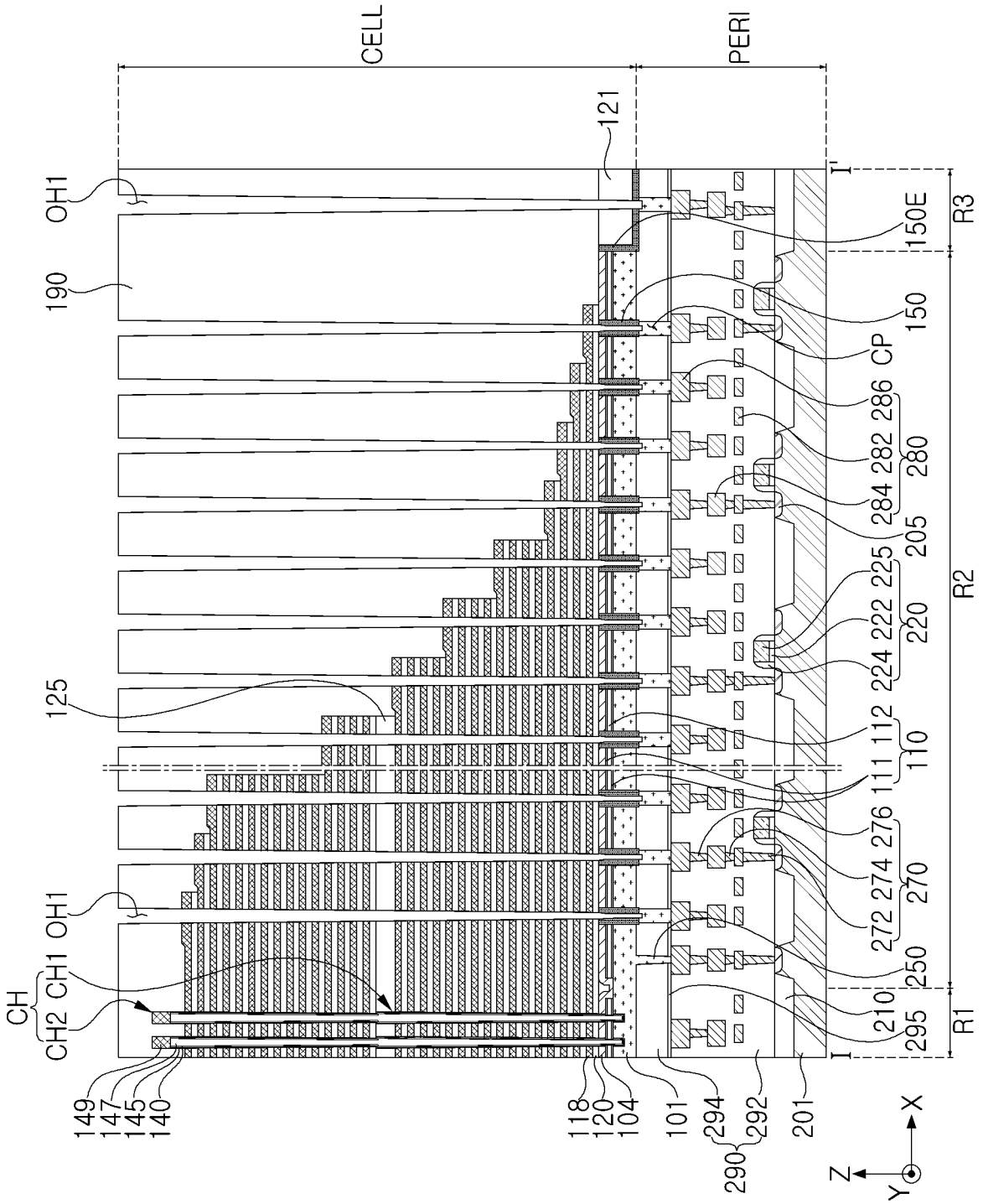

CELL
PERI
121
I'
I
OH1
190
150E
R3
150
CP
286
282
284
280
205
225
222
224
220
R2
125
112
111
110
276
274
272
270
CH
CH1
CH2
OH1
250
210
295
R1
149
147
145
140
118
120
104
101
294
292
290
201
Z
Y
X

