FIG.1

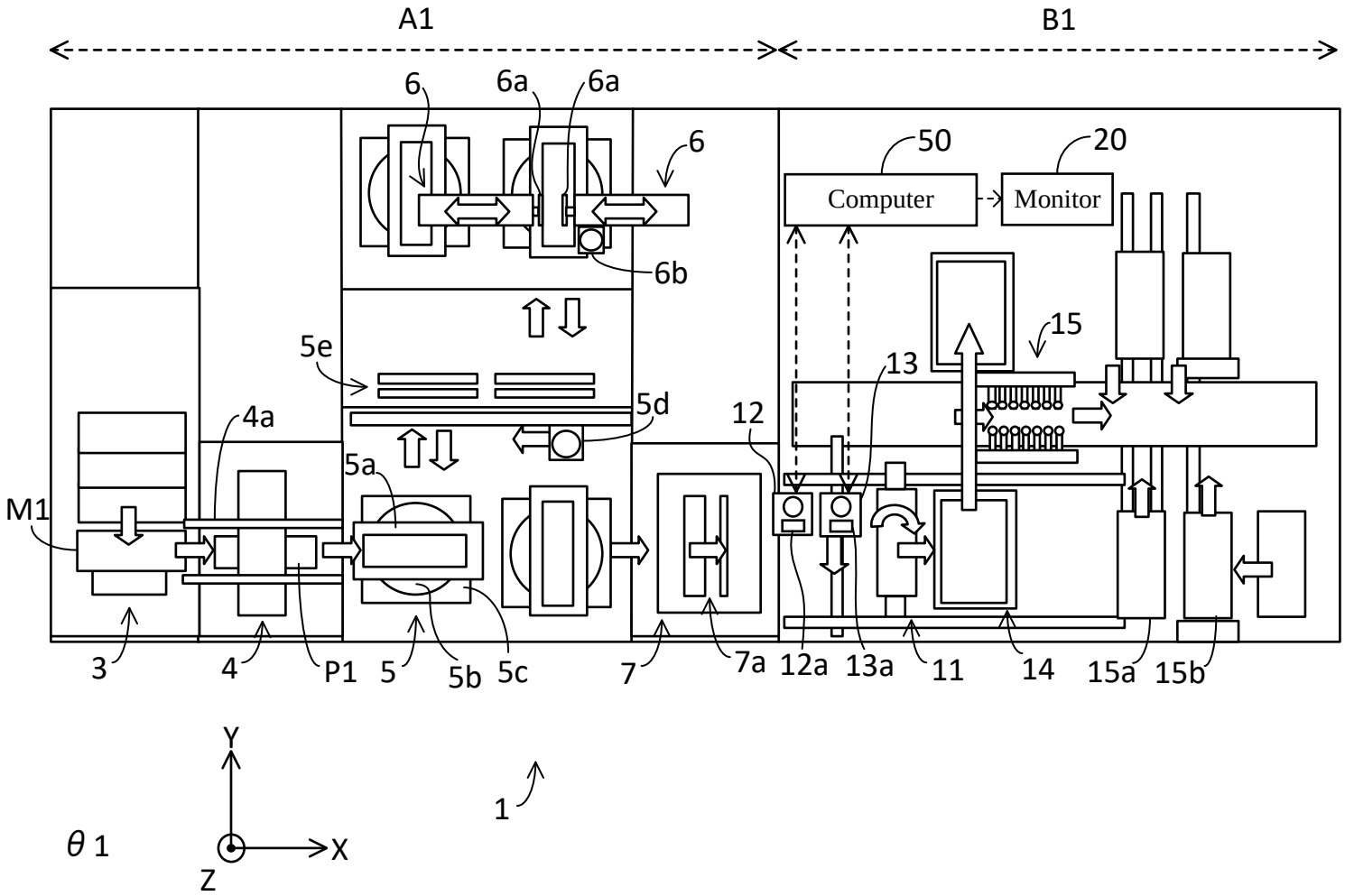

A1
B1
6
6a
6a
6
6b
50
20
Computer
Monitor
15
13
5e
5d
12
4a
5a
M1
3
4
P1
5
5b
5c
7
7a
12a
13a
11
14
15a
15b
Y
X
Z
θ1
1

