FIG. 1

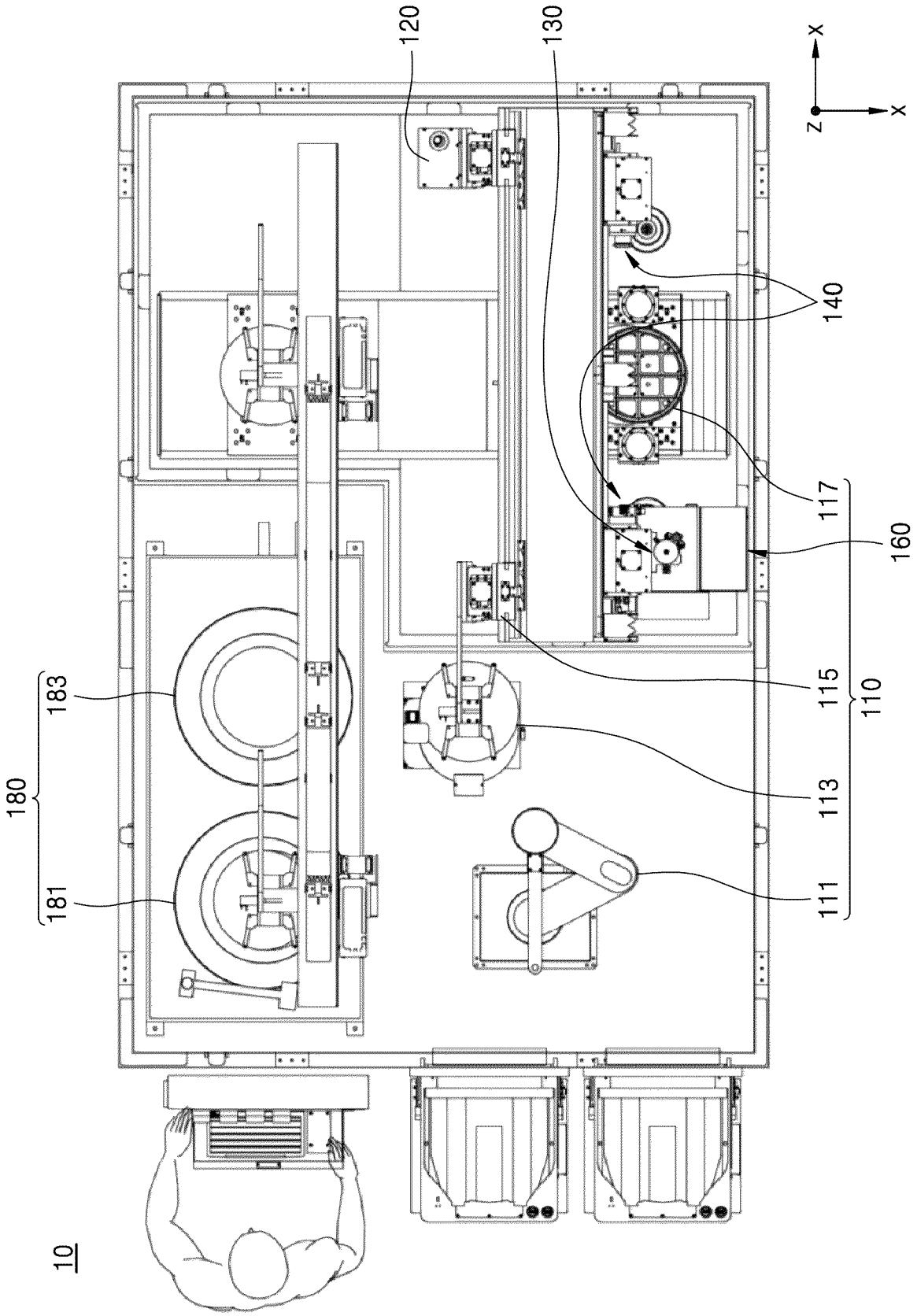


FIG. 2

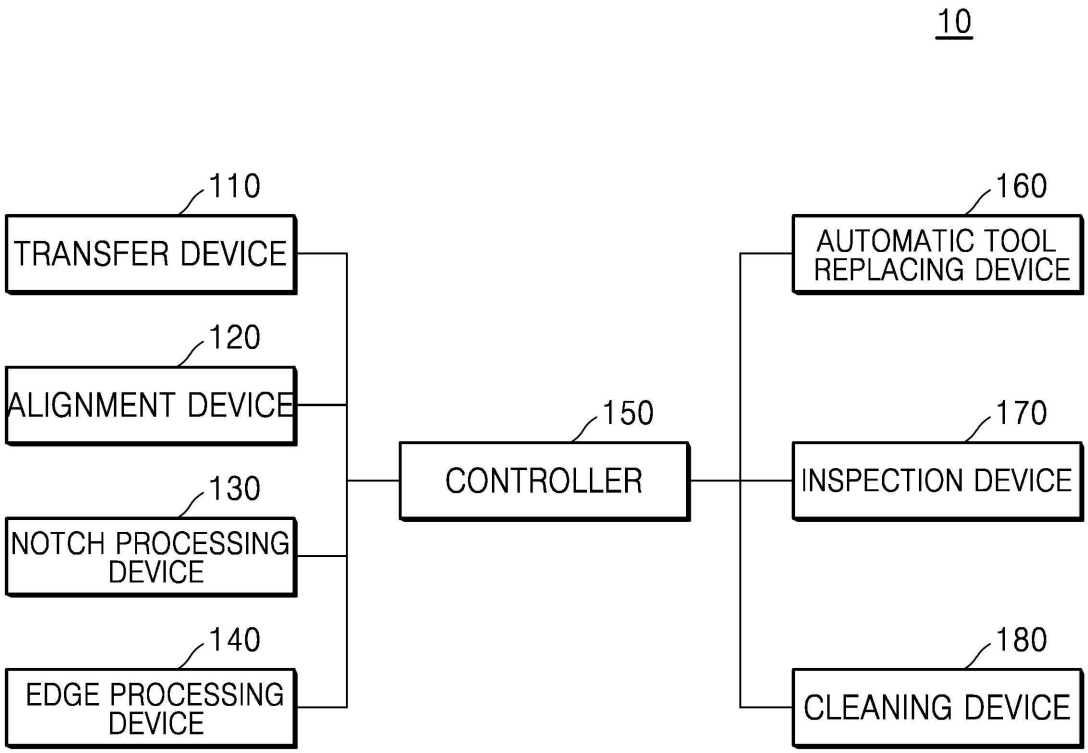

10
110
TRANSFER DEVICE
120
ALIGNMENT DEVICE
130
NOTCH PROCESSING DEVICE
140
EDGE PROCESSING DEVICE
150
CONTROLLER
160
AUTOMATIC TOOL REPLACING DEVICE
170
INSPECTION DEVICE
180
CLEANING DEVICE