FIG. 8G

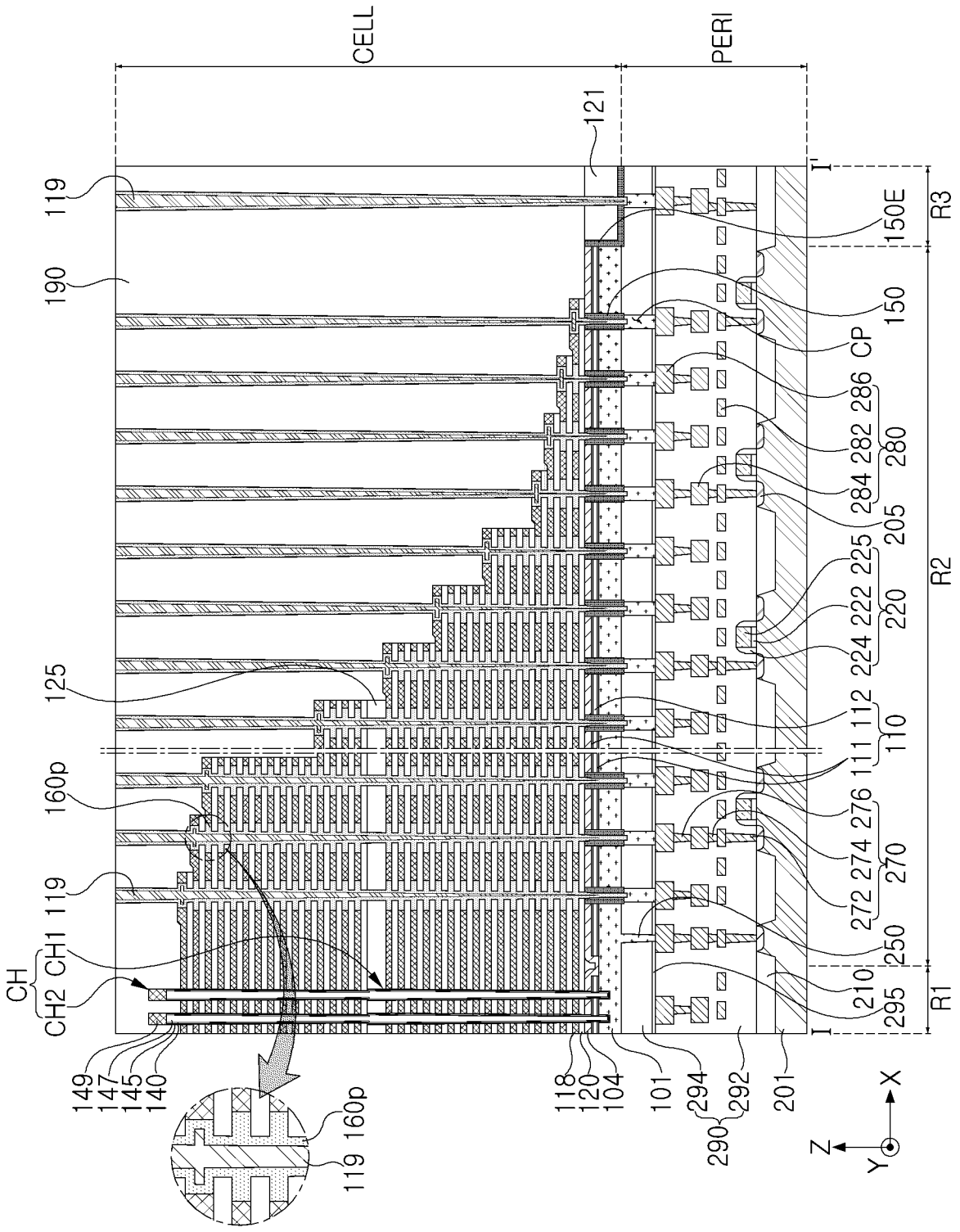

CELL
PERI
121
I
I'
119
190
125
160p
CH
CH1
CH2
149
147
145
140
118
120
104
101
294
292
290
201
295
210
250
270
272
274
276
110
111
112
220
222
224
225
205
280
282
284
286
CP
150
150E
R1
R2
R3
X
Y
Z