FIG.2

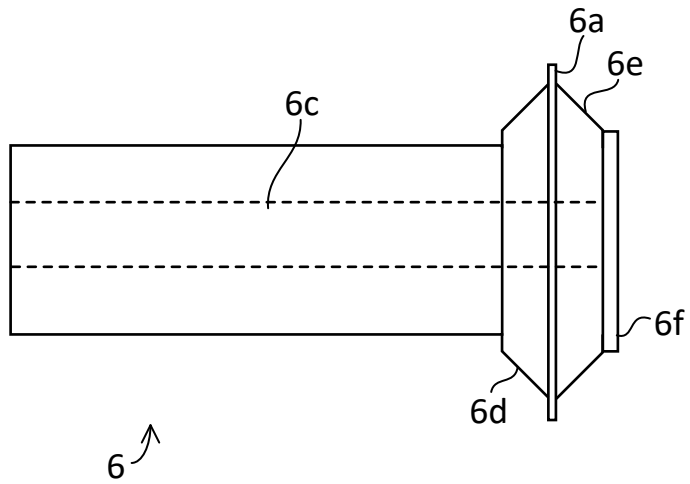


FIG.3

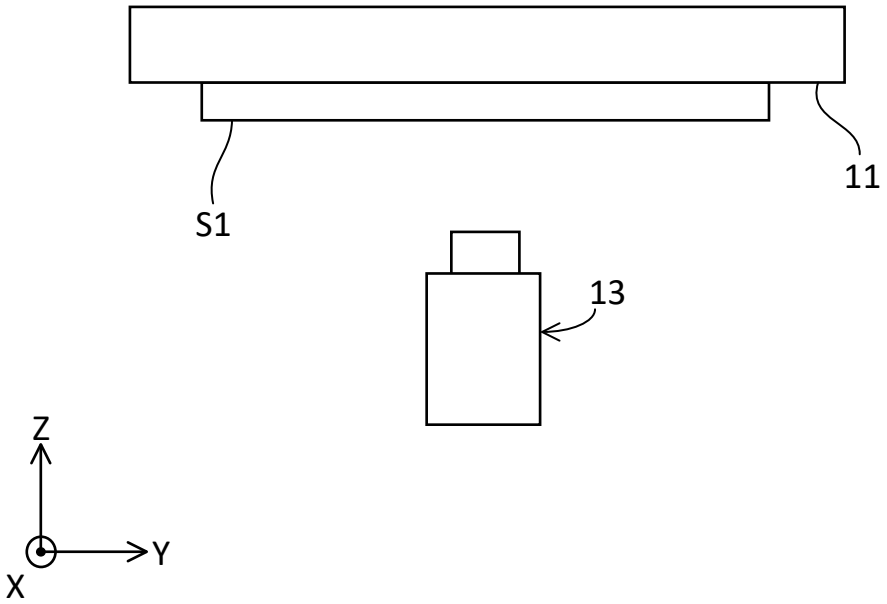


FIG.4

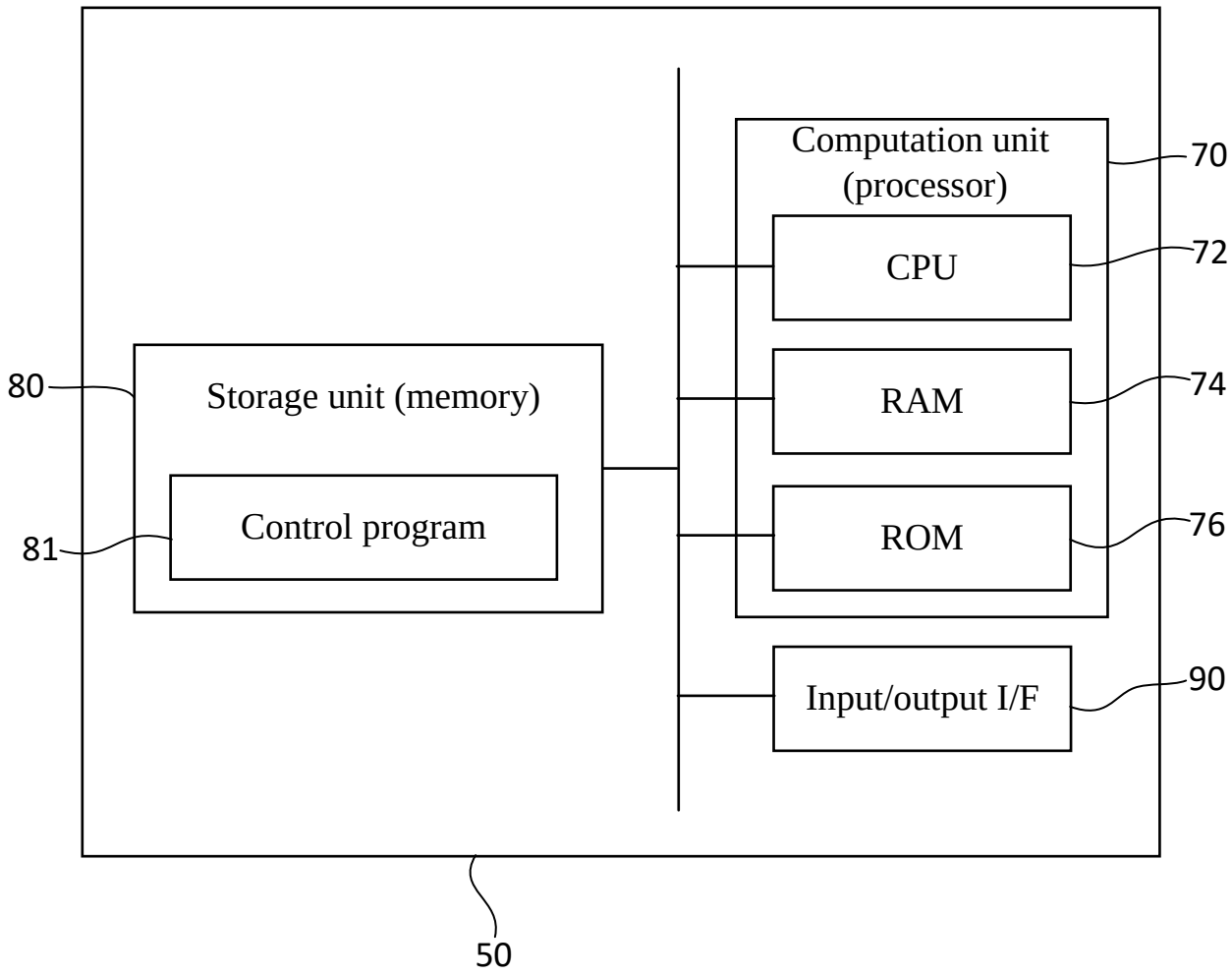

Computation unit
(processor)
70
CPU
72
RAM
74
ROM
76
Input/output I/F
90
80
Storage unit (memory)
81
Control program
50