FIG. 3

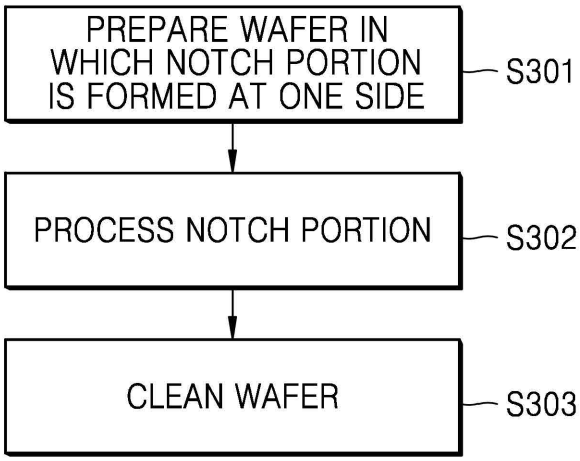

PREPARE WAFER IN WHICH NOTCH PORTION IS FORMED AT ONE SIDE
S301
PROCESS NOTCH PORTION
S302
CLEAN WAFER
S303

FIG. 4A

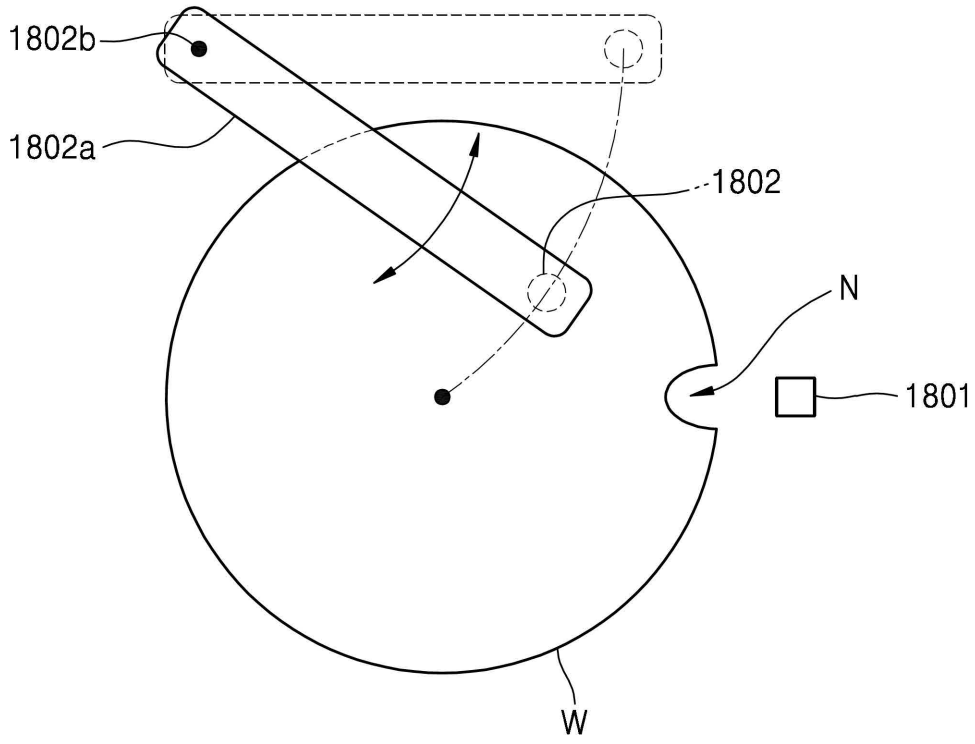


FIG. 4B

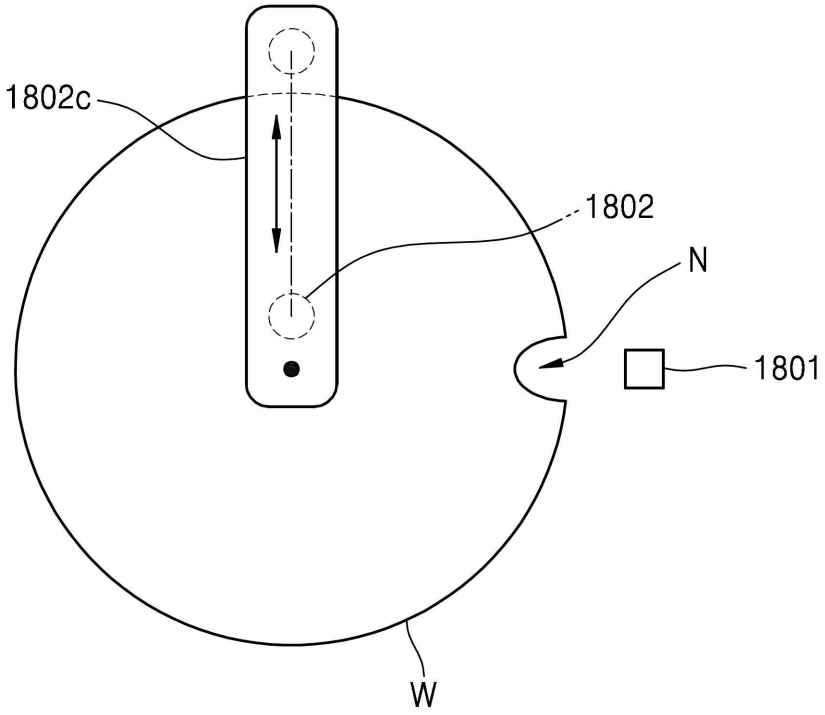


FIG. 5A

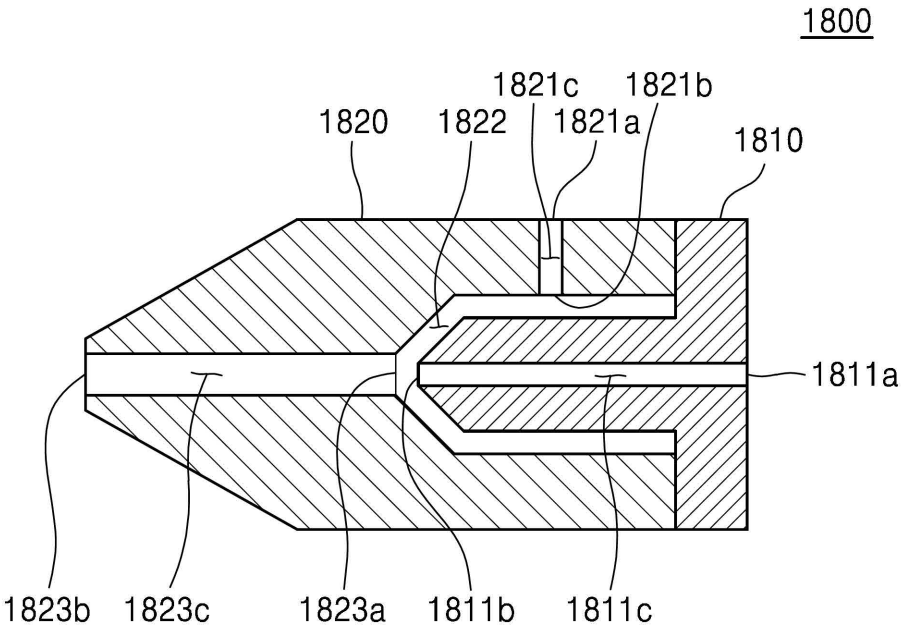