FIG. 8H

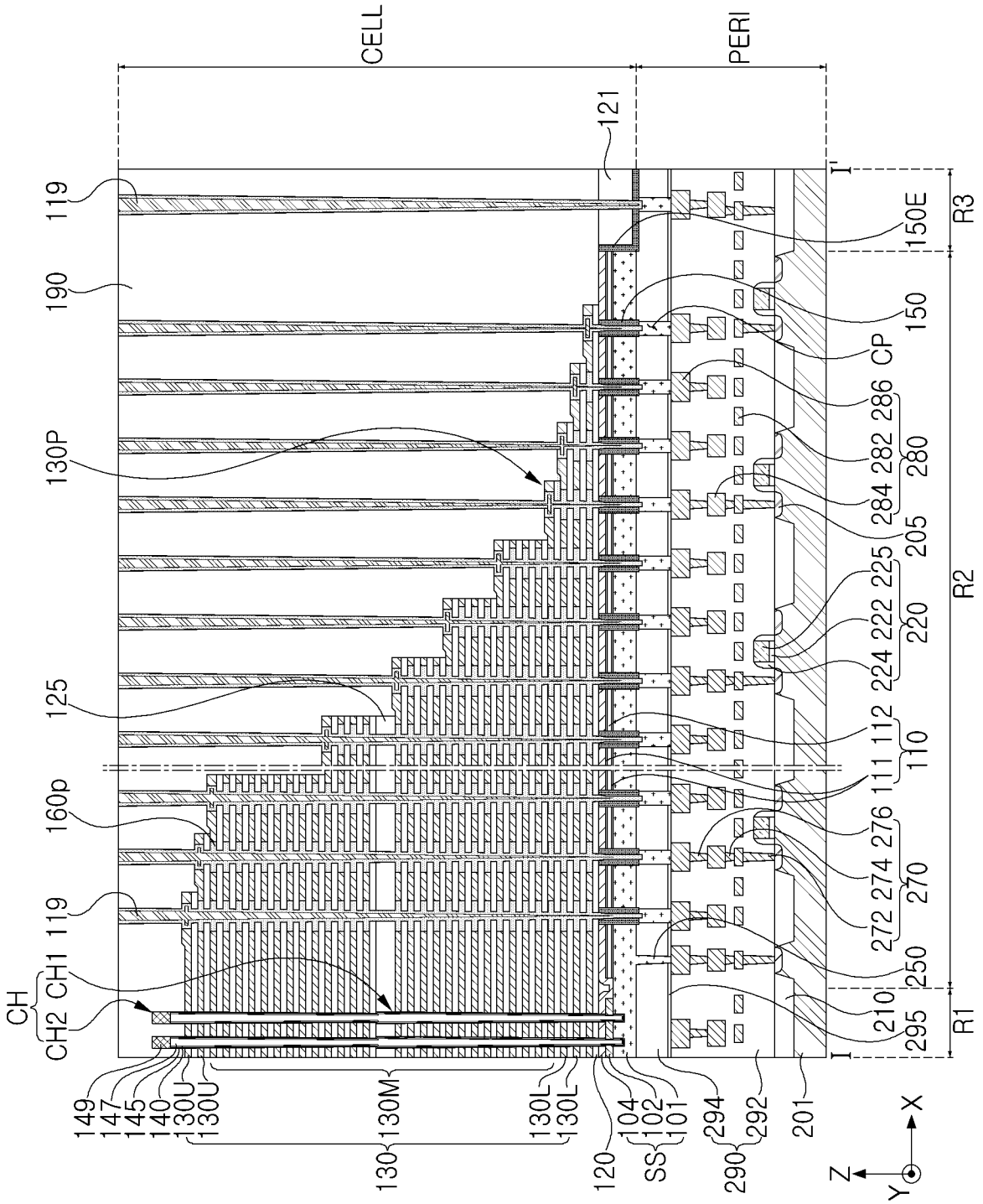

CELL
PERI
121
I'
I
119
190
130P
125
160p
119
CH
CH1
CH2
149
147
145
140
130U
130U
130
130M
130L
130L
120
104
102
101
SS
294
292
290
201
150E
R3
150
CP
286
282
284
280
205
225
222
224
220
R2
112
111
110
276
274
272
270
250
210
295
R1
Z
Y
X