FIG.5

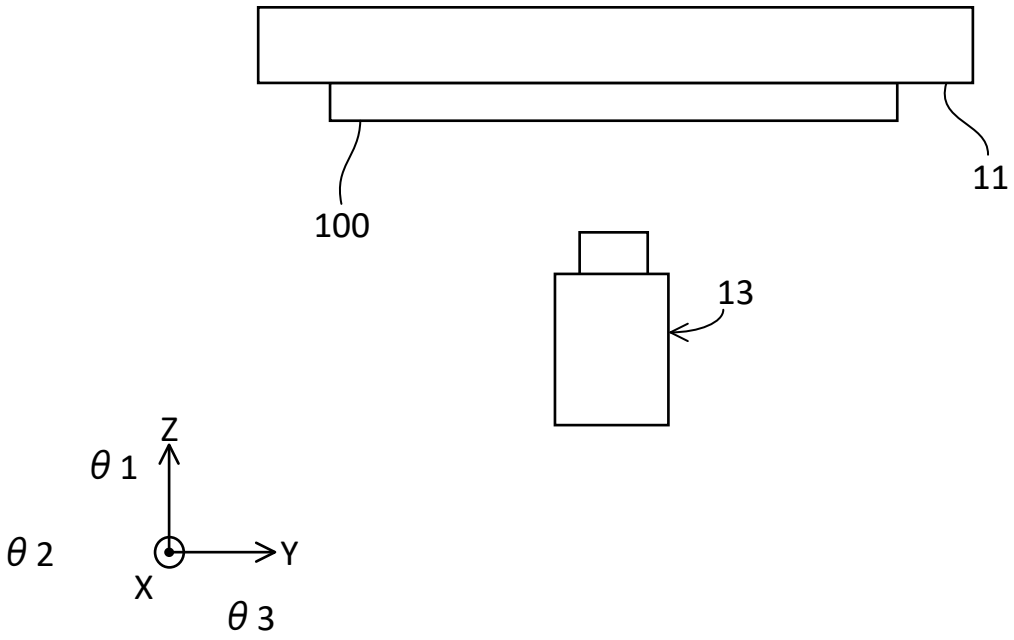


FIG.6

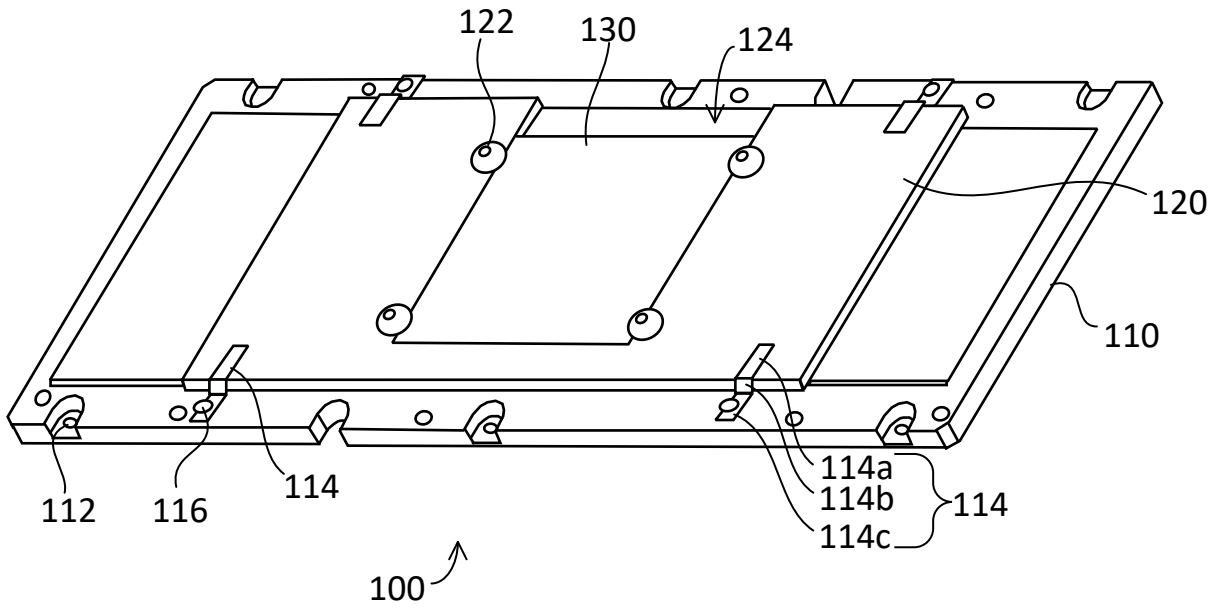


FIG.7

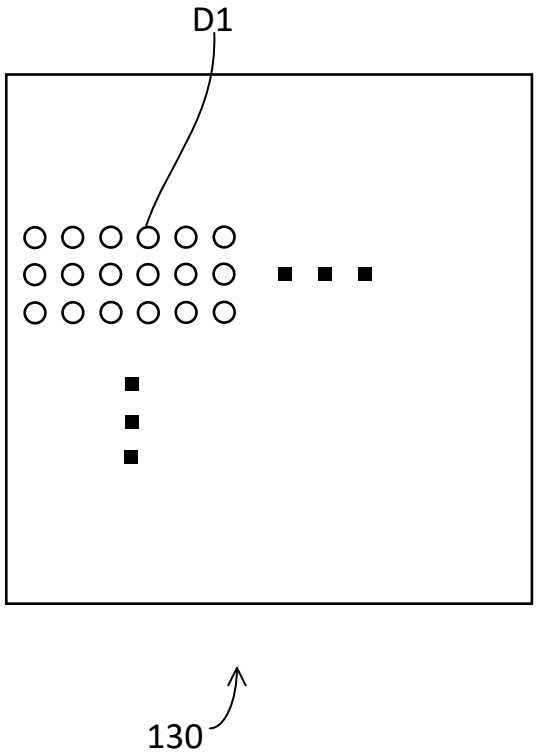


FIG.8

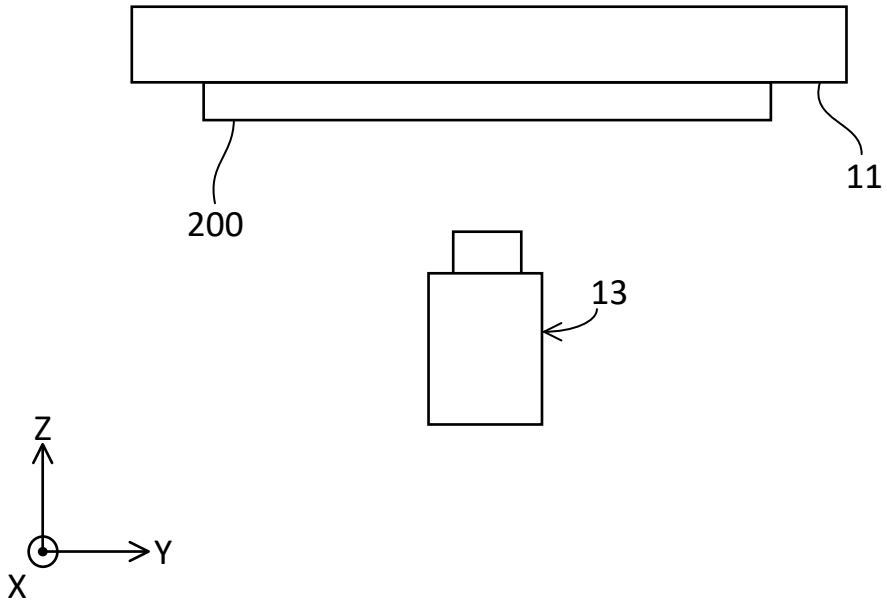


FIG.9

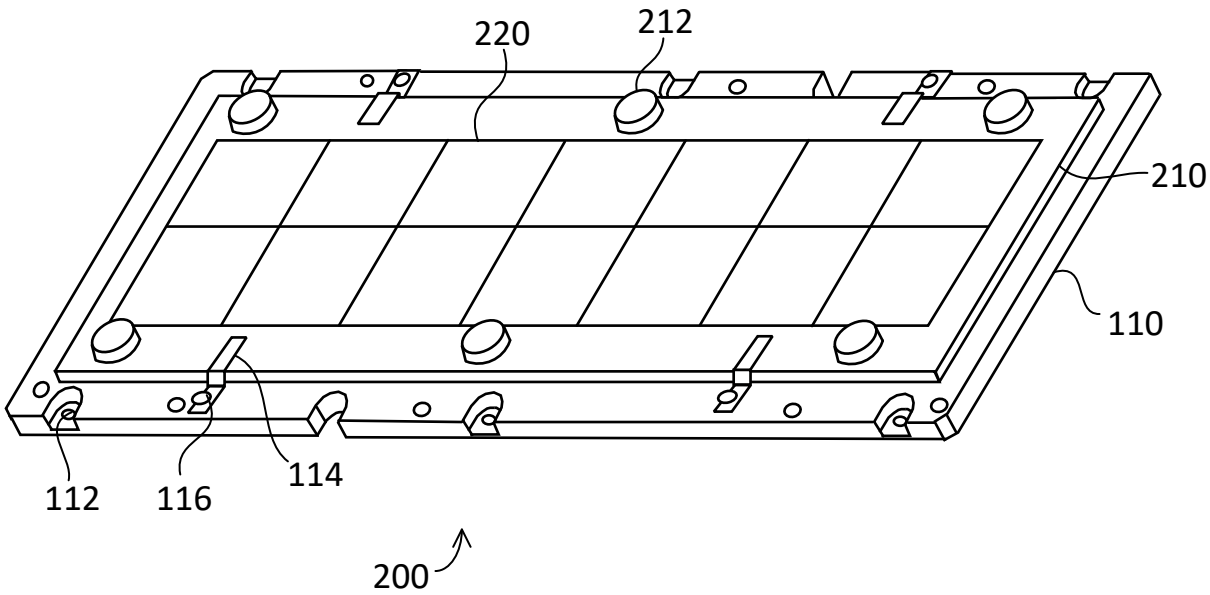