1800
1821c
1821b
1820
1822
1821a
1810
1811a
1823b
1823c
1823a
1811b
1811c

FIG. 5B

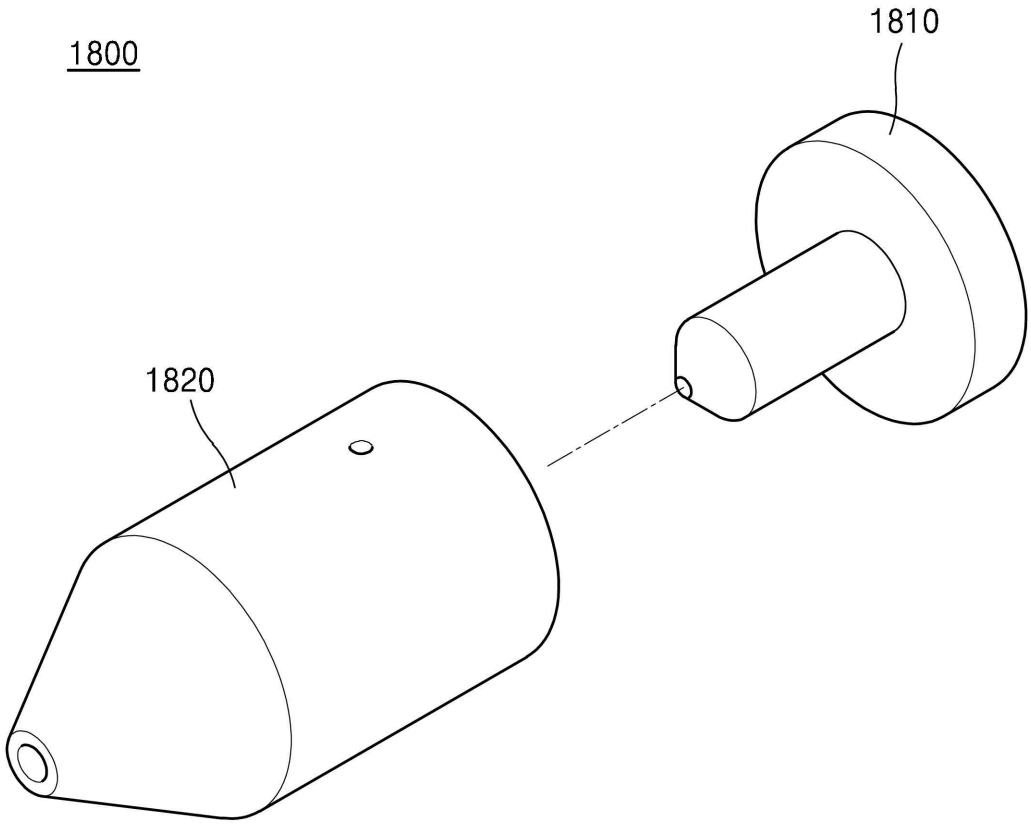


FIG. 6

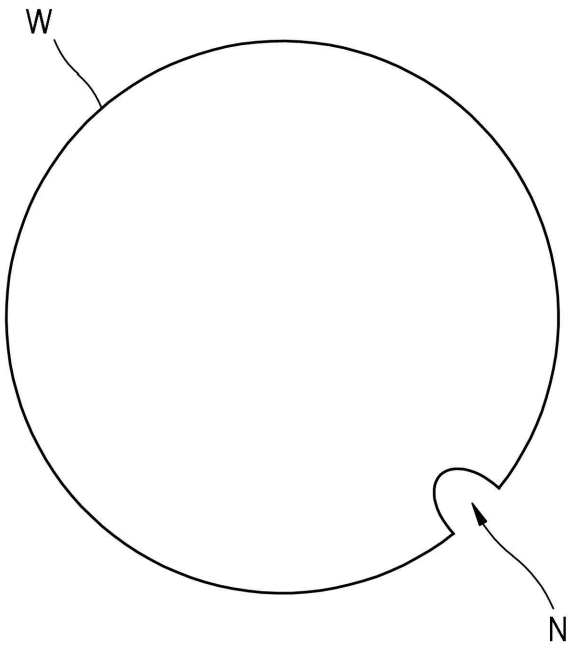


FIG. 7

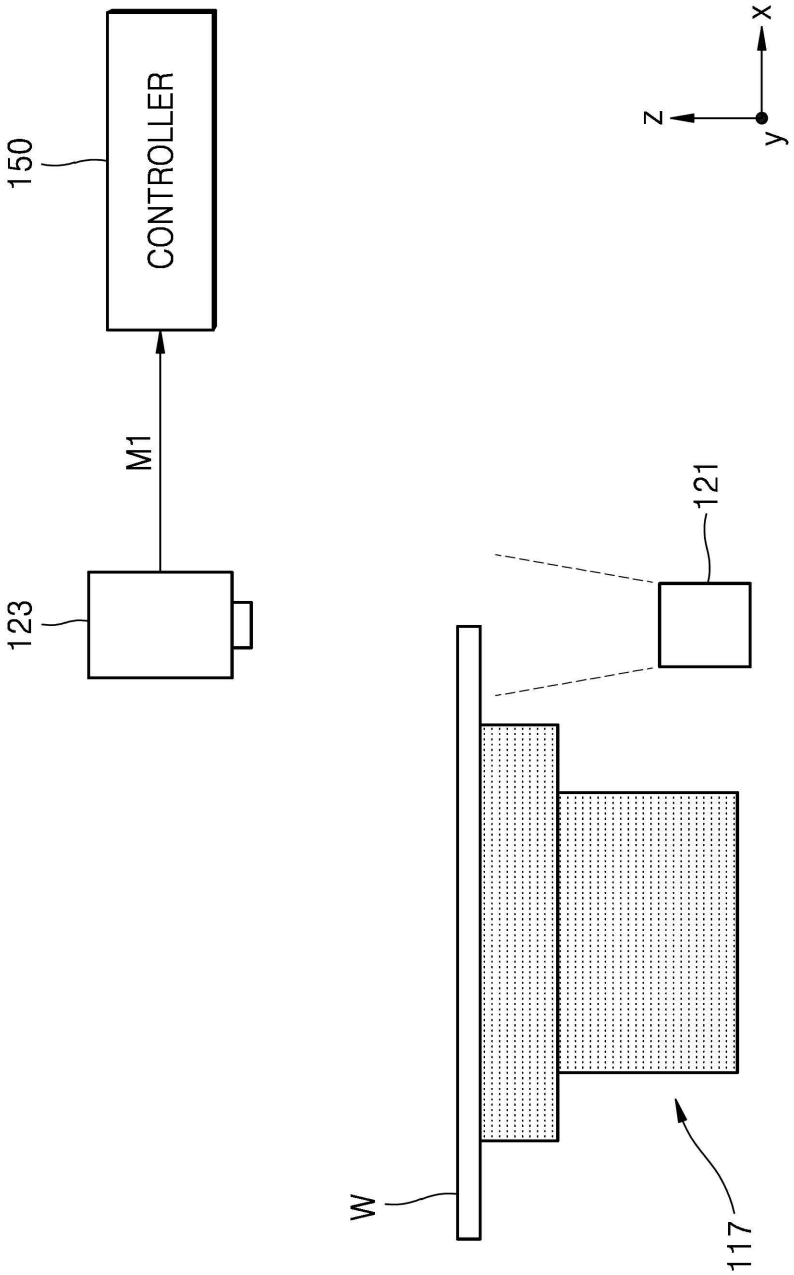


FIG. 8

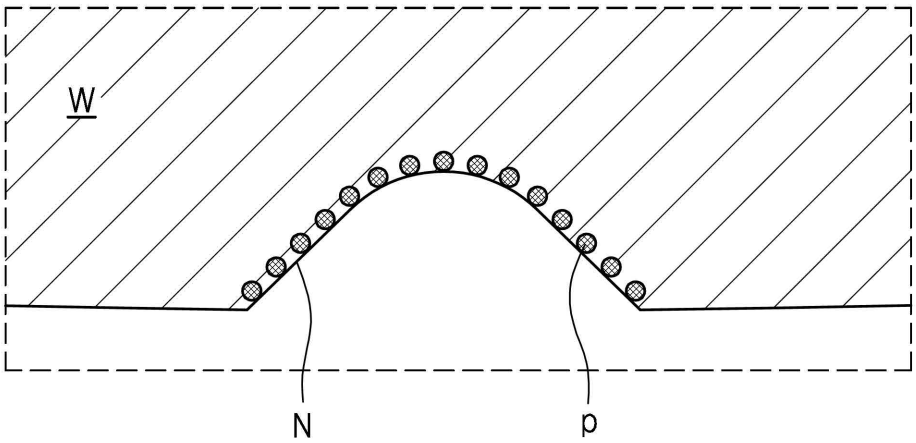


FIG. 9

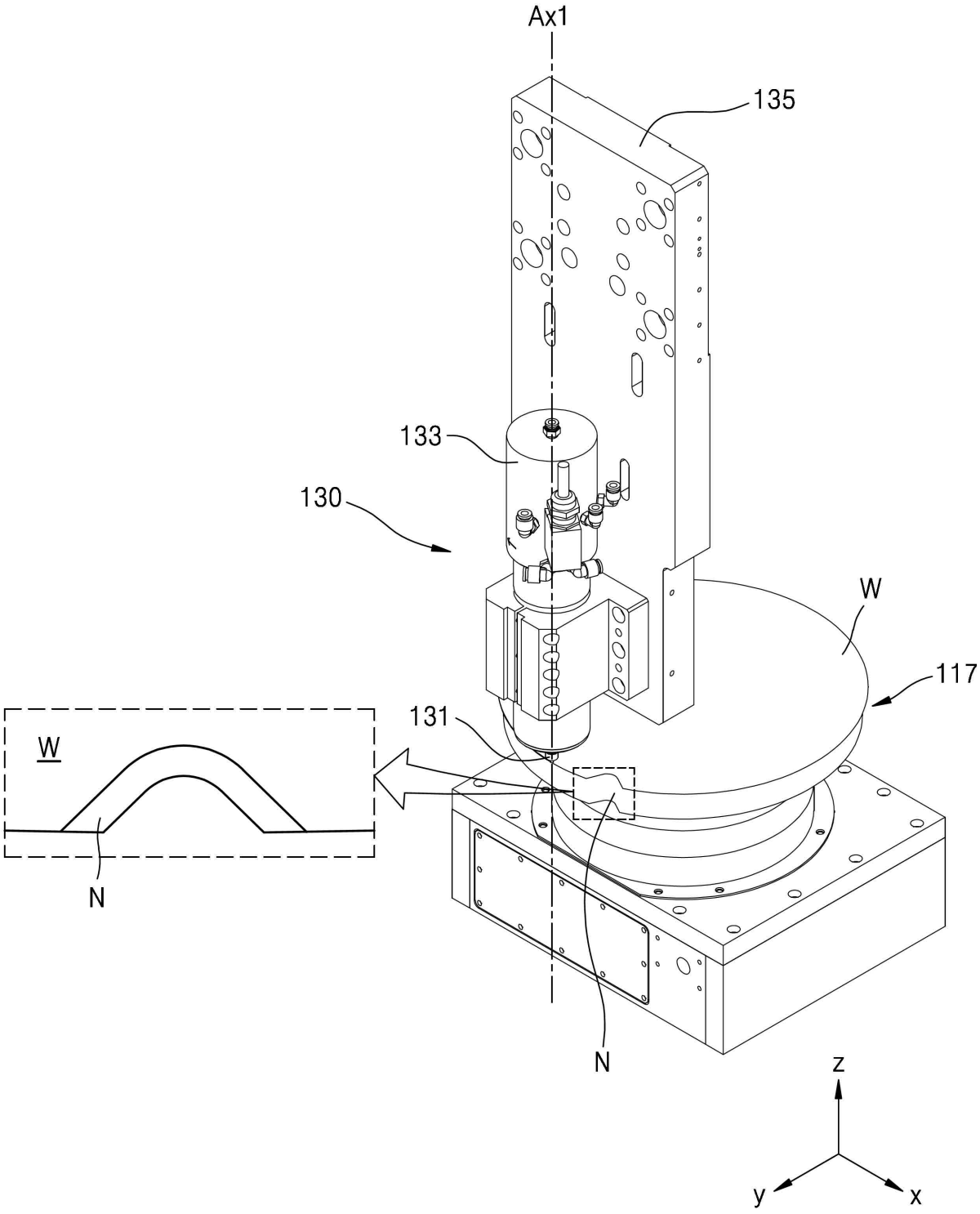


