FIG. 1

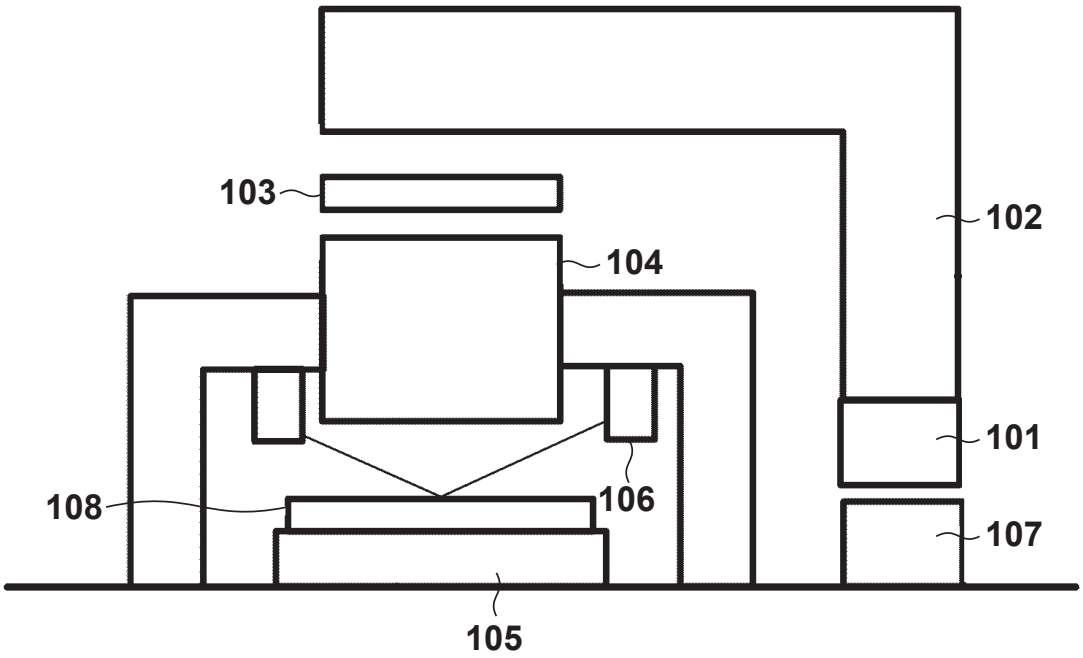


FIG. 2

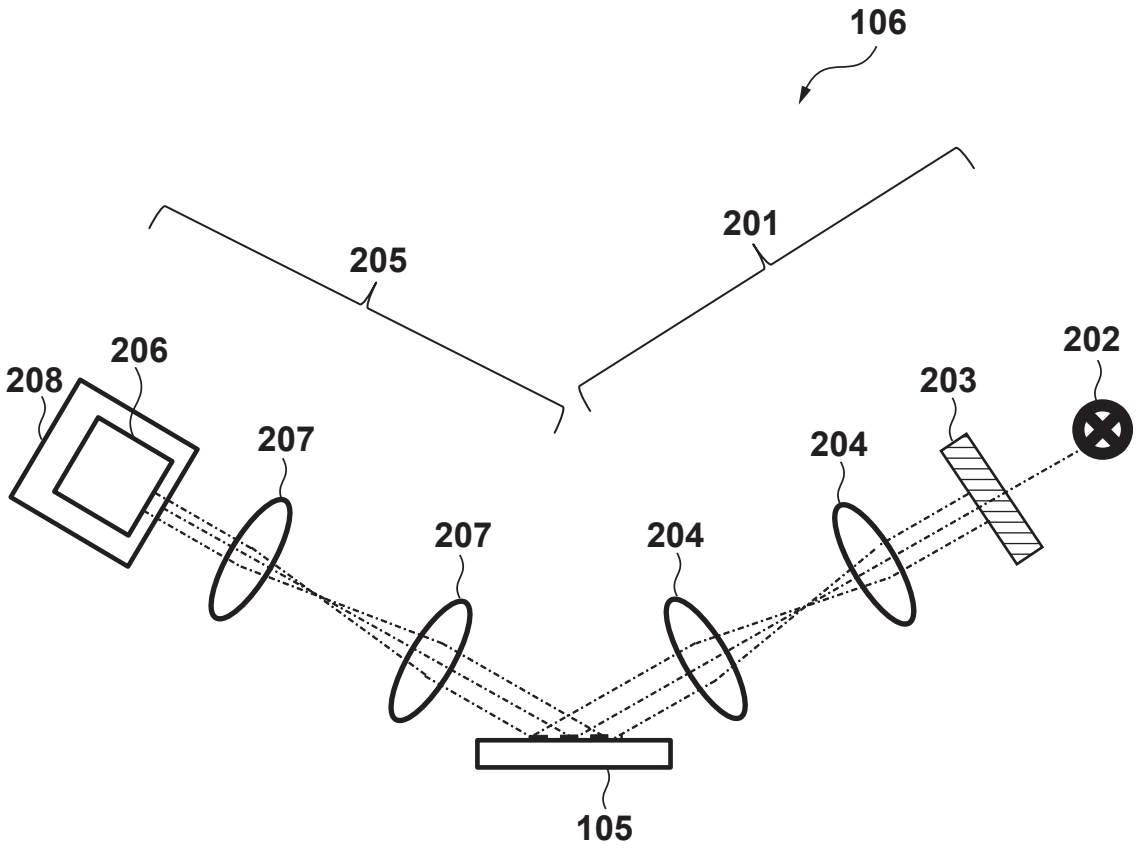