FIG.10

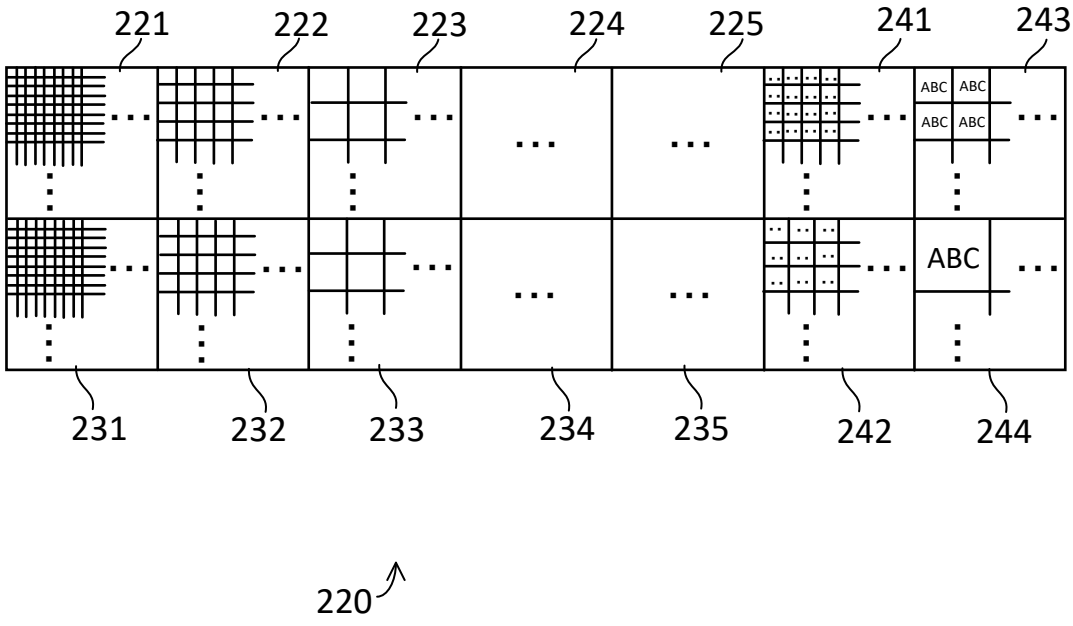

221
222
223
224
225
241
243
ABC
ABC
ABC
ABC
ABC
231
232
233
234
235
242
244
220

FIG.11

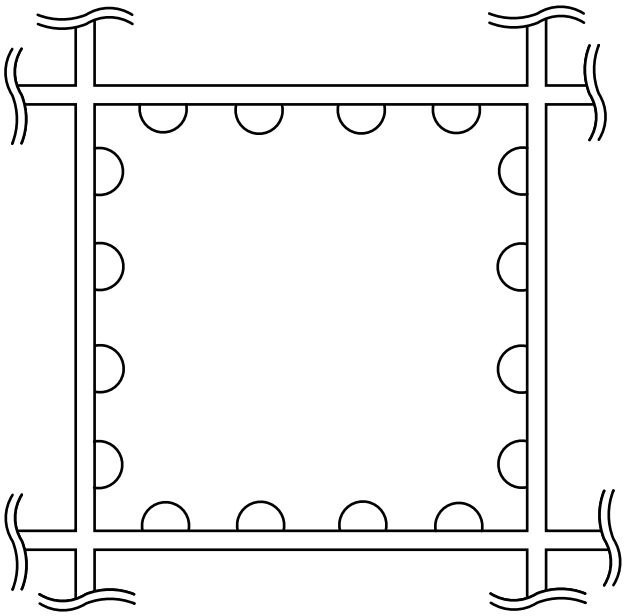


FIG.12

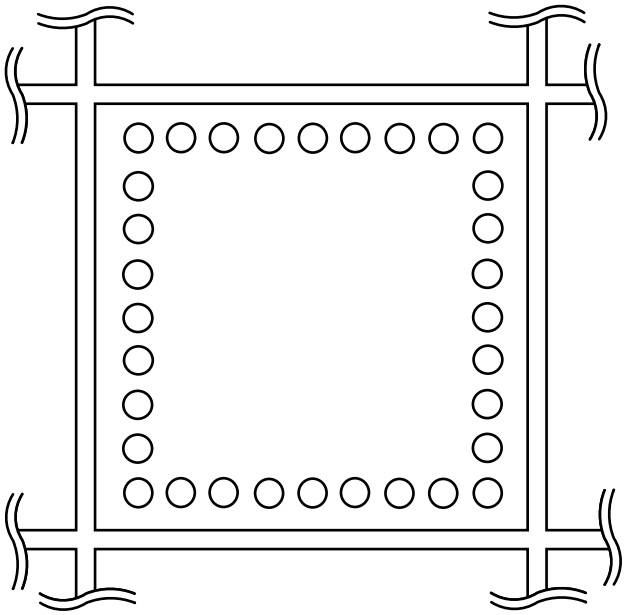


FIG.13

