FIG. 1A

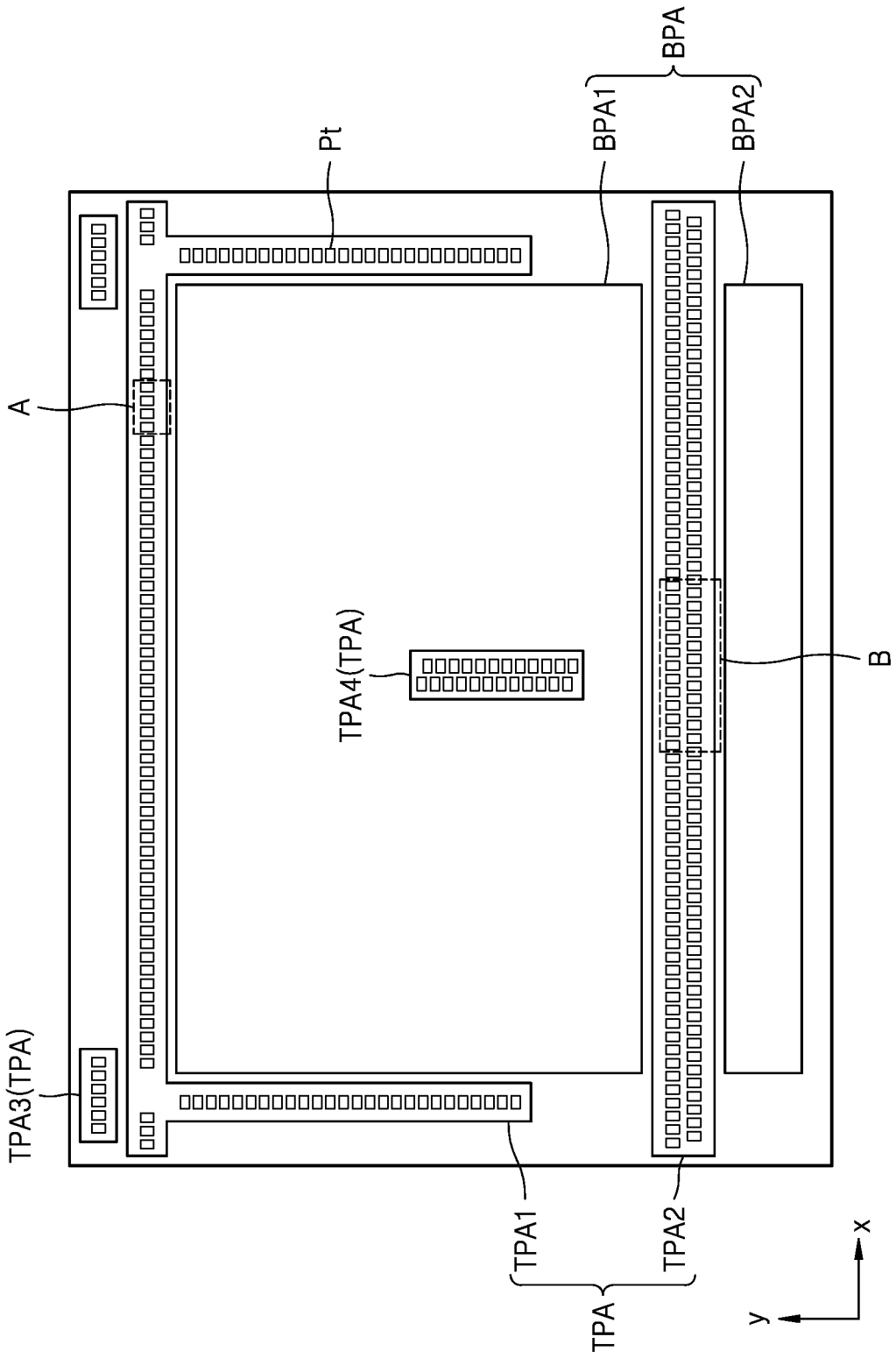


FIG. 1B

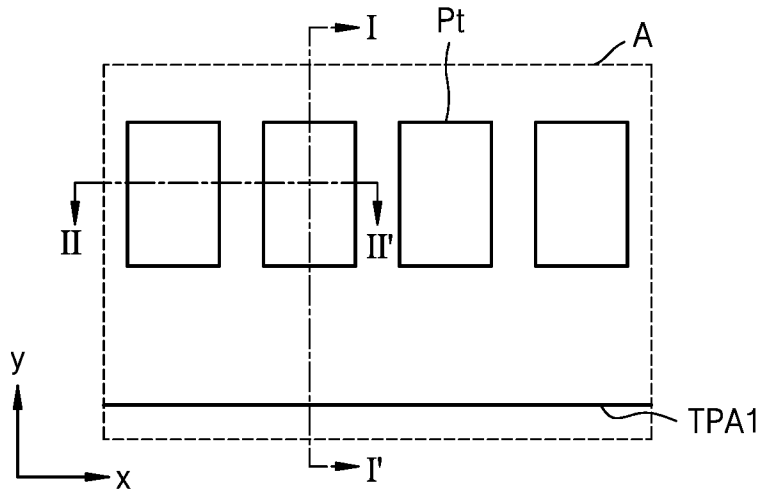


FIG. 1C

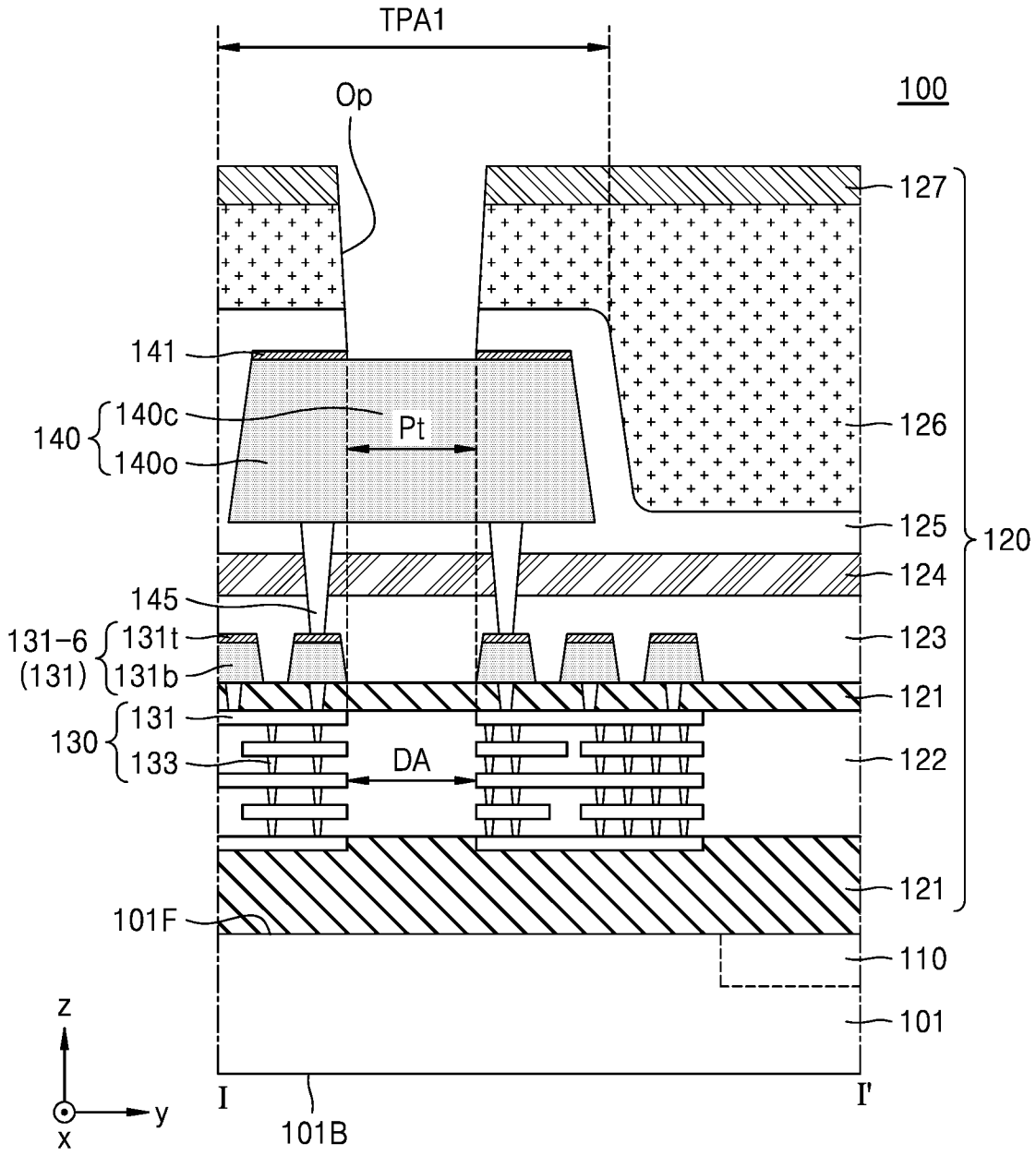

TPA1
Op
100
127
141
140
140c
140o
Pt
126
125
120
124
145
131-6
(131)
131t
131b
123
121