FIG. 10

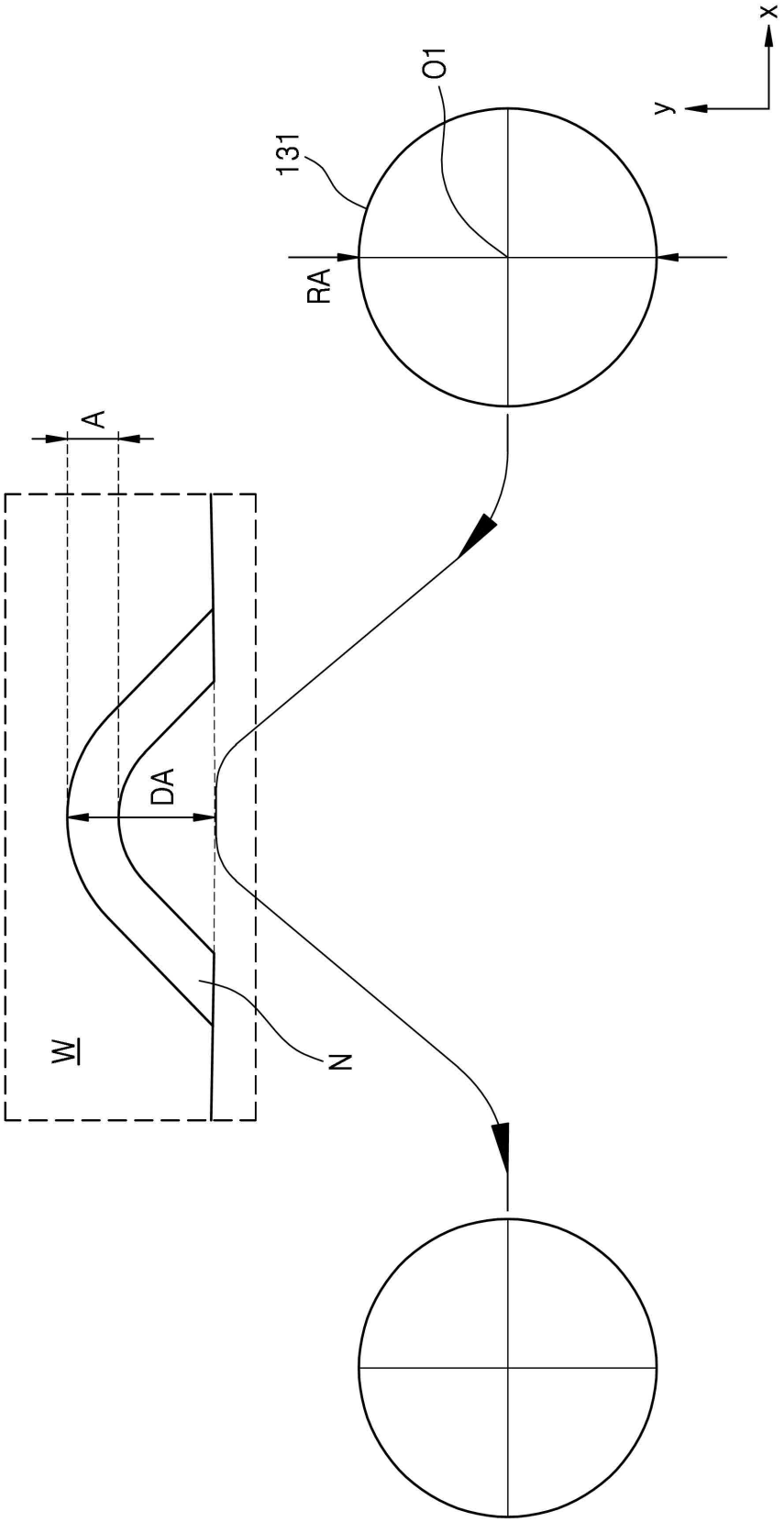


FIG. 11A

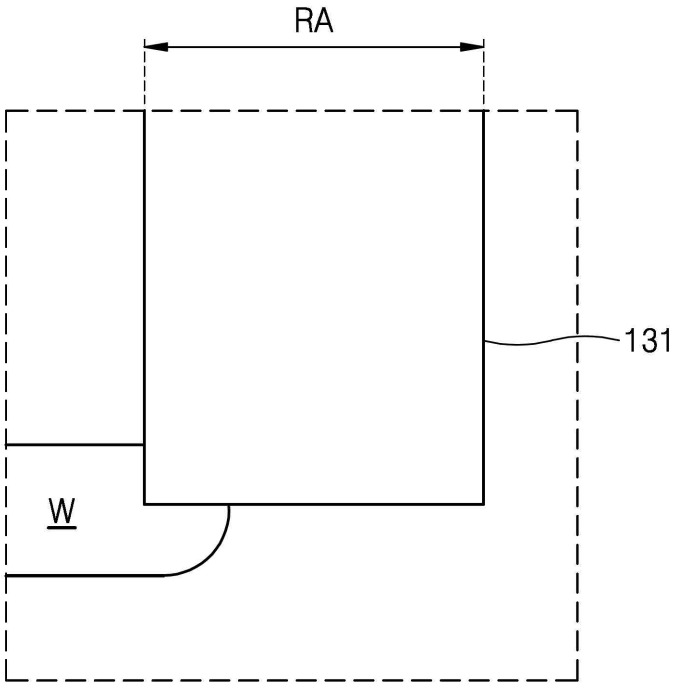


FIG. 11B

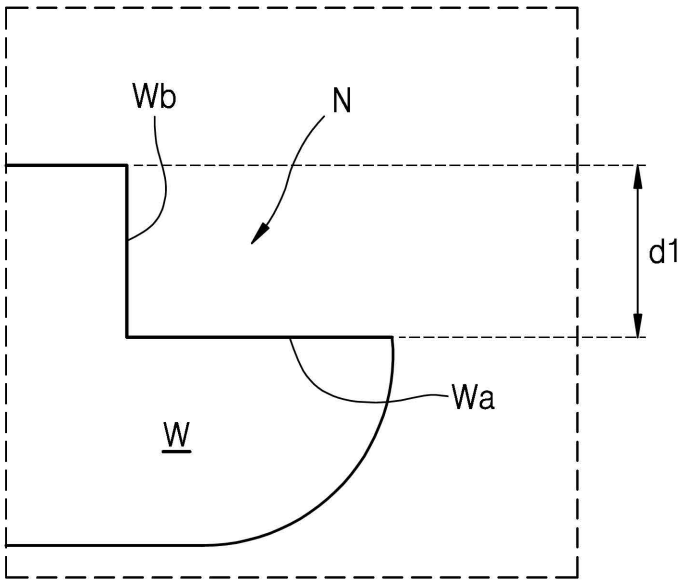


FIG. 11C

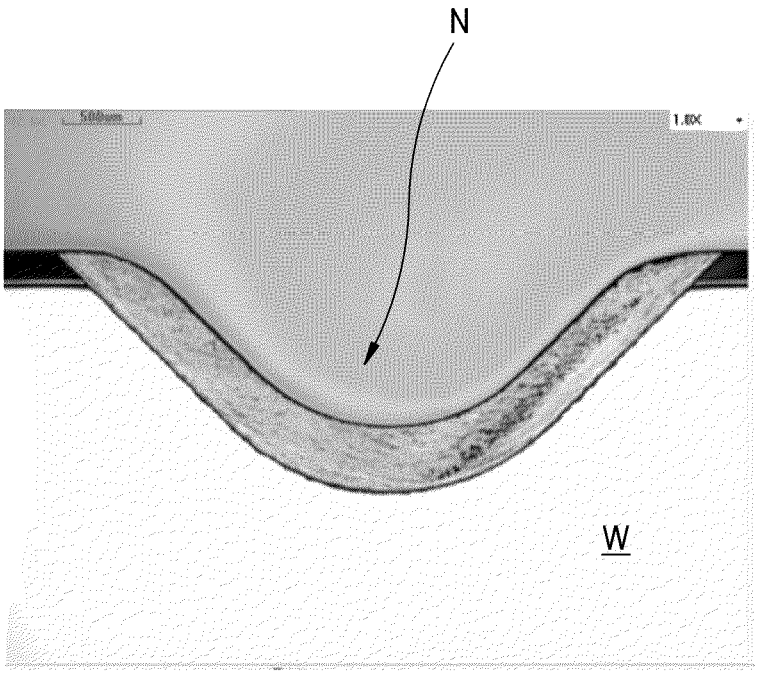


FIG. 12

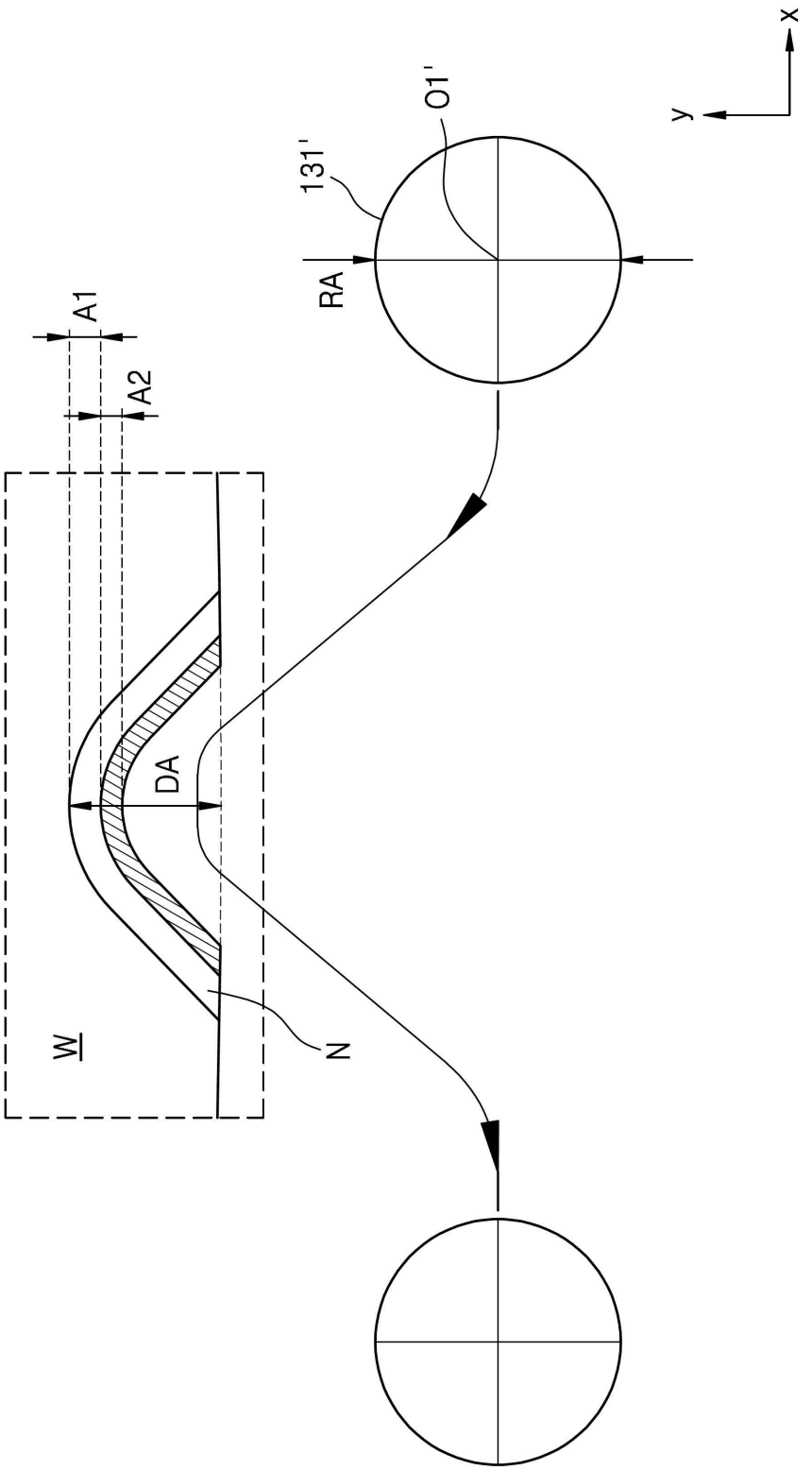


FIG. 13A

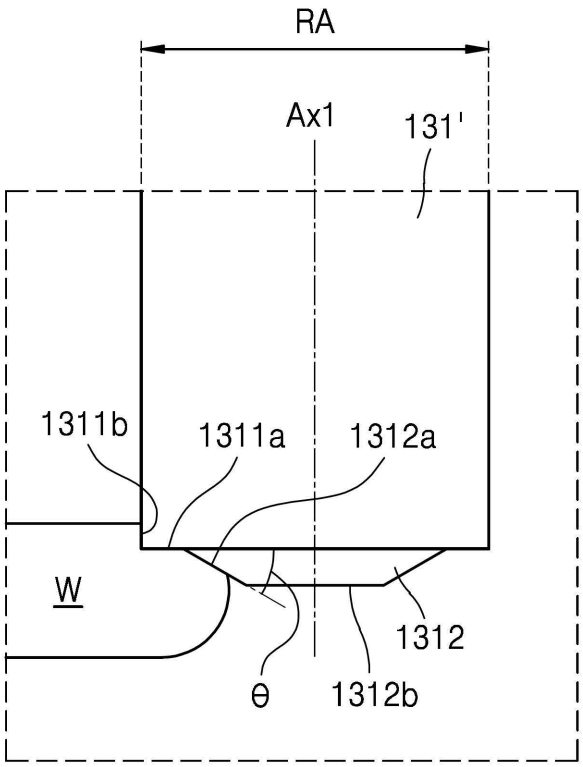