FIG. 8I

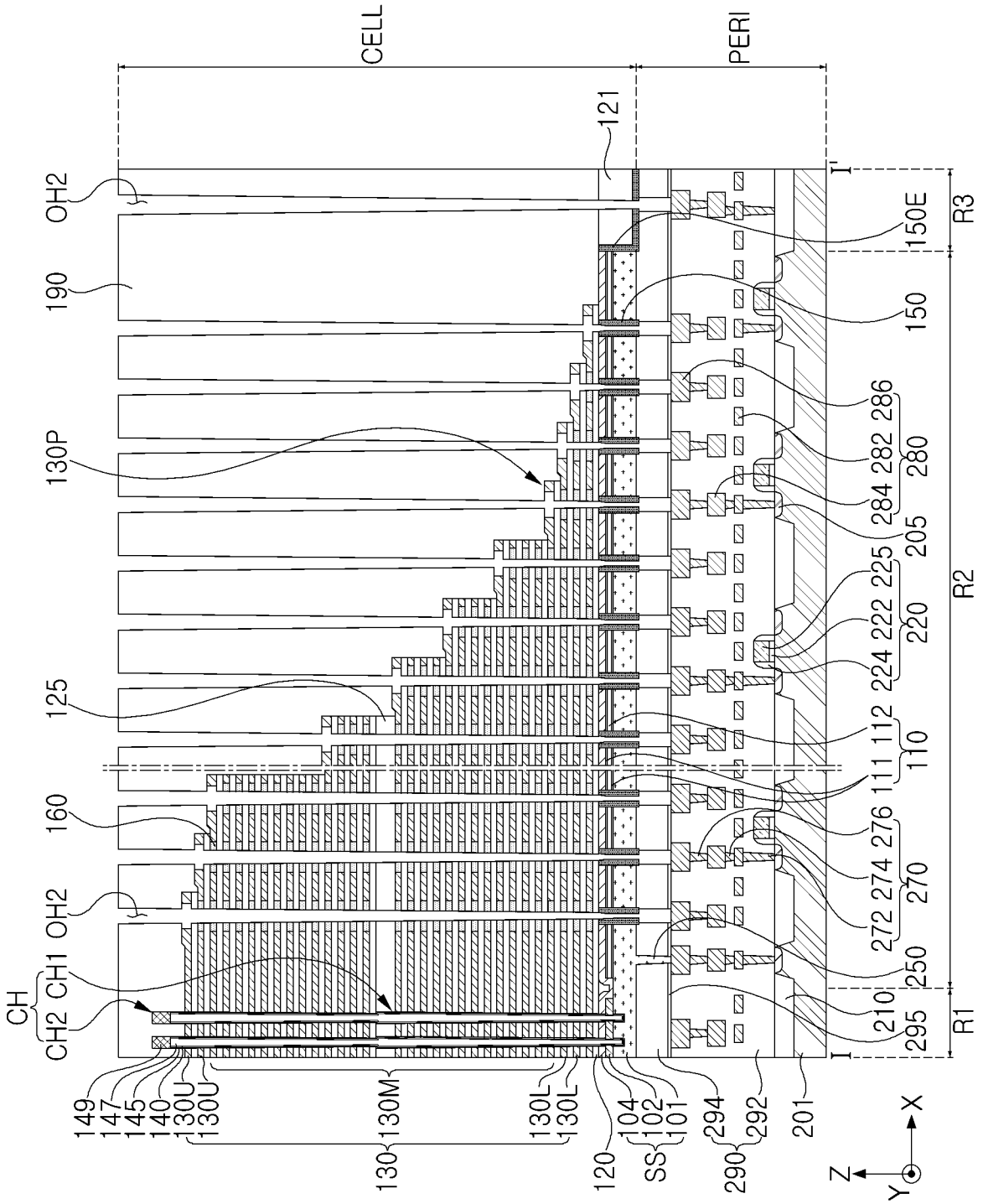

CELL
PERI
121
I'
I
OH2
190
130P
125
160
OH2
CH
CH1
CH2
149
147
145
140
130U
130U
130
130M
130L
130L
120
104
102
101
SS
294
290
292
201
150E
150
286
282
280
284
205
225
222
220
224
112
111
110
276
274
270
272
250
210
295
R3
R2
R1
Z
X
Y