130
131
133
DA
122
121
101F
110
101
z
y
x
I
I'
101B

FIG. 1D

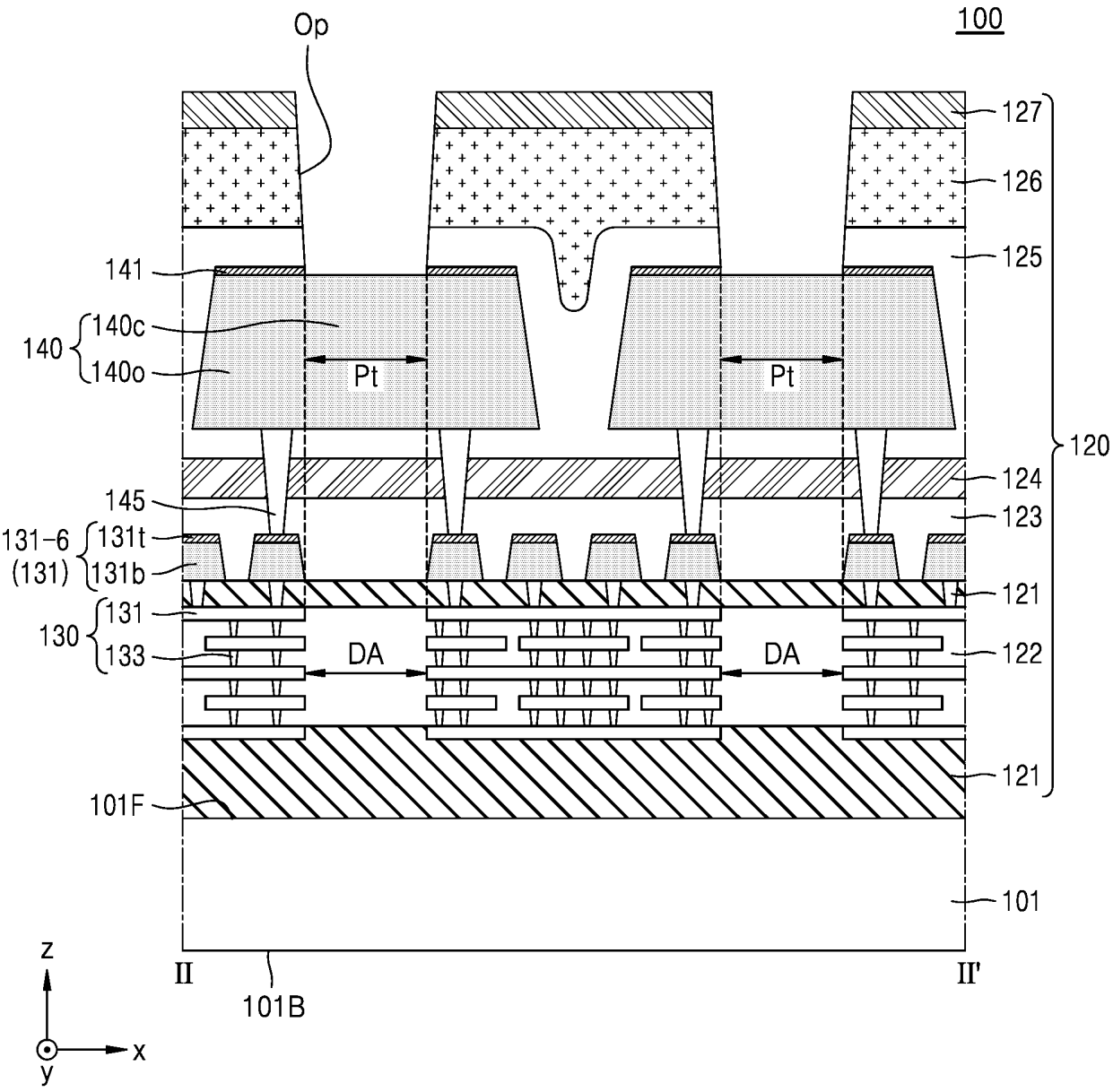

Op
100
127
126
125
141
140
140c
140o
Pt
Pt
120
124
145
123
131-6
(131)
131t
131b
121
130
131
133
DA
DA
122
121
101F
101
z
x
y
II
II'
101B