FIG. 13B

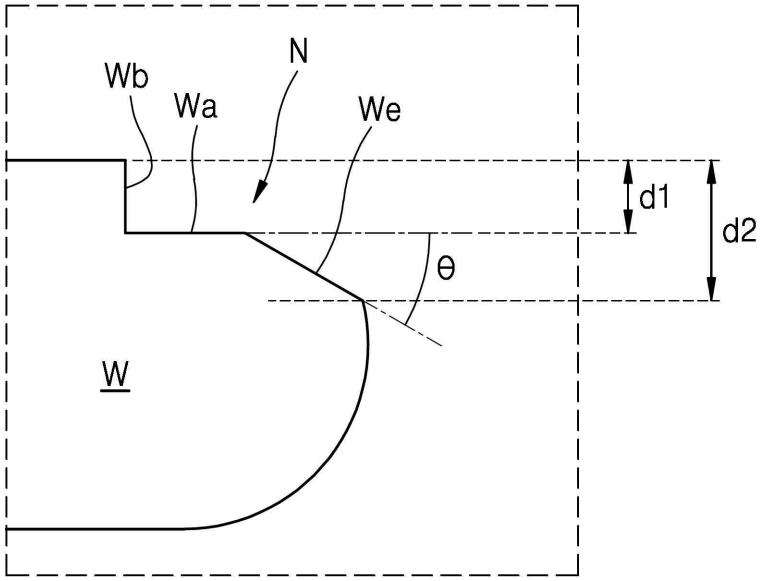


FIG. 13C

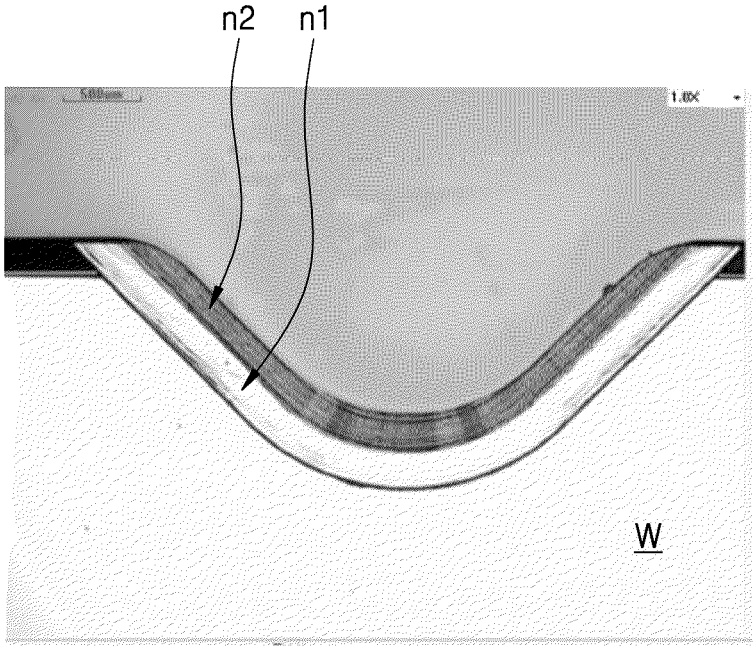


FIG. 14A

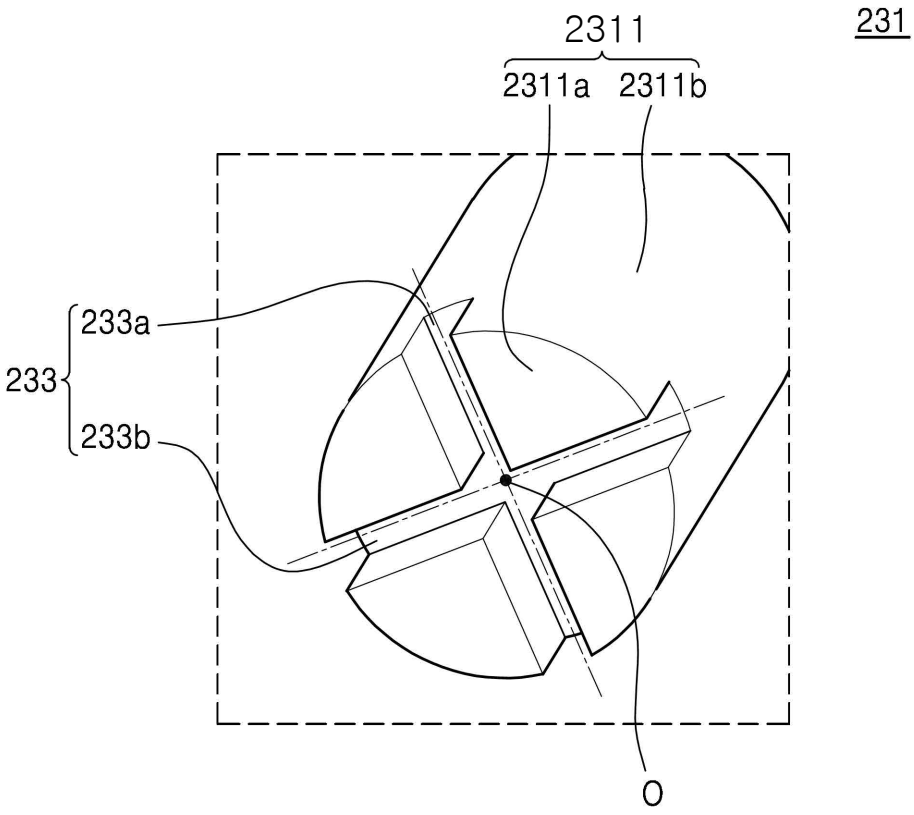


FIG. 14B

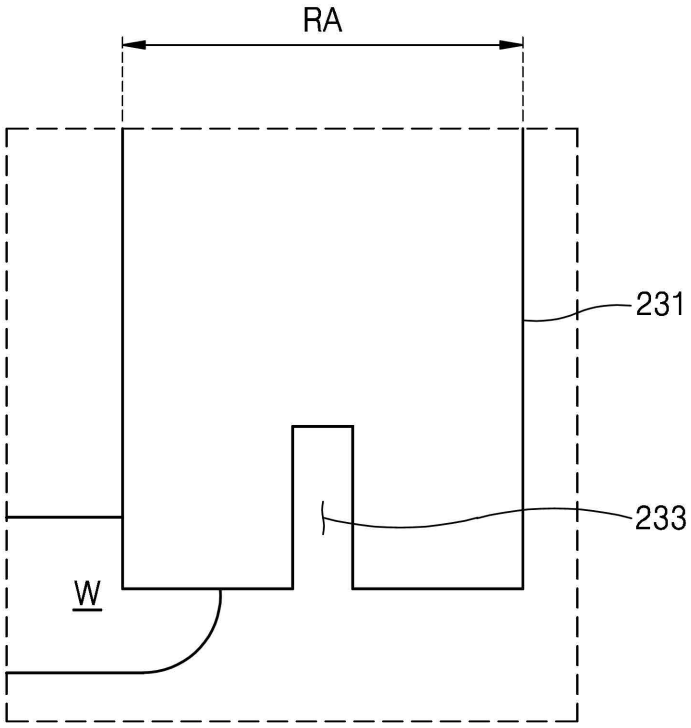


FIG. 15A

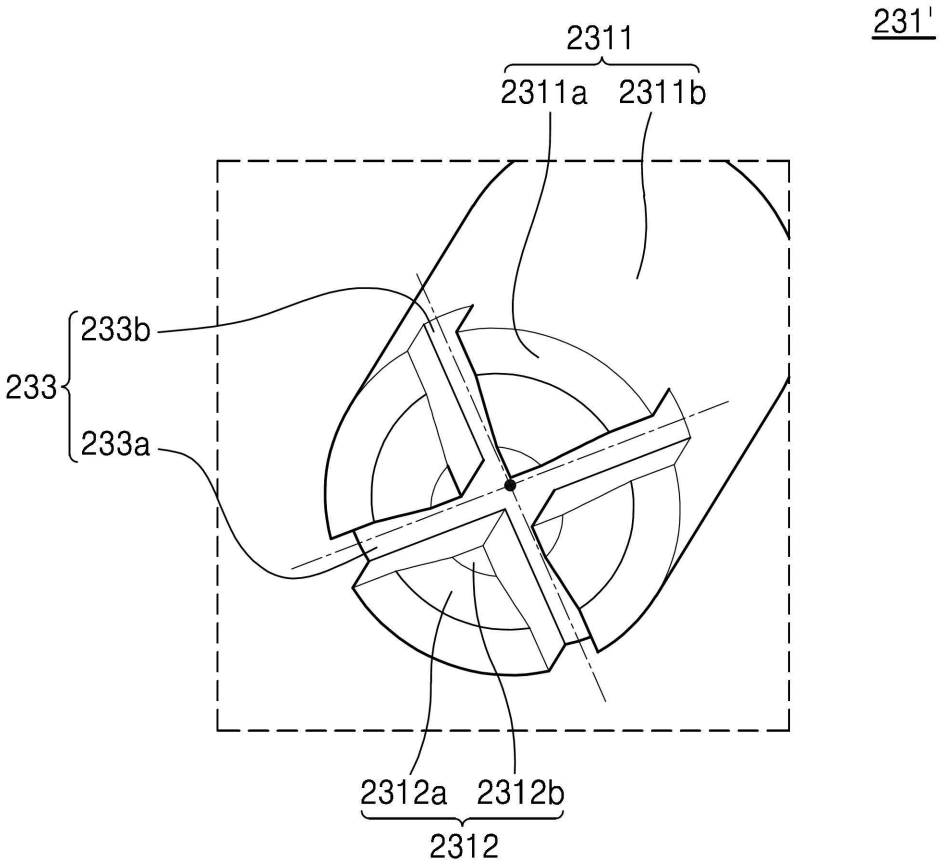


FIG. 15B

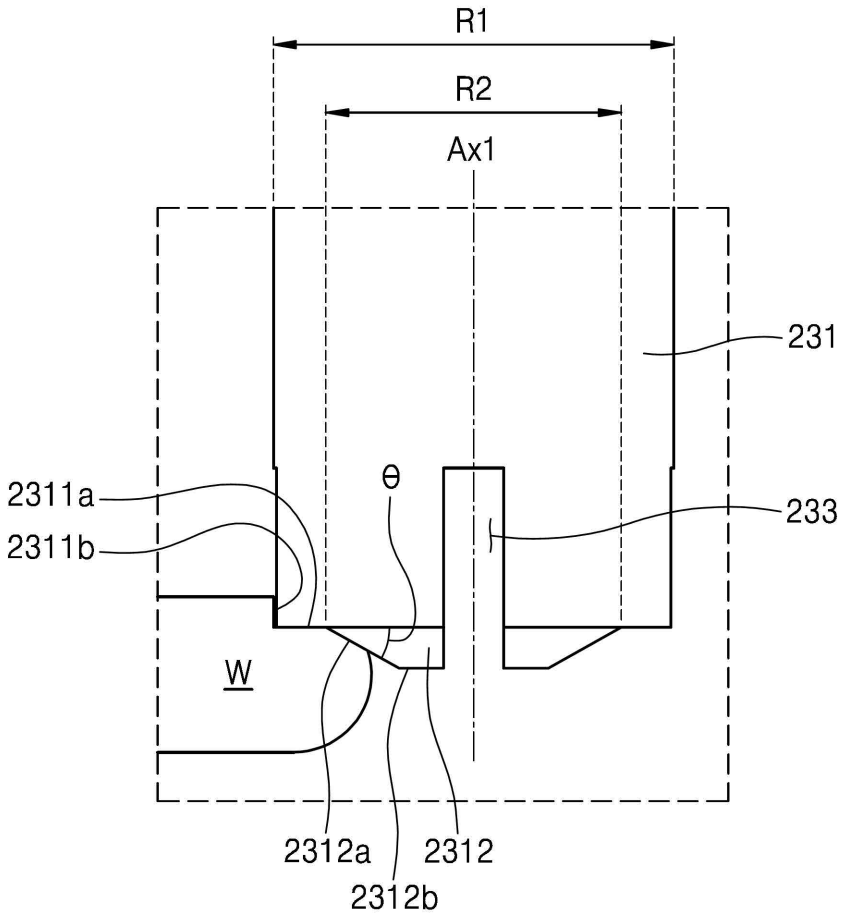