FIG. 8J

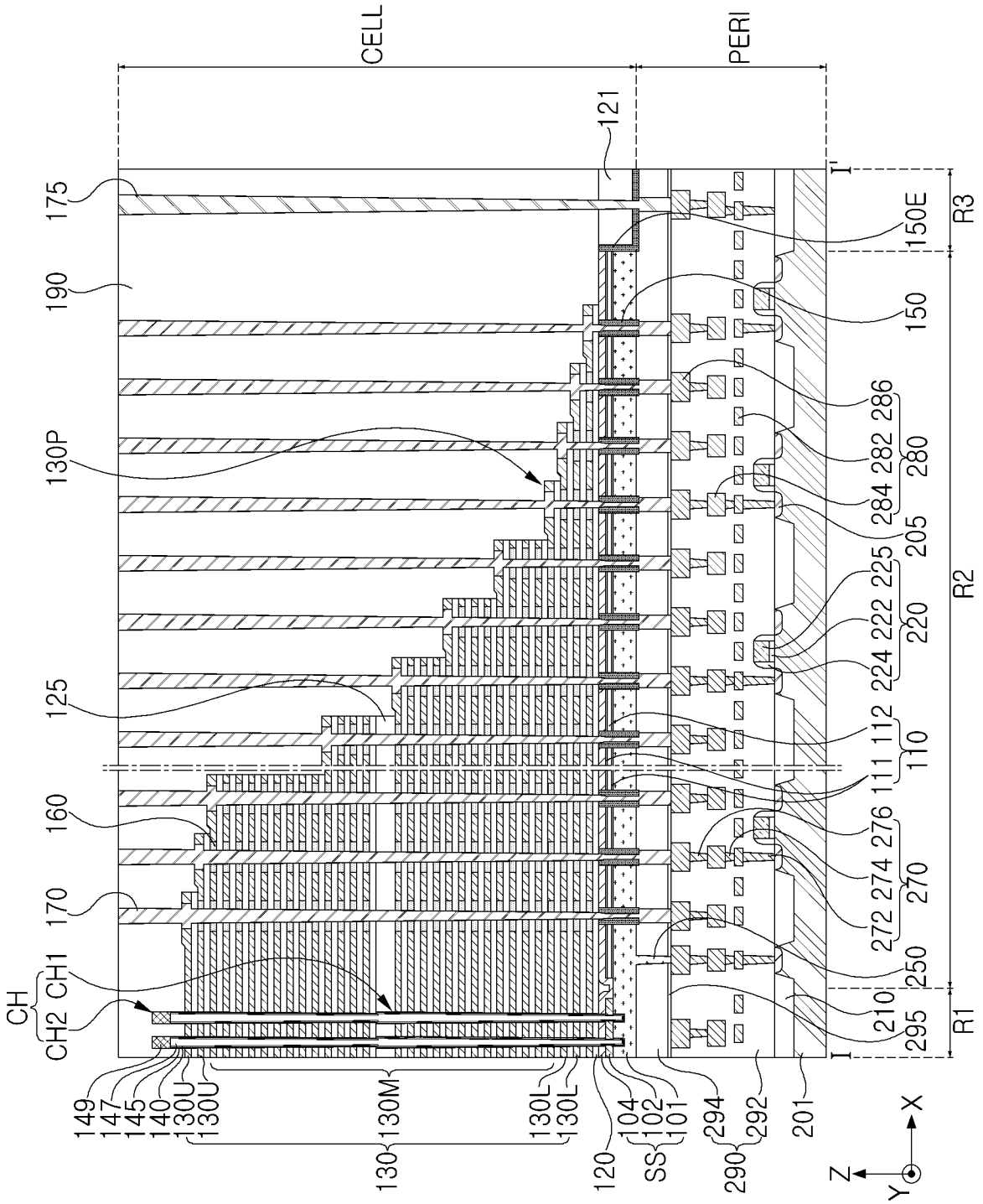

CELL
PERI
121
I'
I
175
190
130P
125
160
170
CH
CH1
CH2
150E
150
286
282
284
280
205
225
222
224
220
112
111
110
276
274
272
270
250
210
295
R3
R2
R1
149
147
145
140
130U
130U
130M
130L
130L
130
120
104
102
101
SS
294
292
290
201
Z
X
Y