FIG. 2

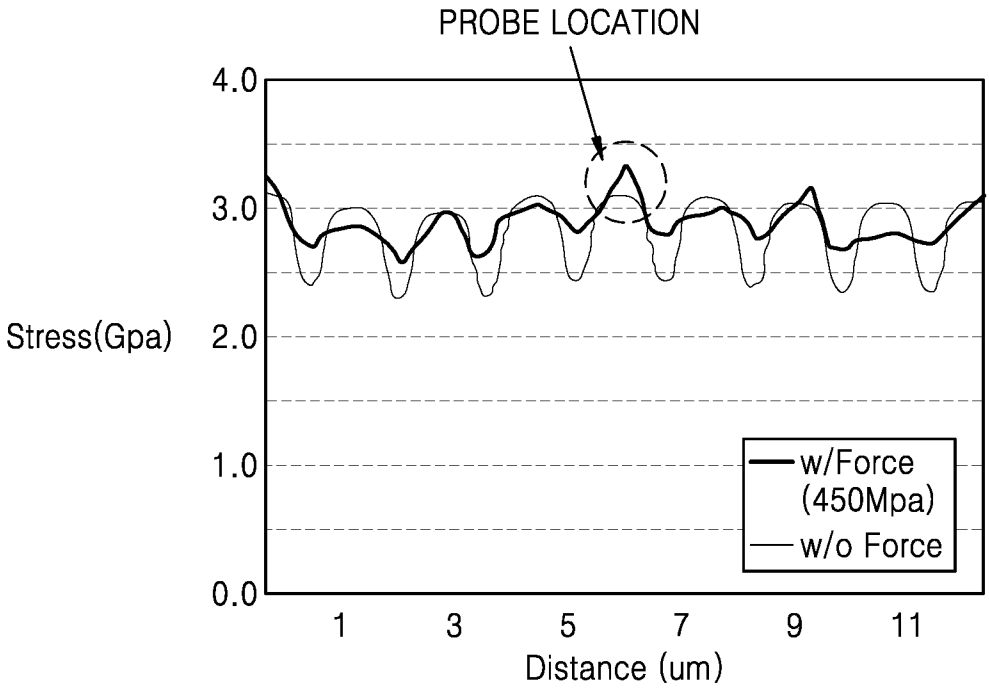

PROBE LOCATION
4.0
3.0
2.0
1.0
0.0
Stress(Gpa)
1
3
5
7
9
11
Distance (um)
w/Force
(450Mpa)
w/o Force

FIG. 3A

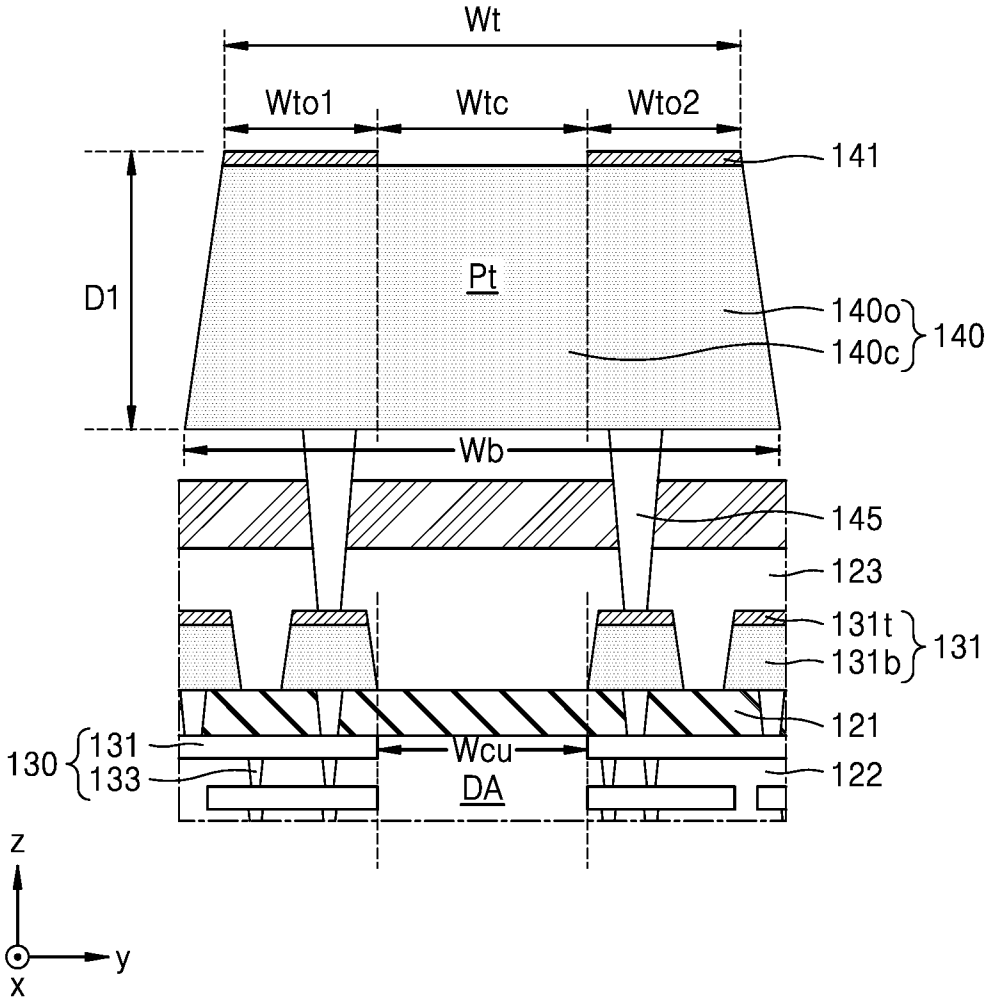

Wt
Wto1
Wtc
Wto2
141
D1
Pt
140o
140c
140
Wb
145
123
131t
131b
131
121
130
131
133
Wcu
DA
122
z
y
x