FIG. 16

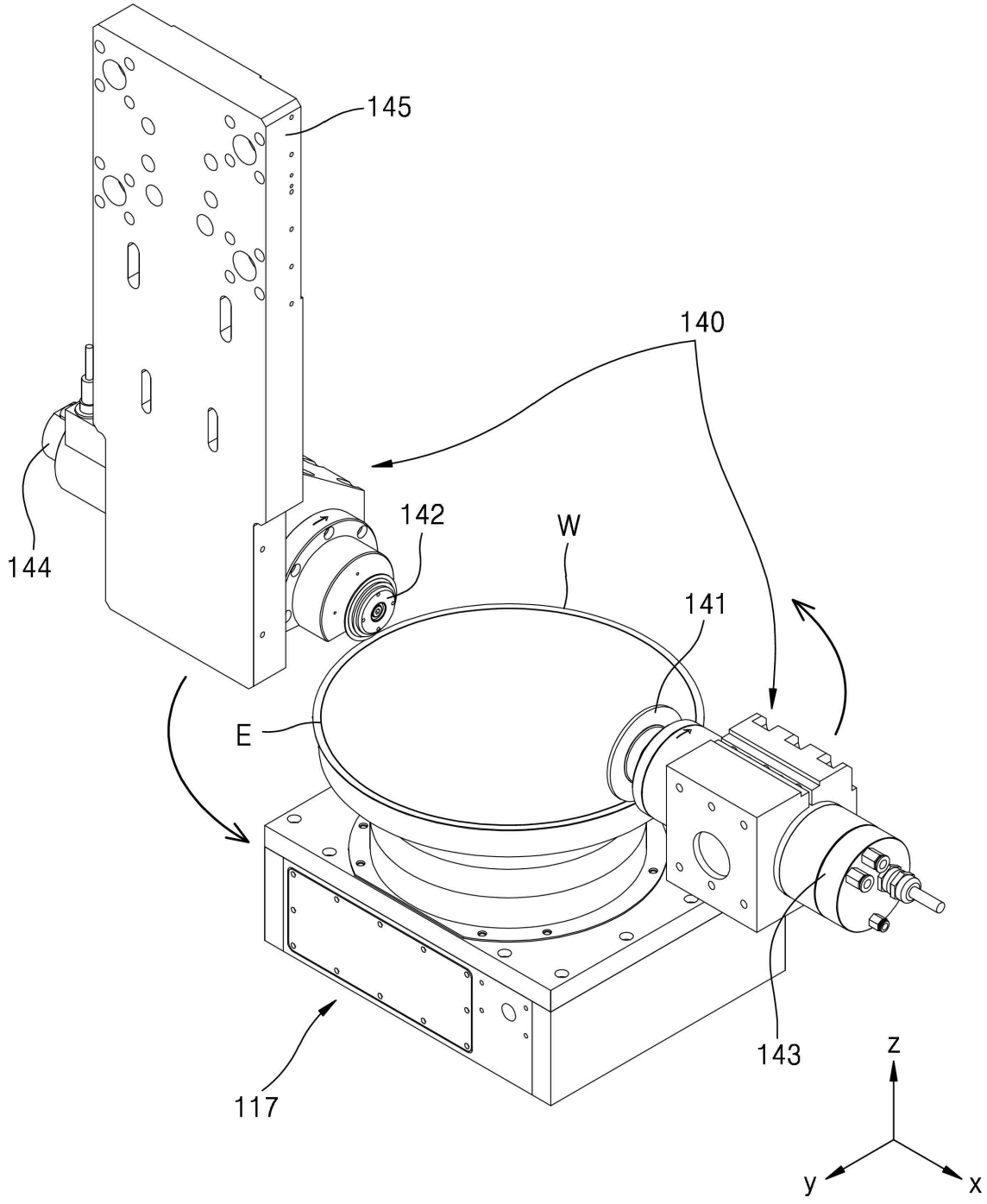


FIG. 17

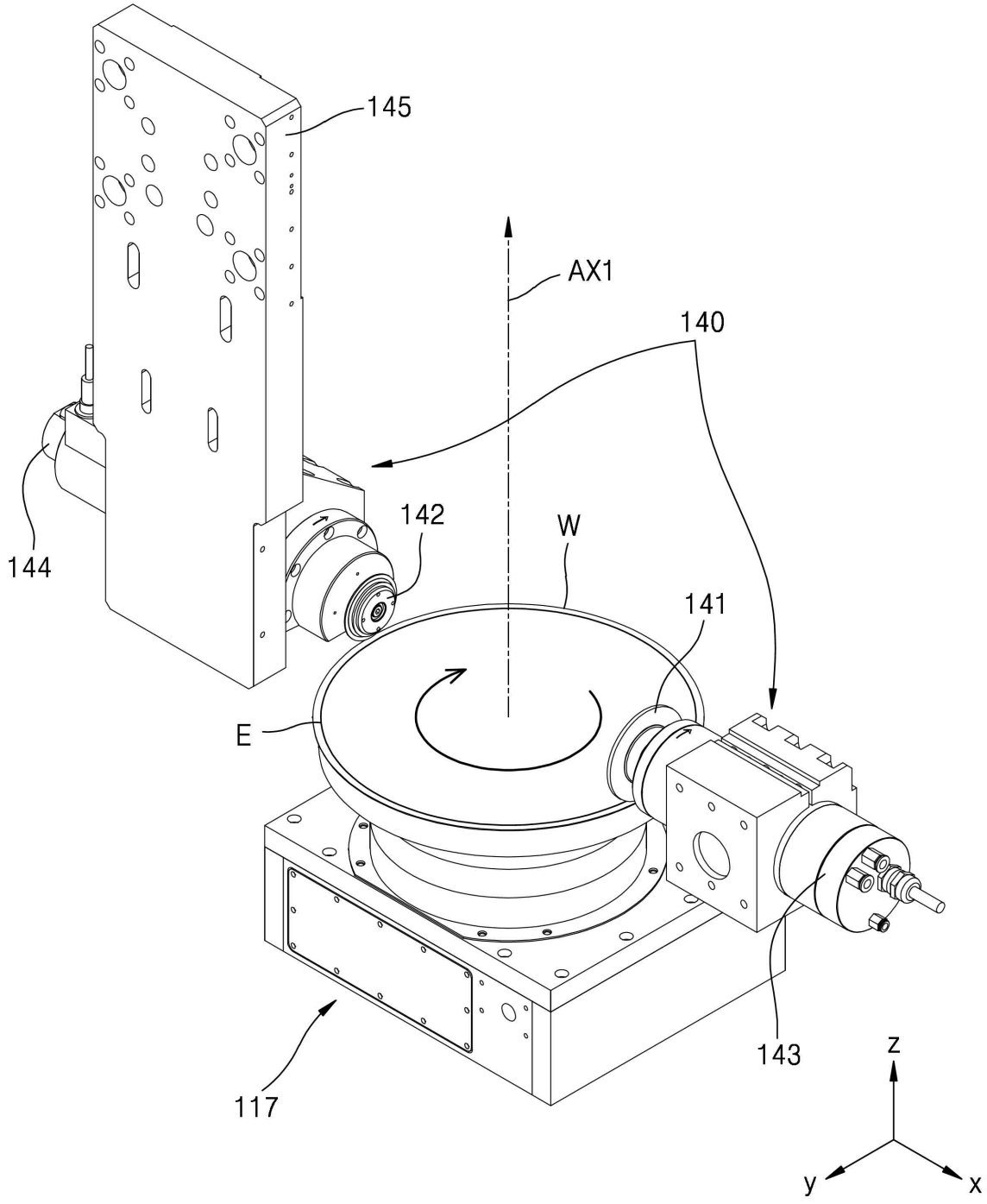


FIG. 18

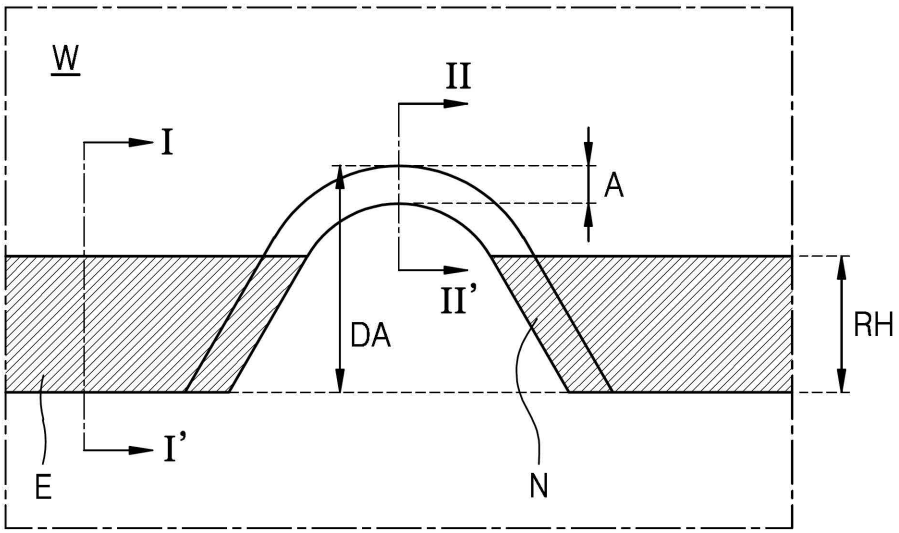


FIG. 19

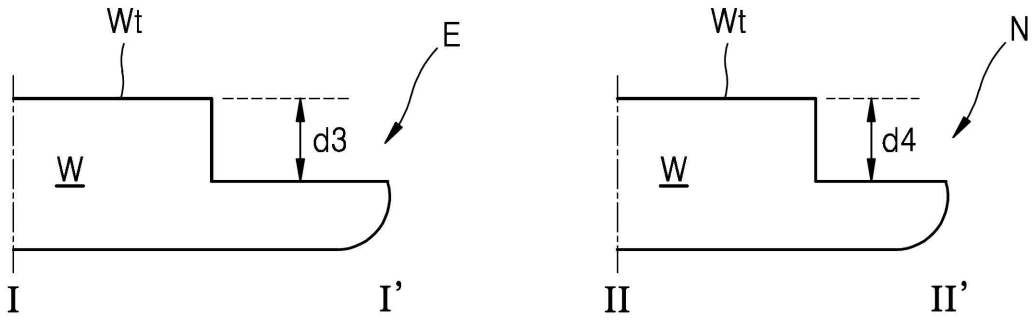


FIG. 20A

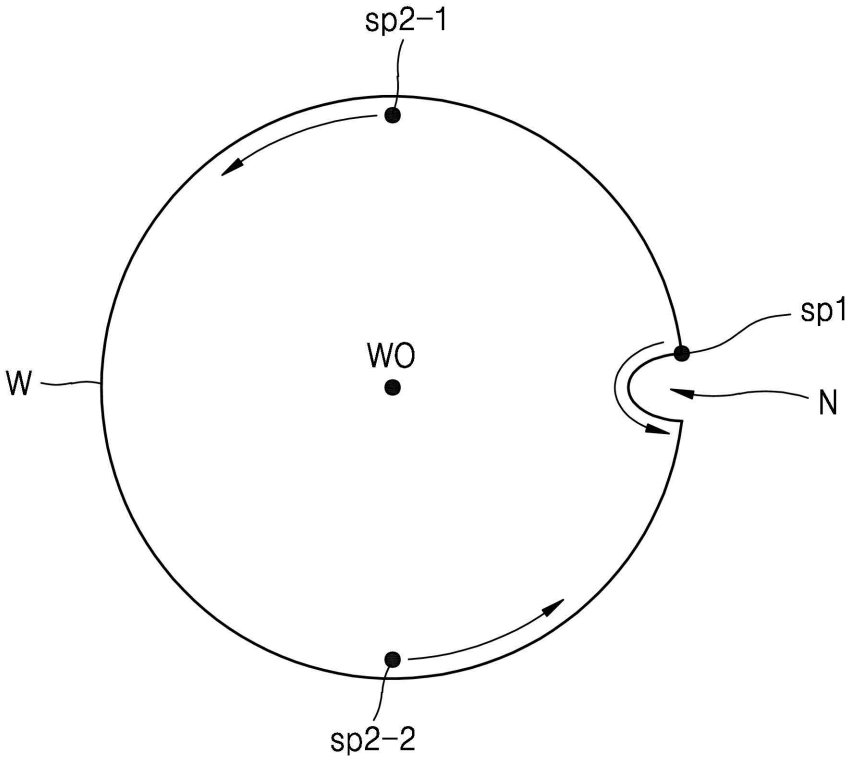


FIG. 20B

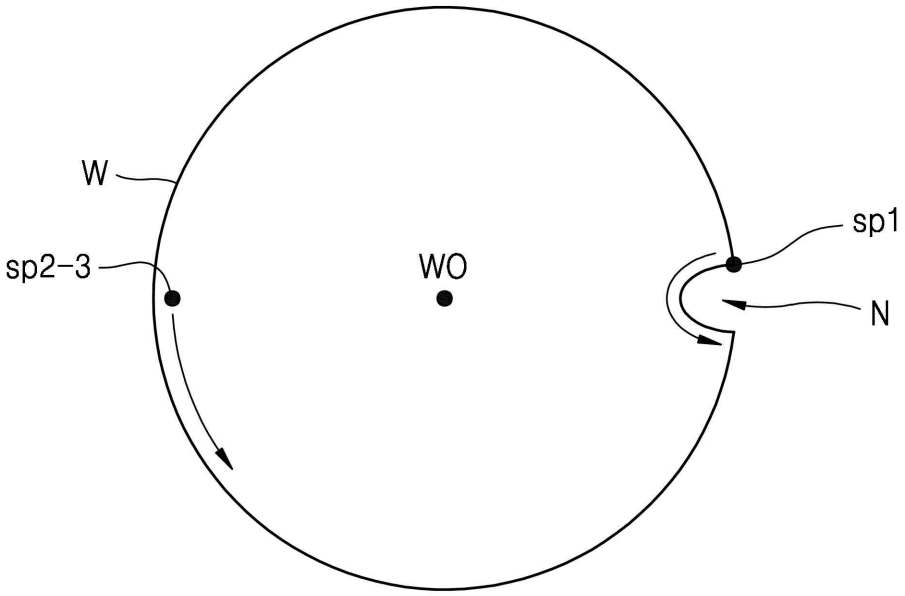