FIG. 8K

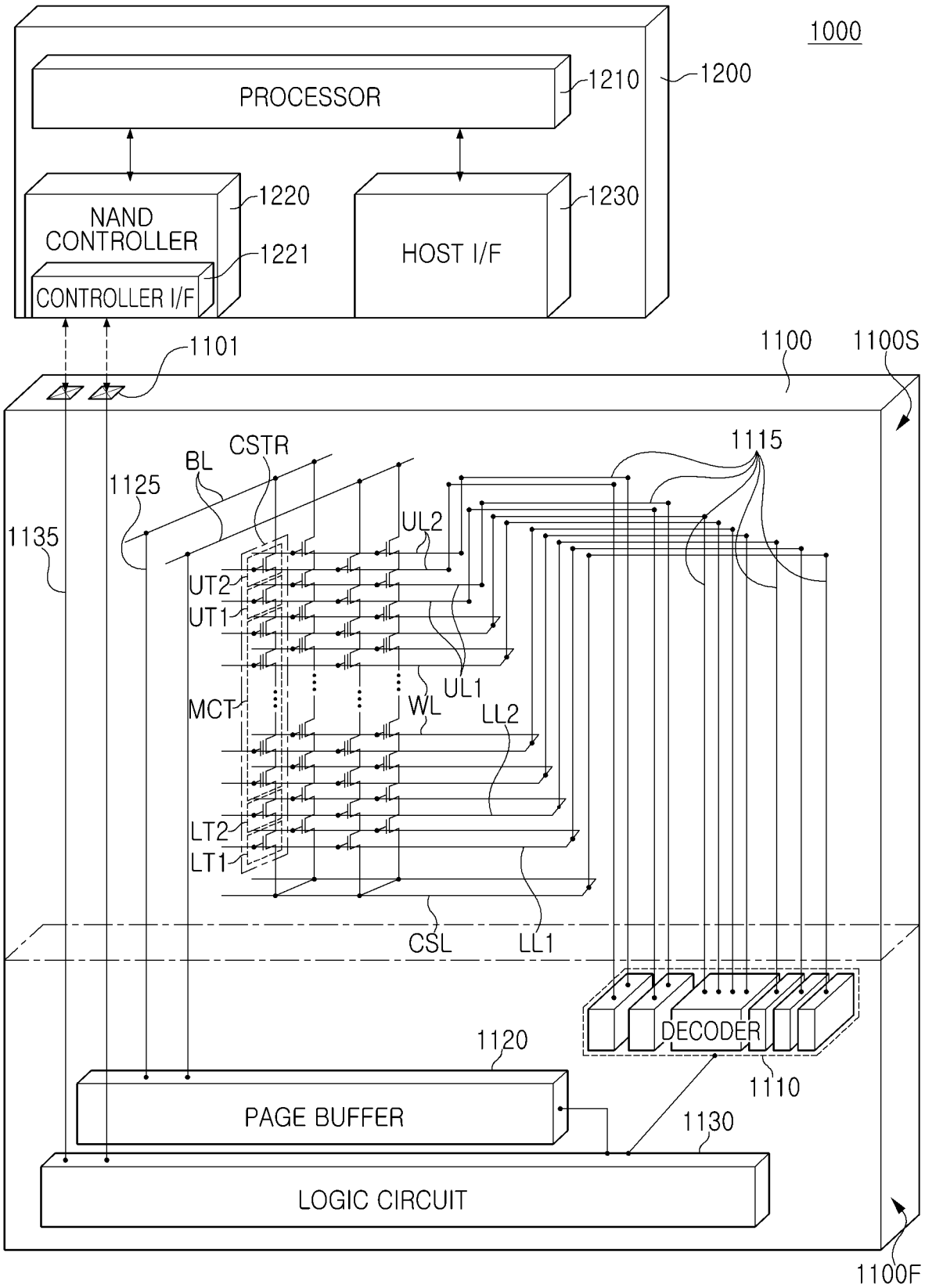

1000
PROCESSOR
1210
1200
NAND CONTROLLER
1220
1221
CONTROLLER I/F
HOST I/F
1230
1101
1100
1100S
1115
BL
CSTR
1125
1135
UL2
UT2
UT1
UL1
MCT
WL
LL2
LT2
LT1
CSL
LL1
DECODER
1120
1110
PAGE BUFFER
1130
LOGIC CIRCUIT
1100F