FIG. 3B

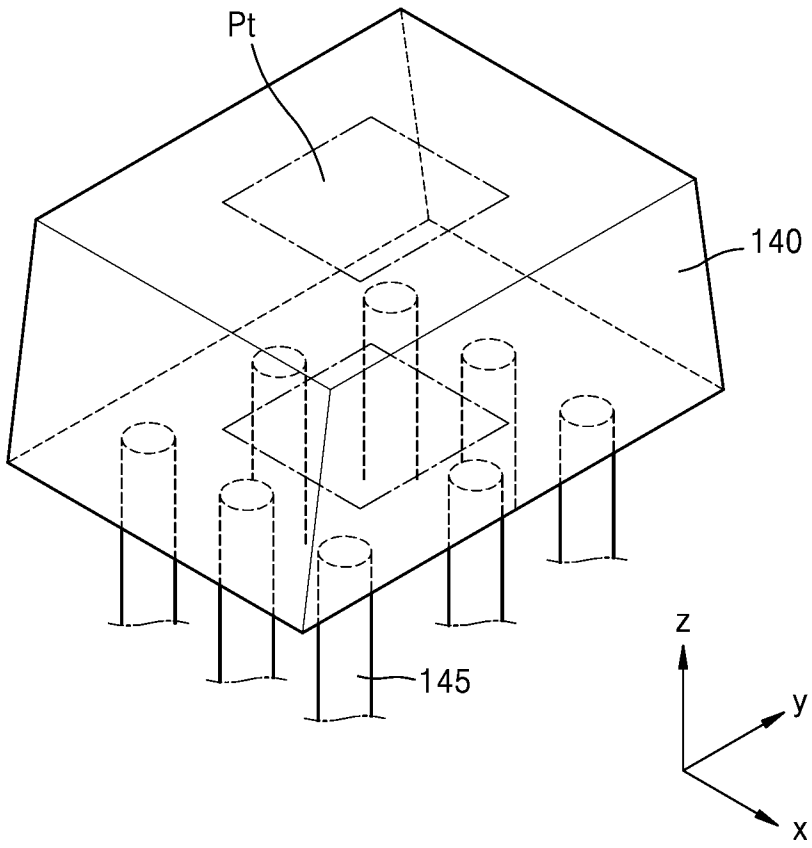


FIG. 4A

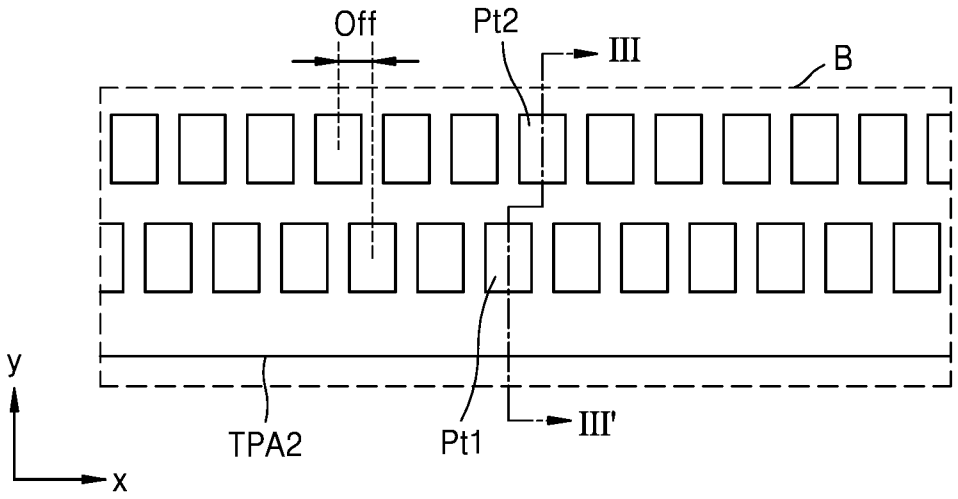


FIG. 4B

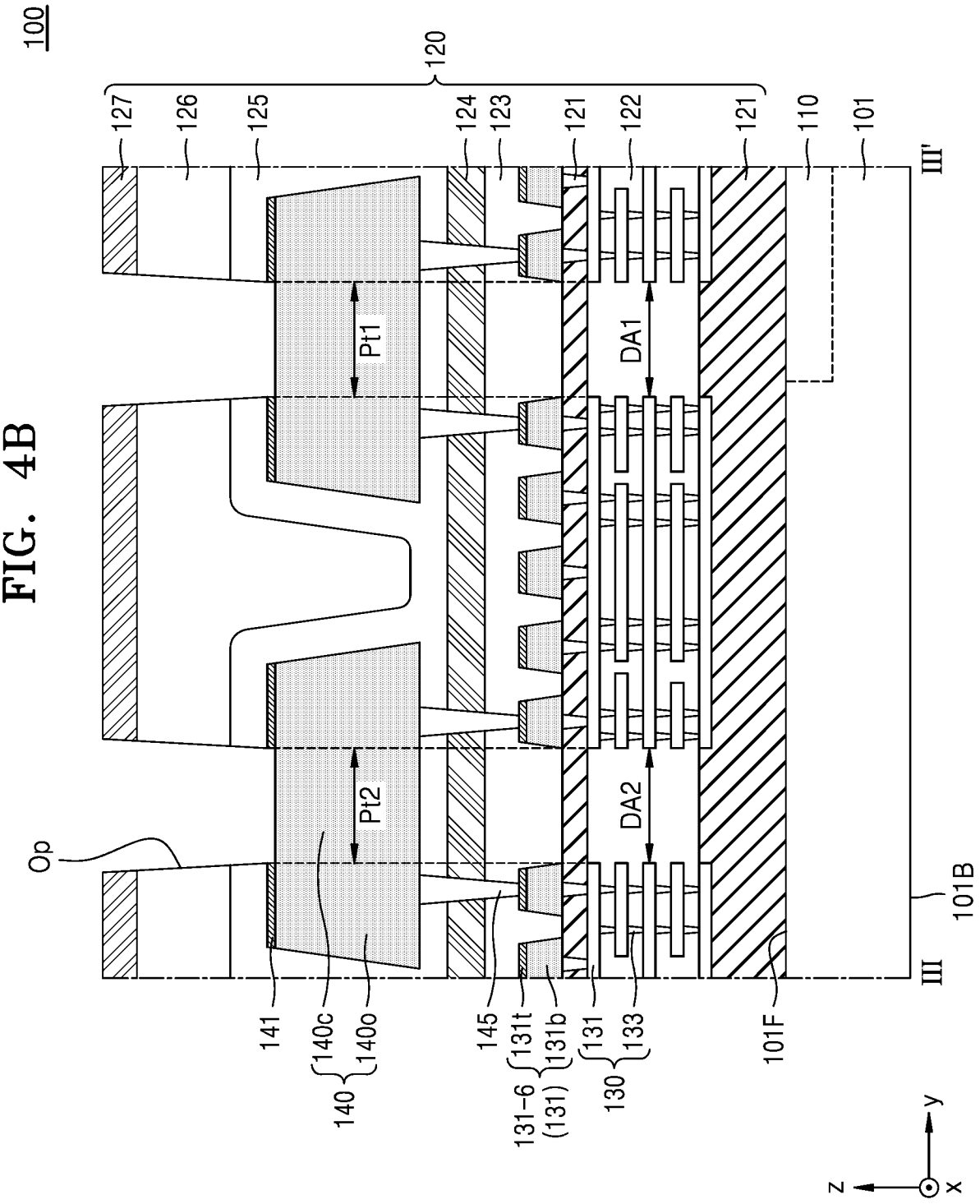

100
120
127
126
125
124
123
121
122
121
110
101
III'
Pt1
DA1
Op
Pt2
DA2
101B
III
141
140c
140o
140
145
131t
131b
131-6
(131)
131
133
130
101F
y
z
x