FIG. 21

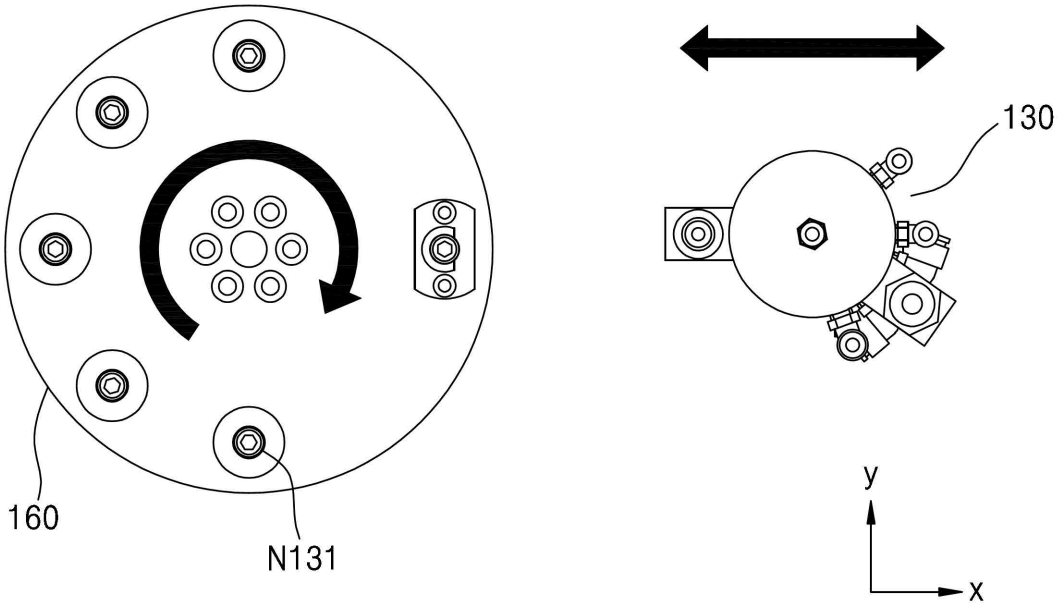


FIG. 22

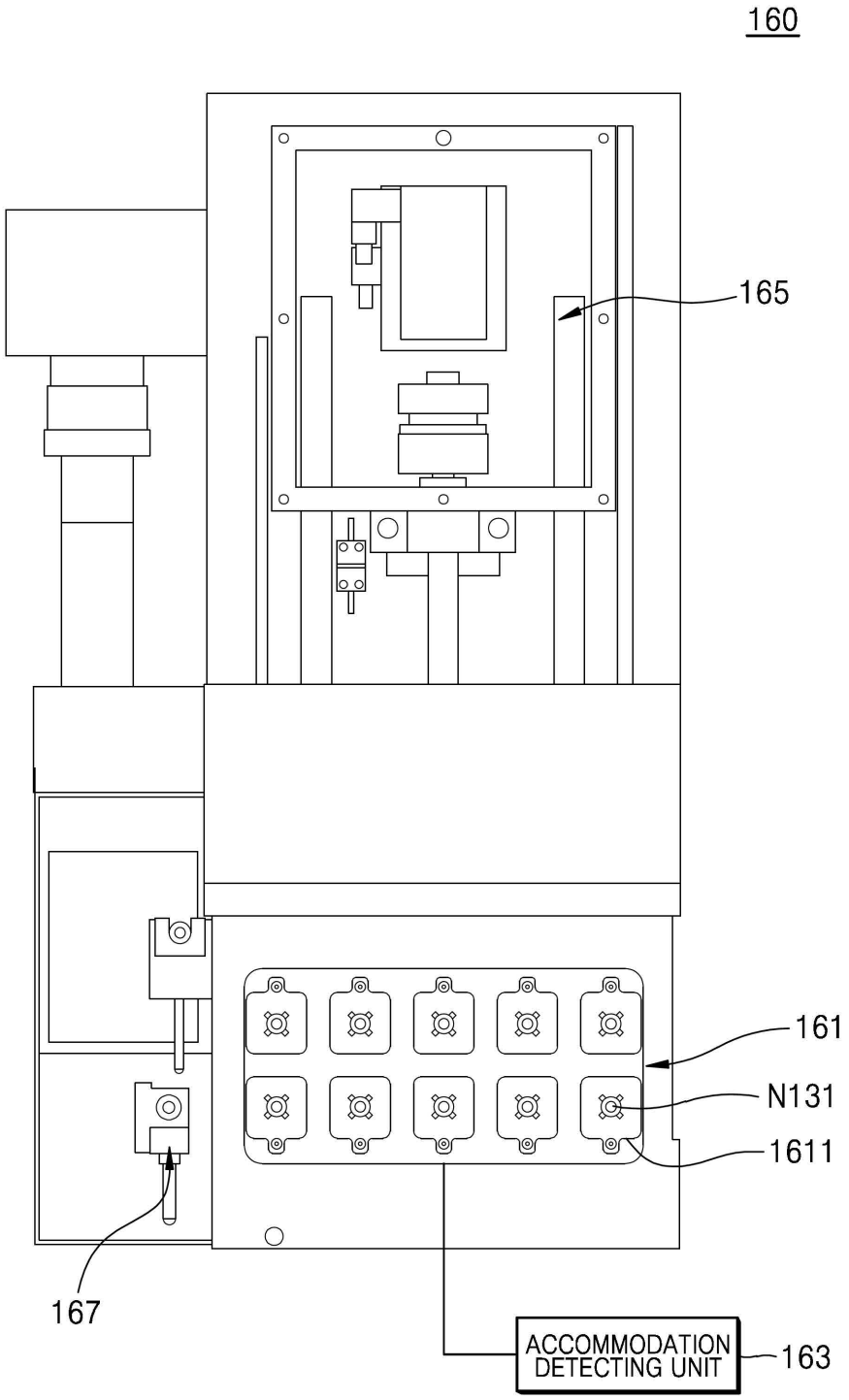


FIG. 23

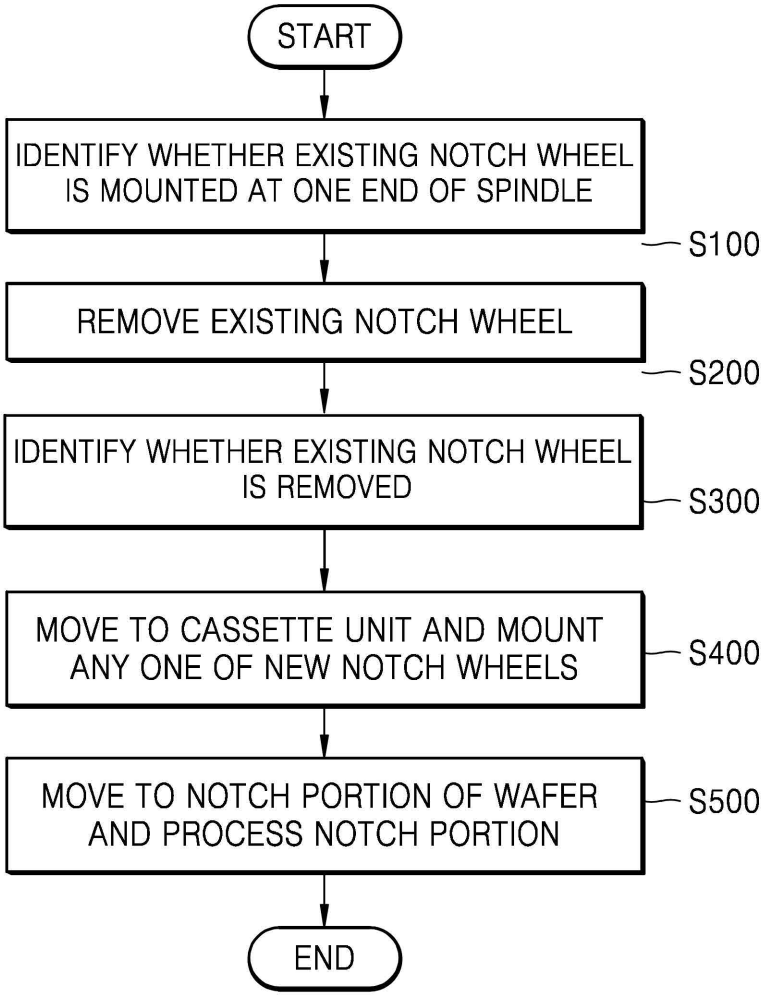

START
IDENTIFY WHETHER EXISTING NOTCH WHEEL IS MOUNTED AT ONE END OF SPINDLE
S100
REMOVE EXISTING NOTCH WHEEL
S200
IDENTIFY WHETHER EXISTING NOTCH WHEEL IS REMOVED