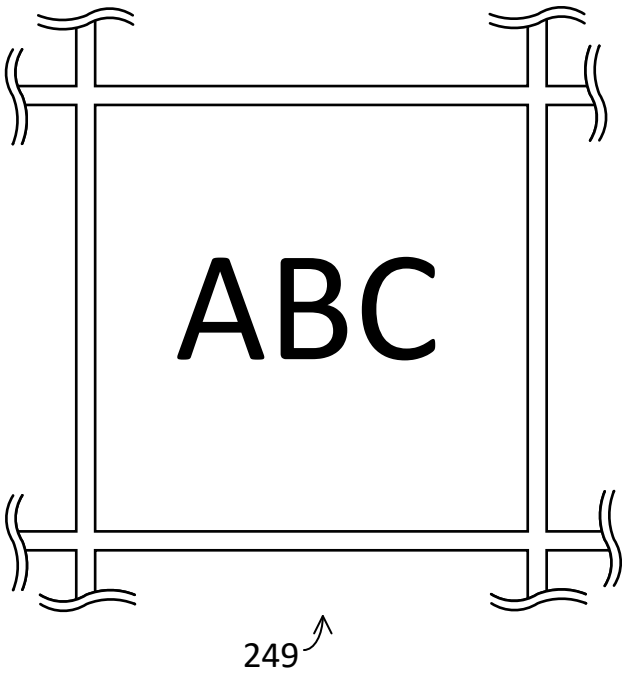


FIG.14

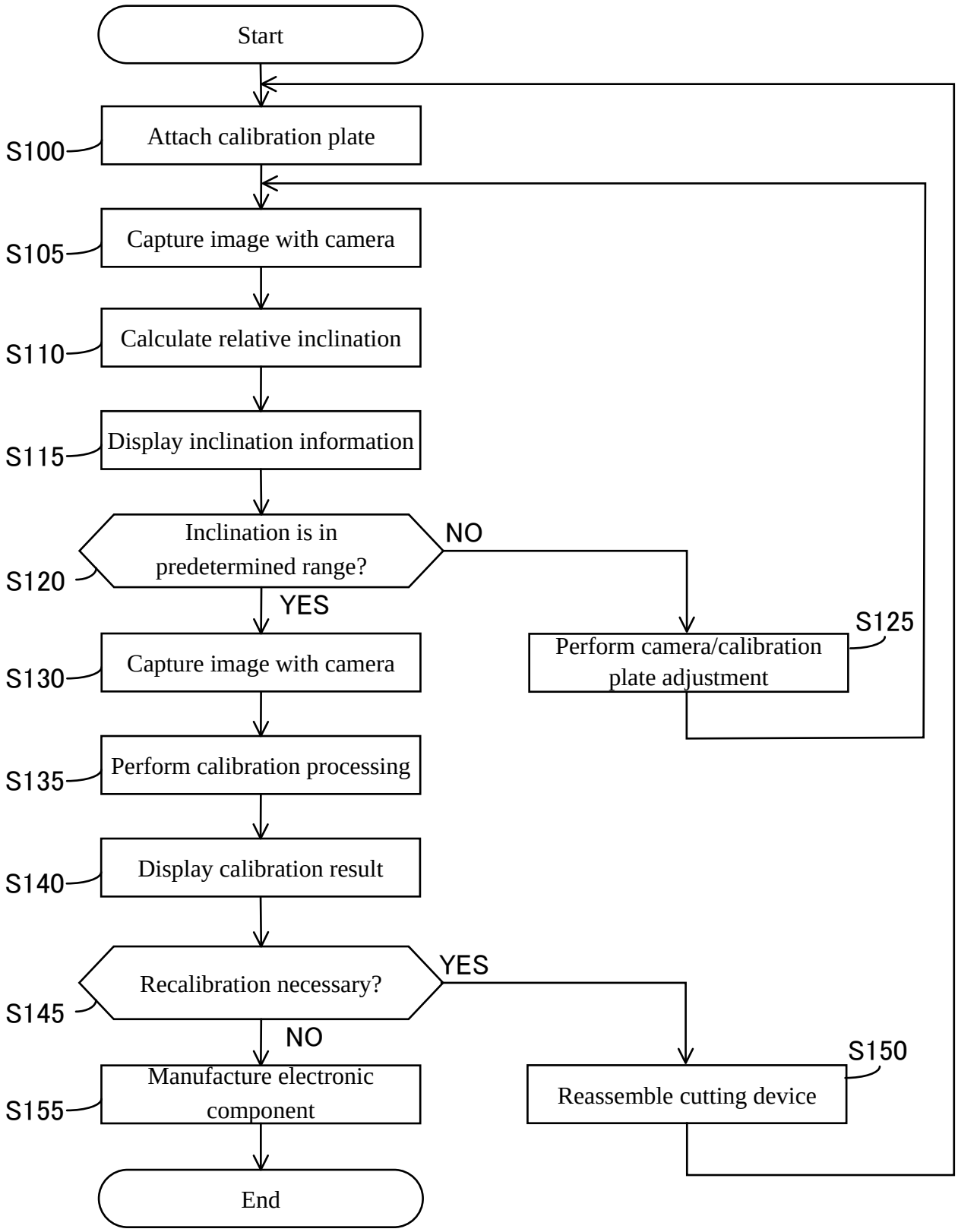
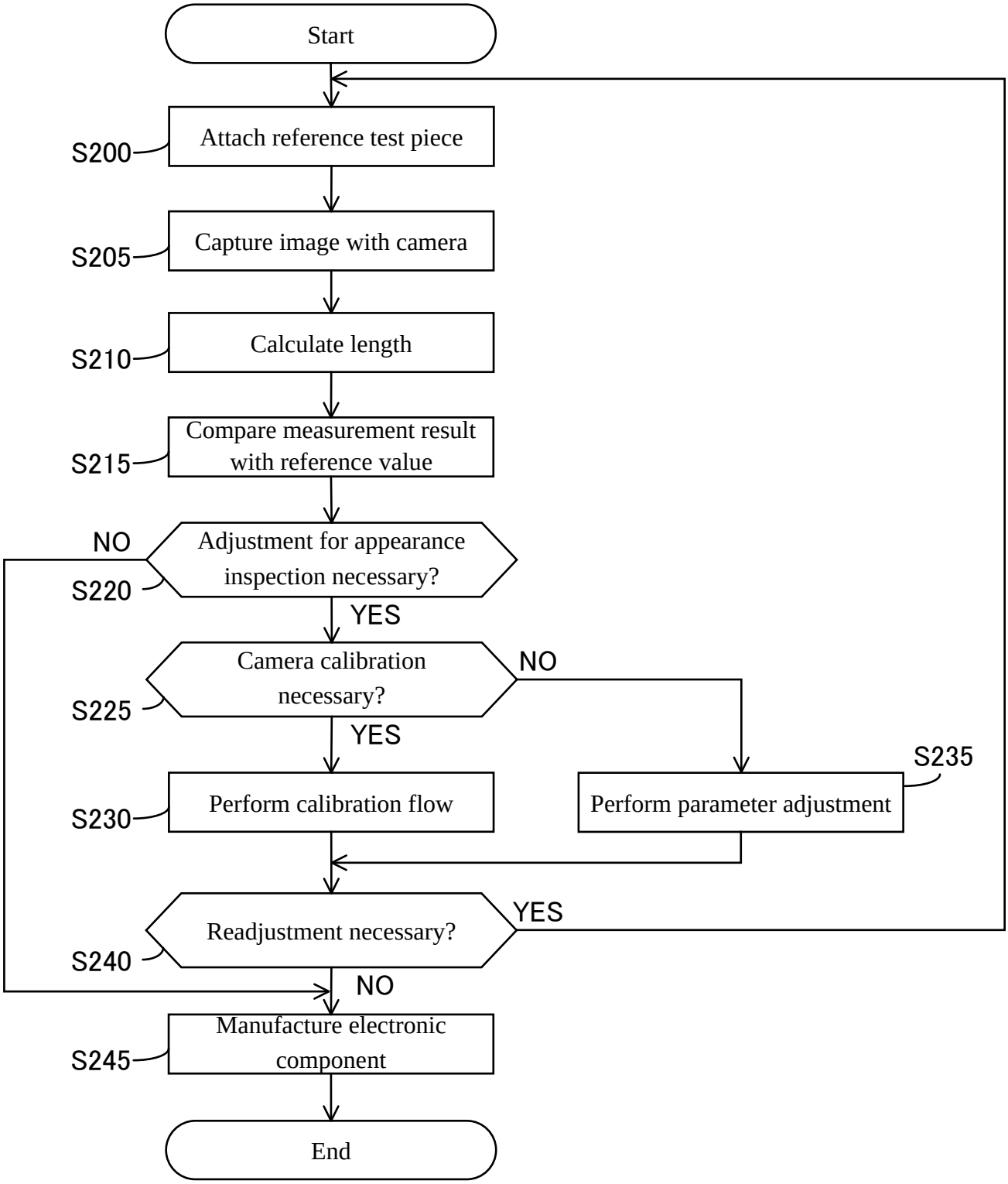

Start
S100
Attach calibration plate
S105
Capture image with camera
S110
Calculate relative inclination
S115
Display inclination information
S120
Inclination is in predetermined range?
NO
YES
S125
Perform camera/calibration plate adjustment
S130
Capture image with camera
S135
Perform calibration processing
S140
Display calibration result
S145
Recalibration necessary?
YES
NO
S150
Reassemble cutting device
S155
Manufacture electronic component
End

FIG.15


Start
S200
Attach reference test piece
S205
Capture image with camera
S210
Calculate length
S215
Compare measurement result with reference value
NO
S220
Adjustment for appearance inspection necessary?
YES
S225
Camera calibration necessary?
NO
YES
S230
Perform calibration flow
S235
Perform parameter adjustment
S240
Readjustment necessary?
YES
NO
S245
Manufacture electronic component
End