FIG. 9

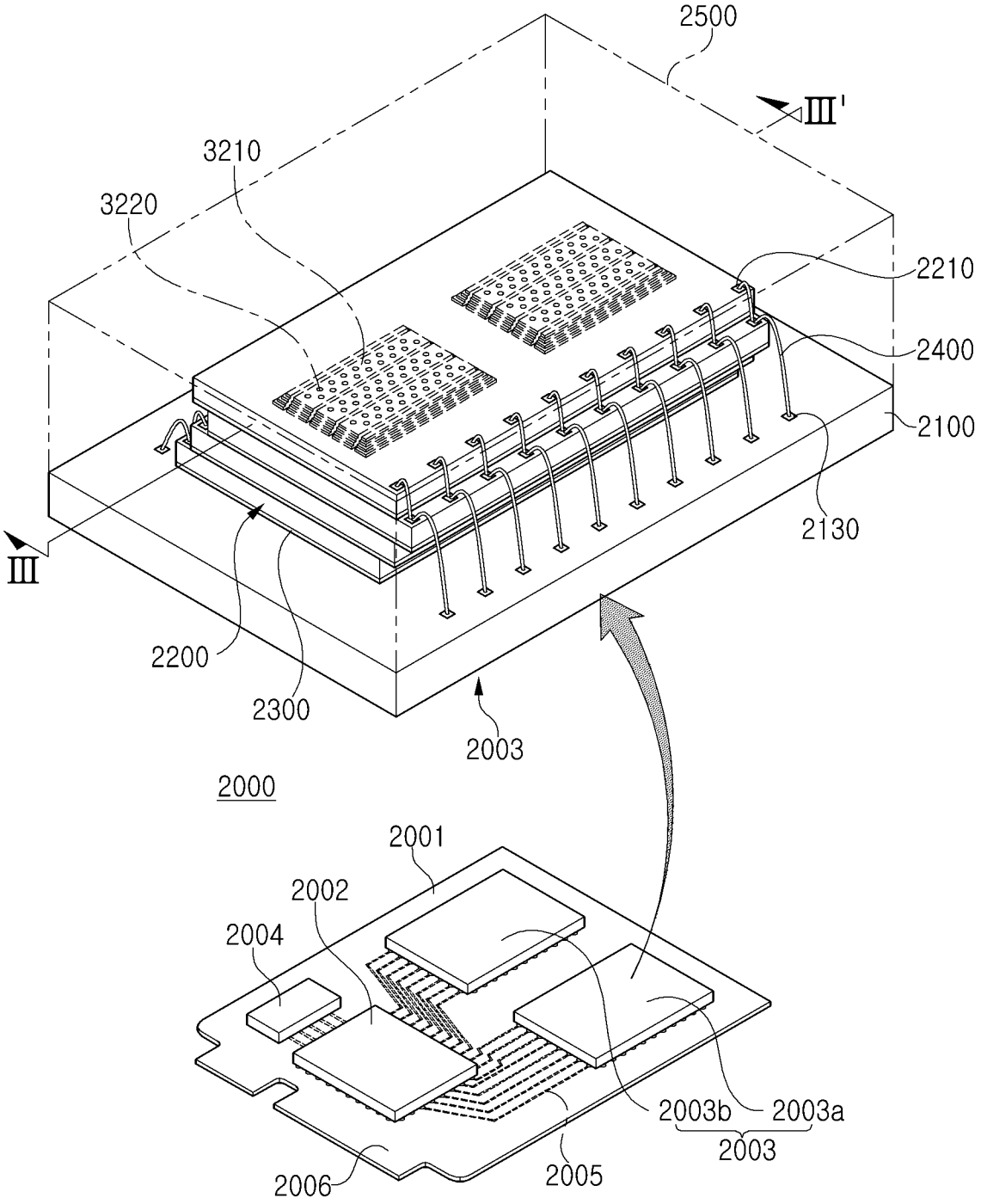

2500
III'
3210
3220
2210
2400
2100
2130
III
2200
2300
2003
2000
2001
2002
2004
2003b
2003a
2003
2005
2006

FIG. 10