S300
MOVE TO CASSETTE UNIT AND MOUNT ANY ONE OF NEW NOTCH WHEELS
S400
MOVE TO NOTCH PORTION OF WAFER AND PROCESS NOTCH PORTION
S500
END

FIG. 24

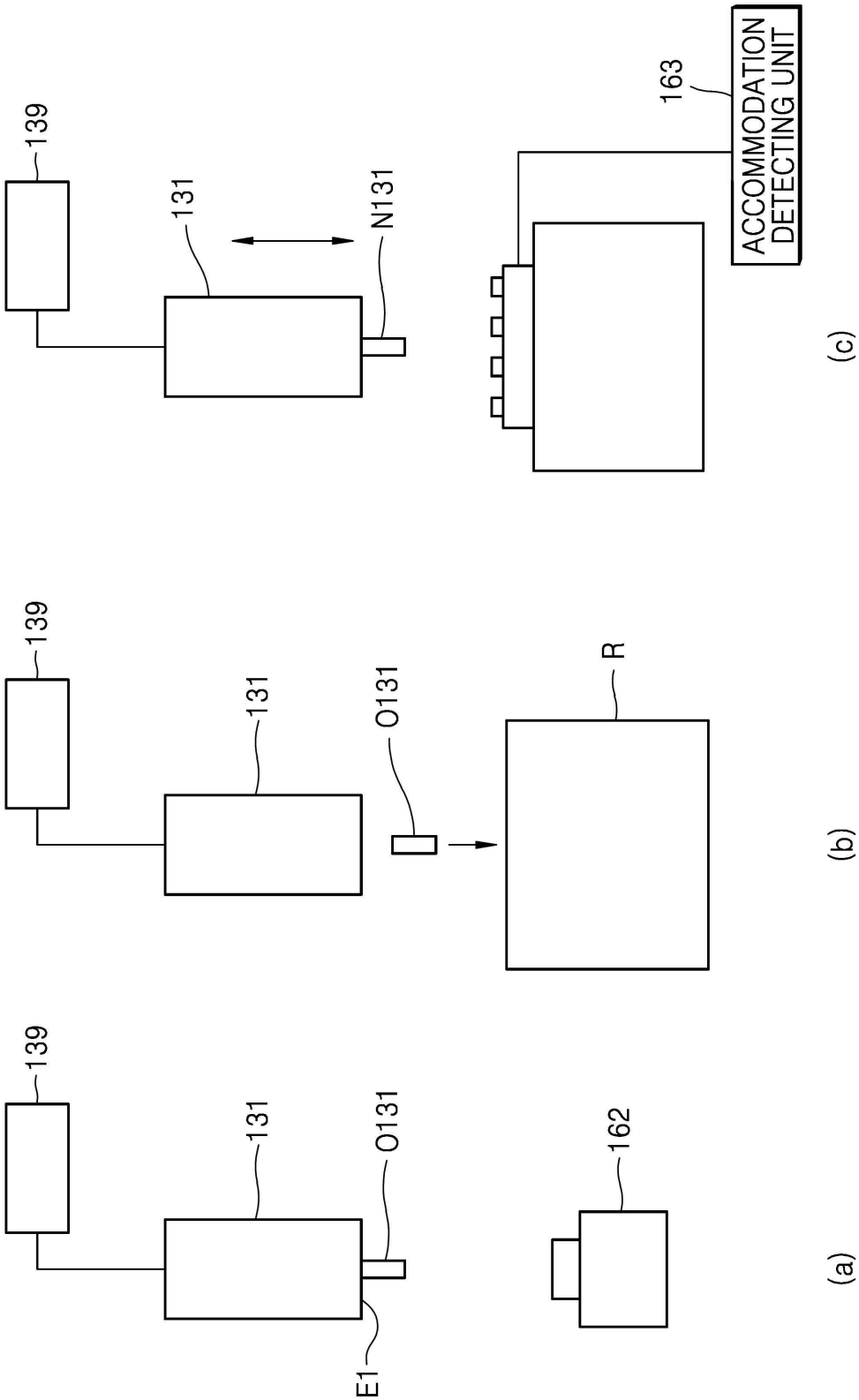

139
131
O131
E1
162
(a)
139
131
O131
R
(b)
139
131
N131
163
ACCOMMODATION DETECTING UNIT
(c)

FIG. 25