FIG. 5A

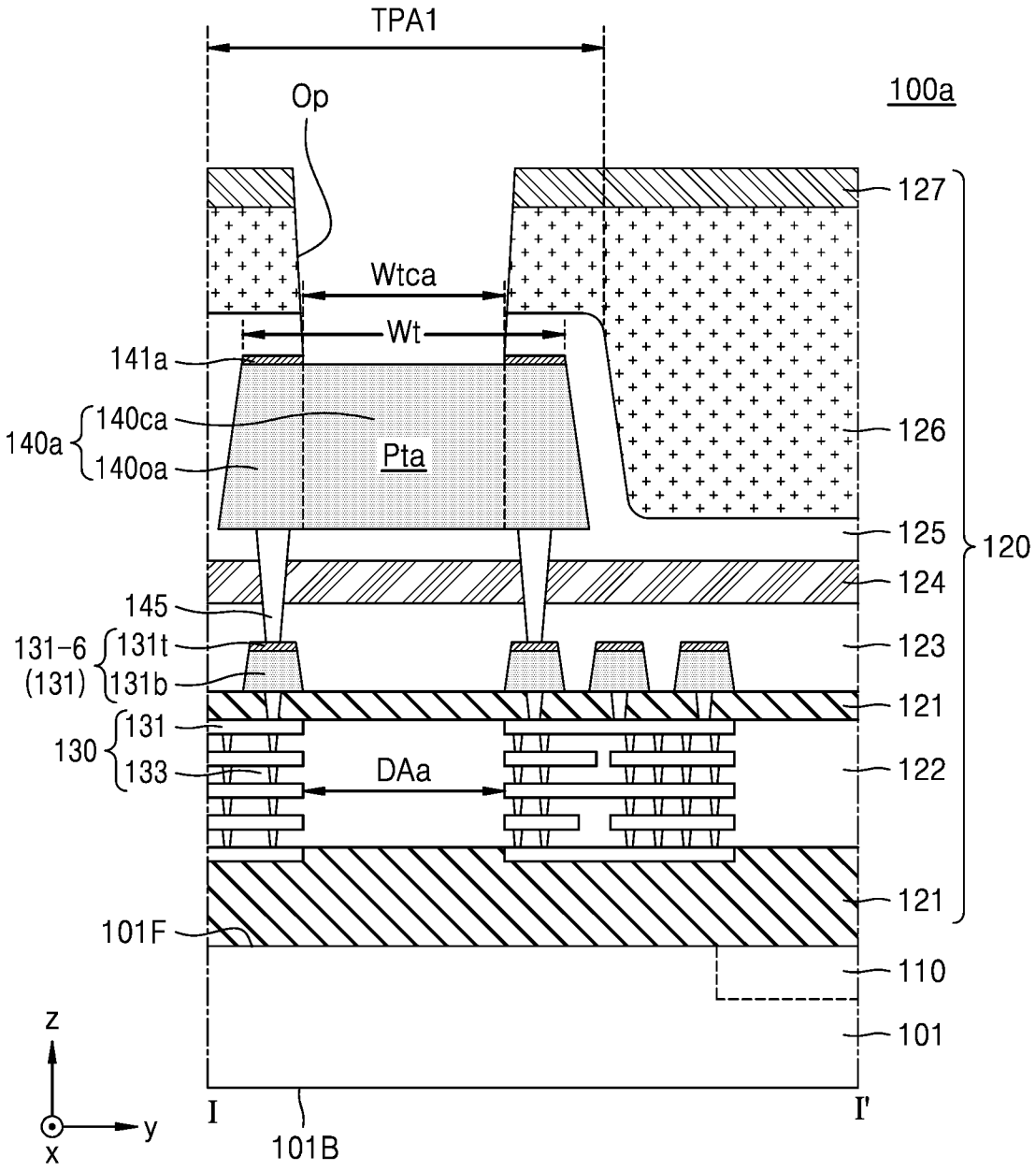

TPA1
Op
100a
127
Wtca
Wt
141a
140a
140ca
140oa
Pta
126
125
120
124
145
131-6
(131)
131t
131b
123
121
130
131
133
DAa
122
121
101F
110
101
z
y
x
I
I'
101B