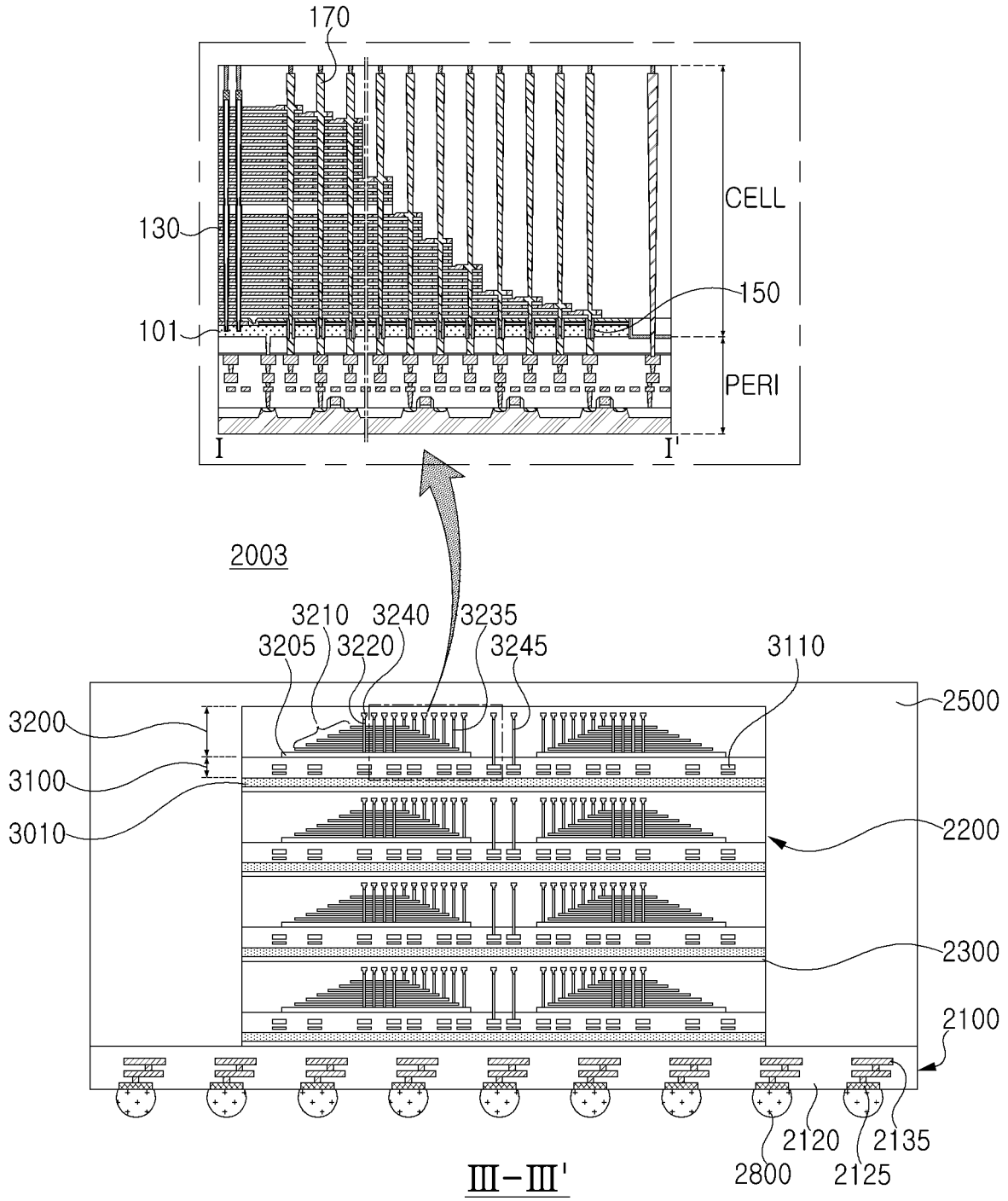

170
CELL
130
150
101
PERI
I
I'
2003
3210
3240
3235
3205
3220
3245
3110
2500
3200
3100
3010
2200
2300
2100
2120
2135
2800
2125
III-III'

FIG. 11