FIG. 3

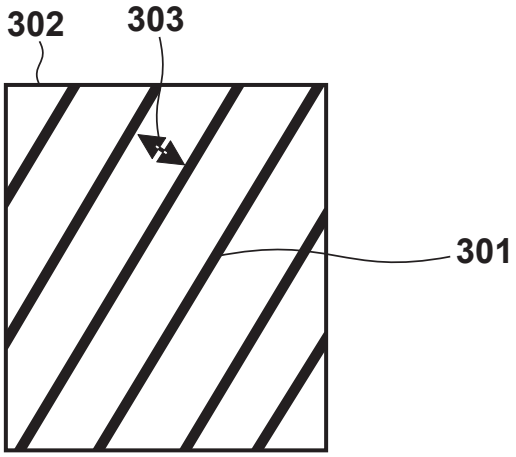
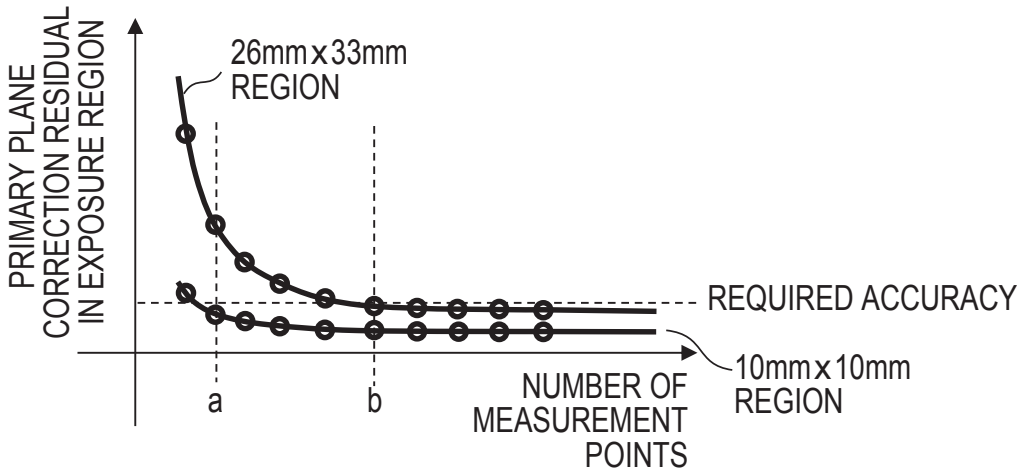