FIG. 5B

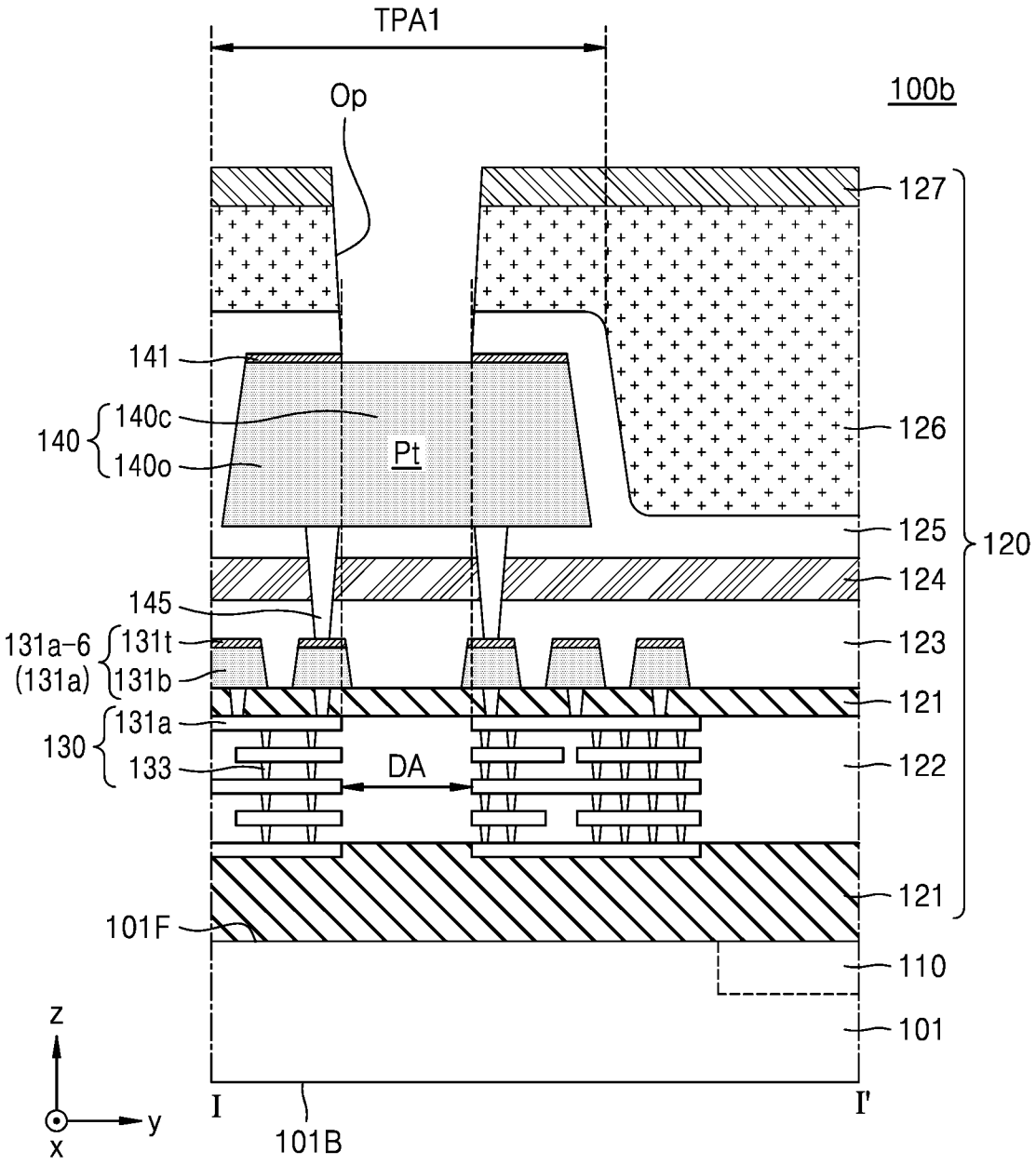

TPA1
Op
100b
127
141
140
140c
140o
Pt
126
125
120
124
145
131a-6
(131a)
131t
131b
123
121
130
131a
133
DA
122
121
101F
110
101
z
y
x
I
I'
101B

FIG. 6

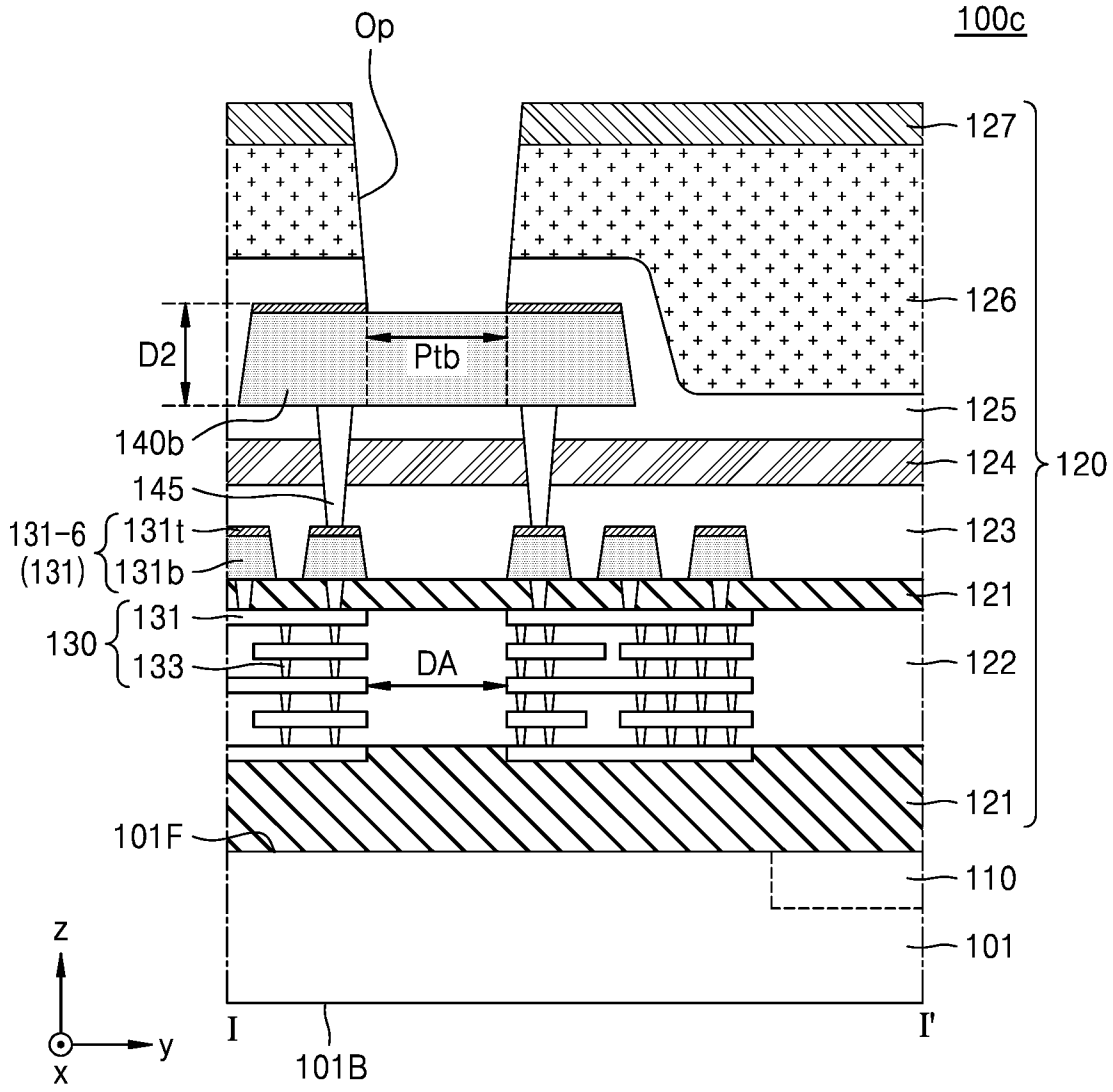

100c
Op
127
126
D2
Ptb
125
140b
124
120
145
131-6
(131)
131t
131b
123
121
130
131
133
DA
122
121
101F
110
101
z
y
x
I
I'
101B