302
303
301

FIG. 4


PRIMARY PLANE CORRECTION RESIDUAL IN EXPOSURE REGION
26mm x 33mm REGION
REQUIRED ACCURACY
10mm x 10mm REGION
a
b
NUMBER OF MEASUREMENT POINTS

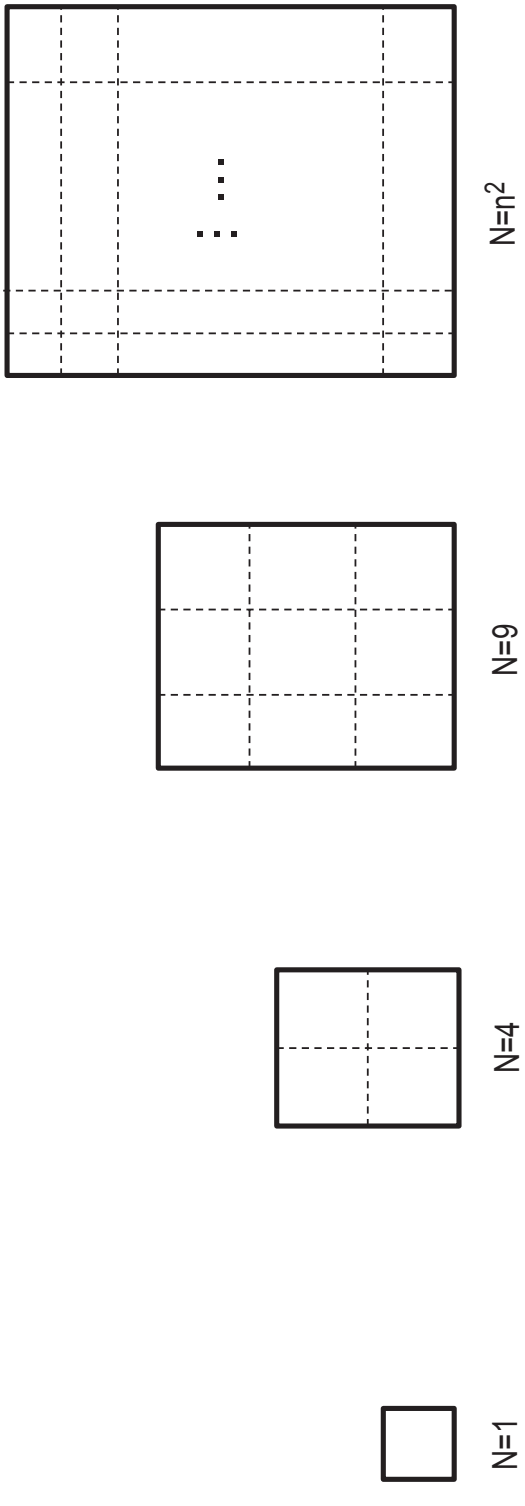


FIG. 5A FIG. 5B FIG. 5C FIG. 5D

FIG. 6