FIG. 7

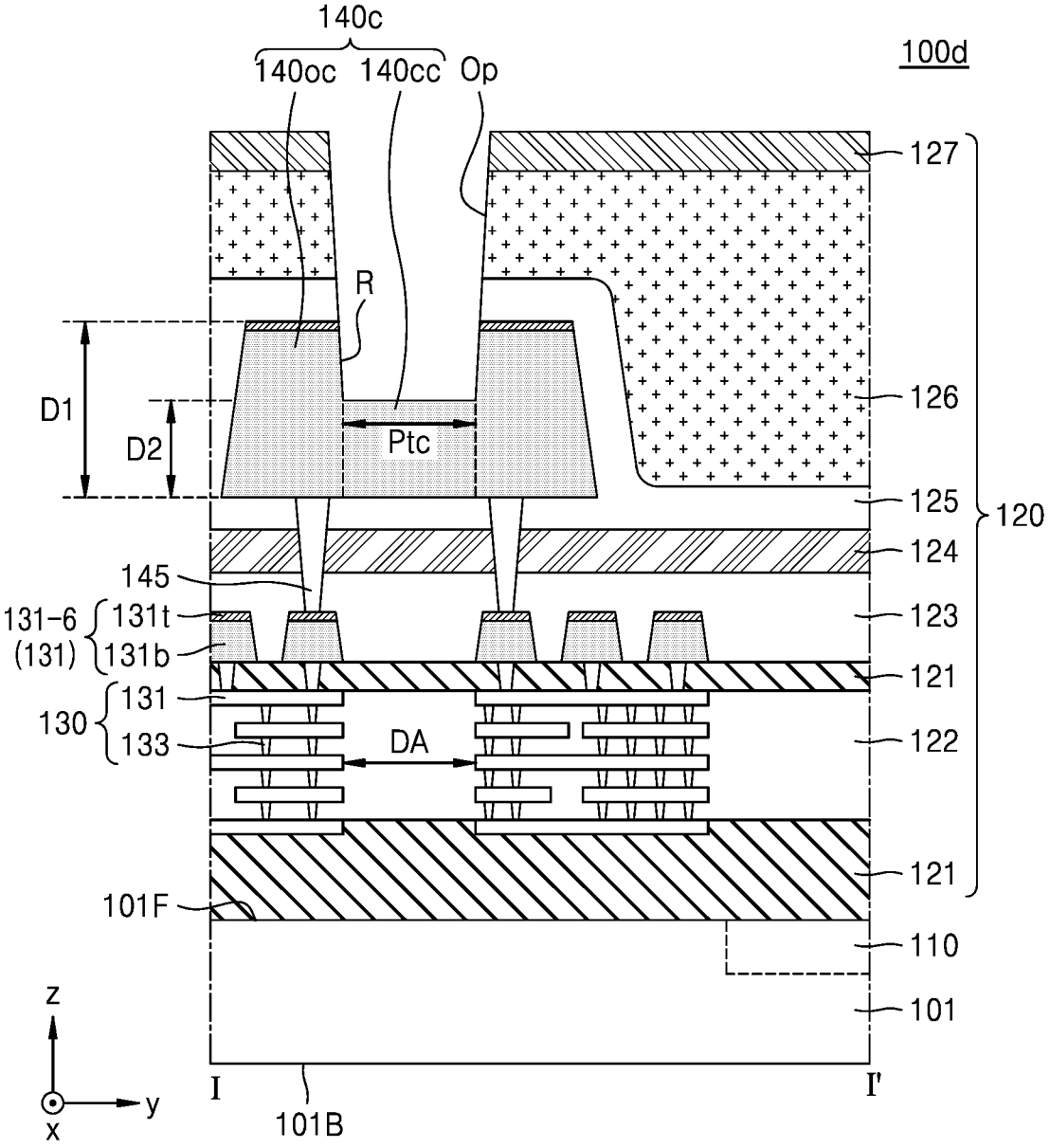

140c
140oc
140cc
Op
100d
127
R
D1
D2
Ptc
126
125
120
124
145
131-6
(131)
131t
131b
123
121
130
131
133
DA
122
121
101F
110
101
z
y
x
I
I'
101B

FIG. 8

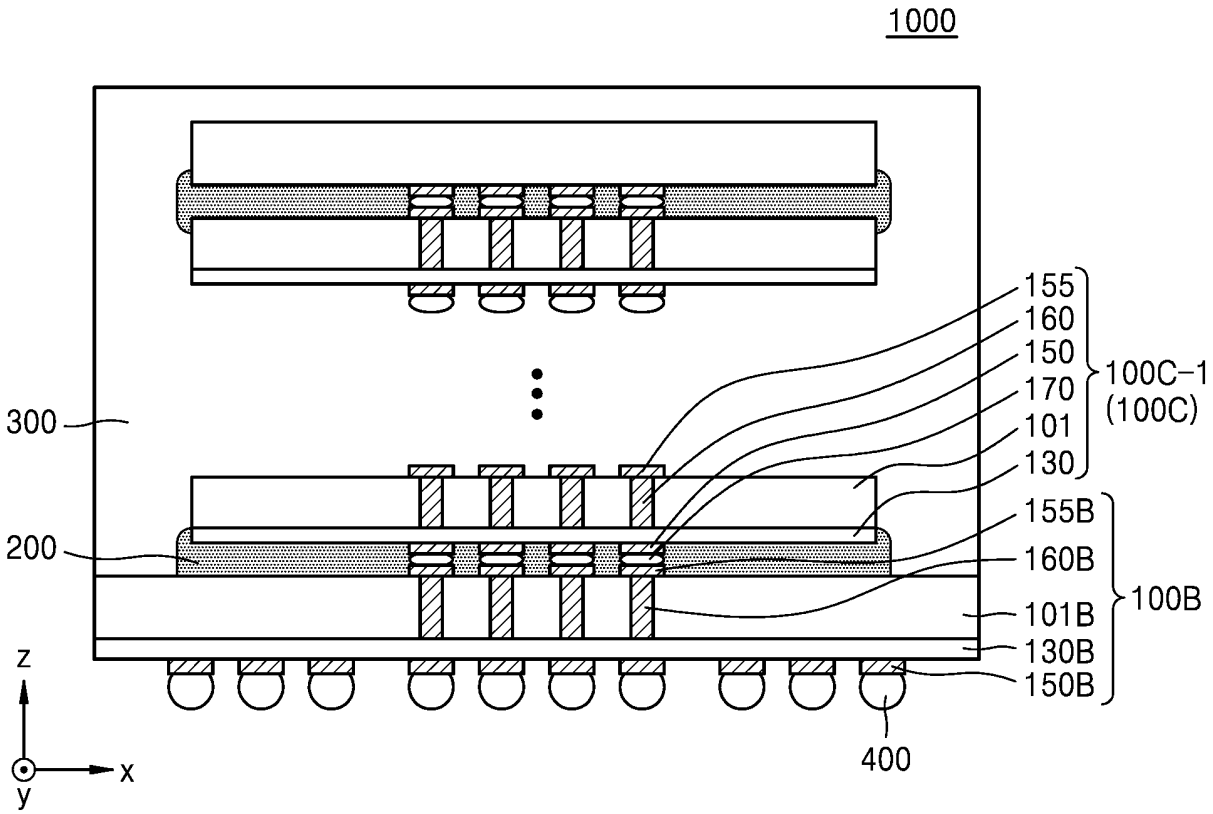

1000
155
160
150
170
101
130
100C-1
(100C)
155B
160B
101B
130B
150B
100B
300
200
400
z
x
y

FIG. 9A

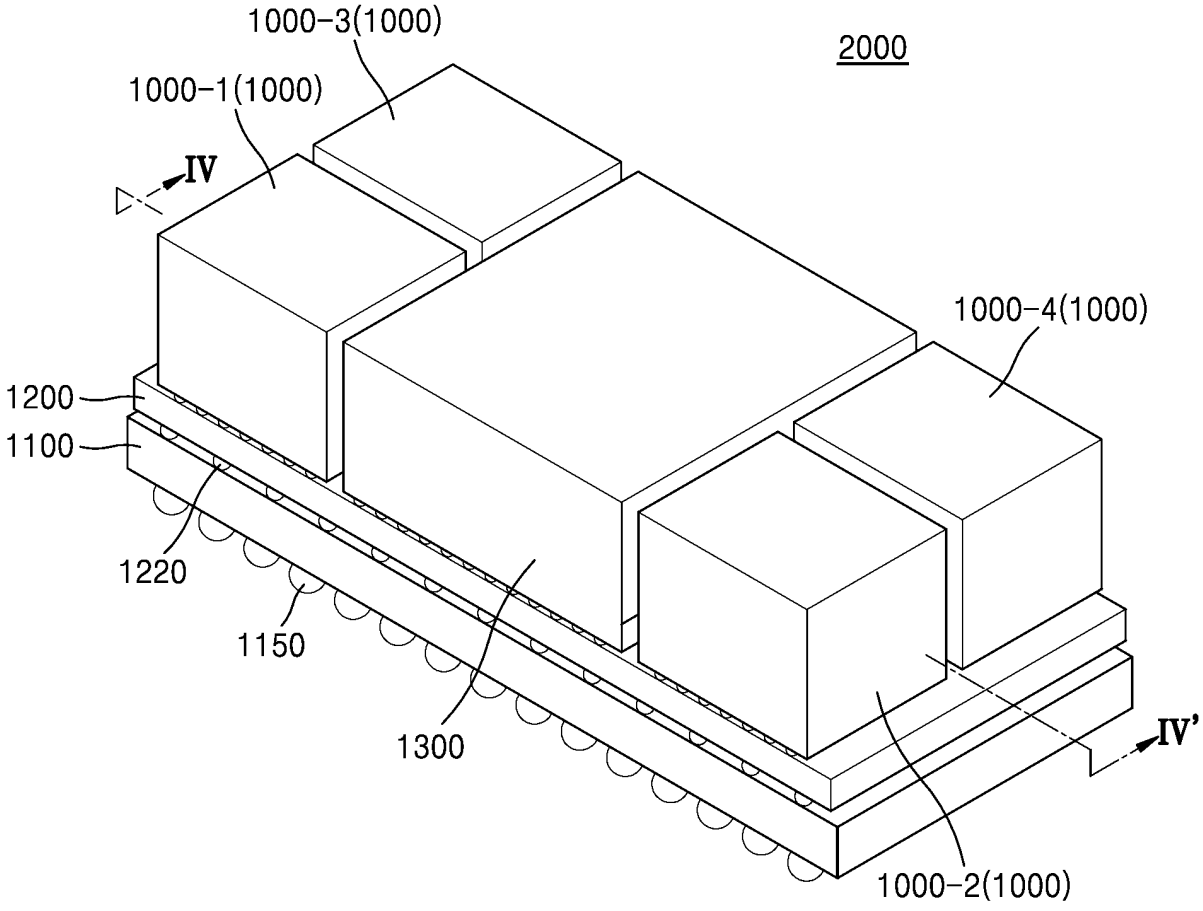
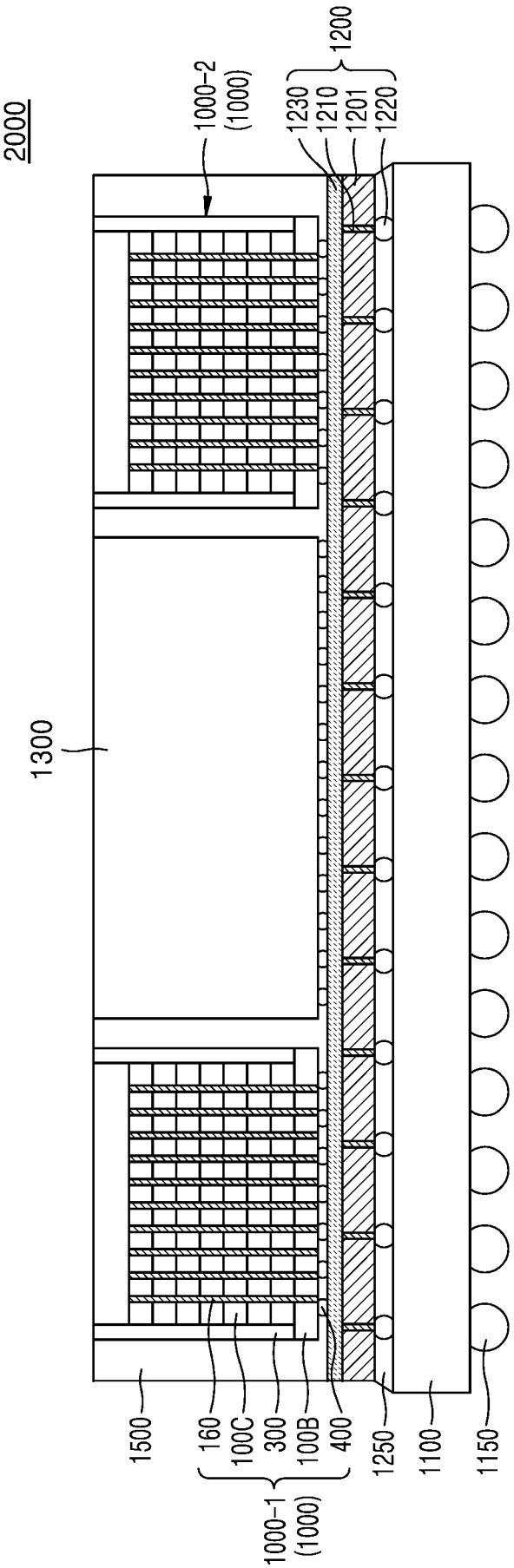

1000-3(1000)
2000
1000-1(1000)
IV
1000-4(1000)
1200
1100
1220
1150
1300
IV'
1000-2(1000)

FIG. 9B


2000
1000-2
(1000)
1200
1230
1210
1201
1220
1300
1500
160
100C
300
100B
400
1250
1100
1150
1000-1
(1000)