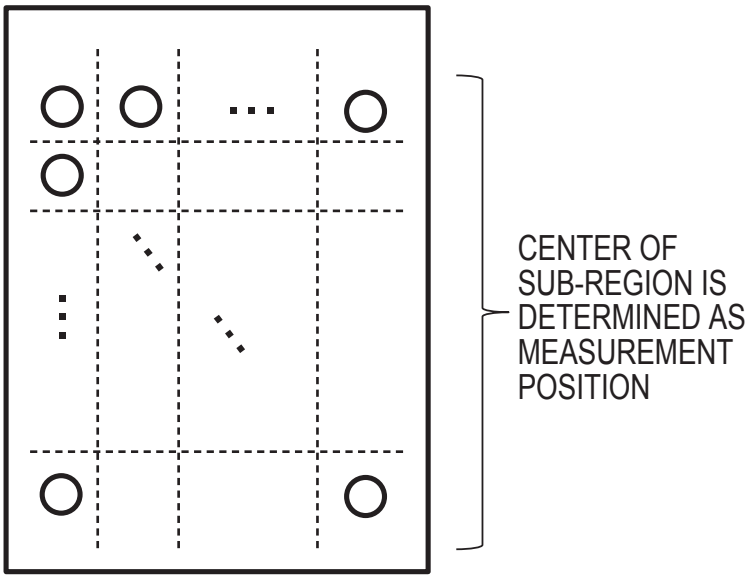


FIG. 7

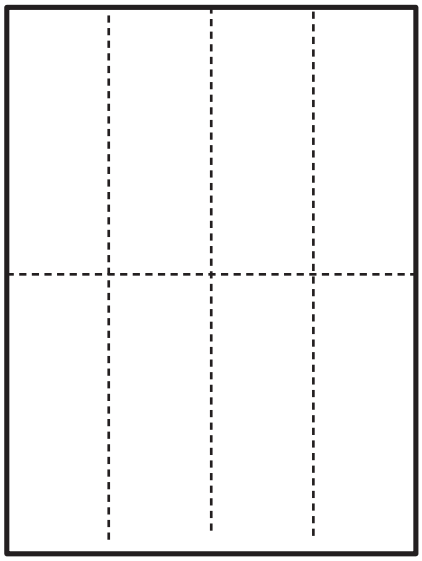
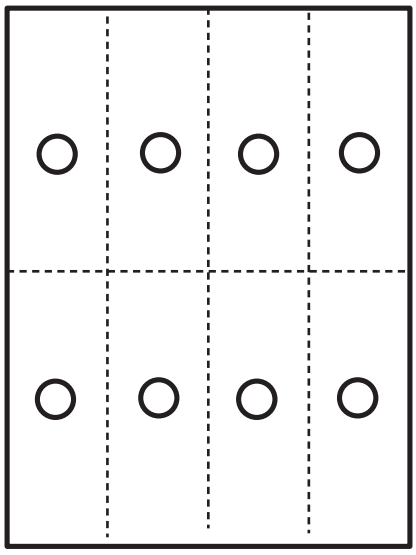


FIG. 8



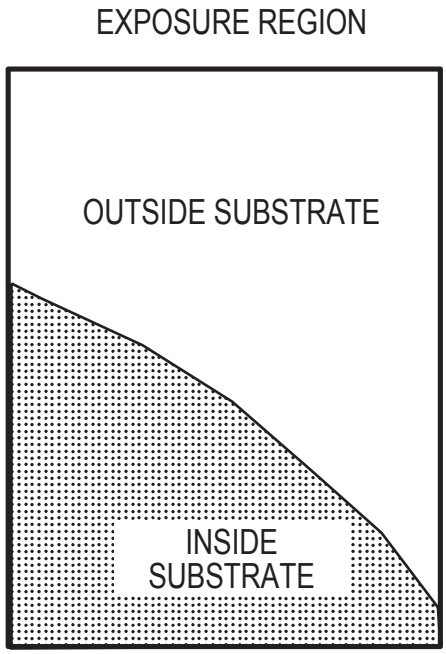


FIG. 9

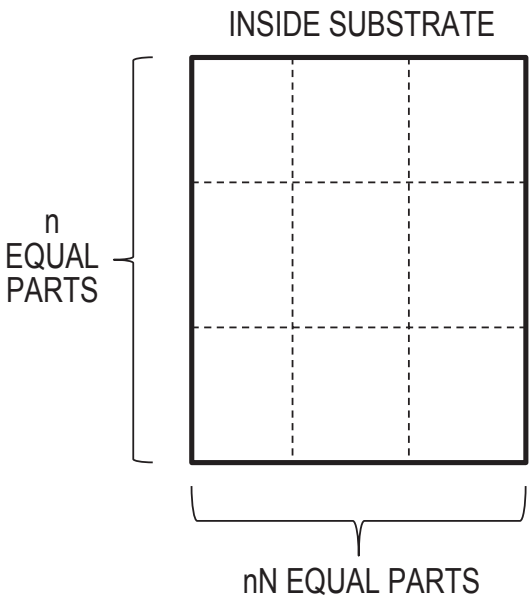


FIG. 10A

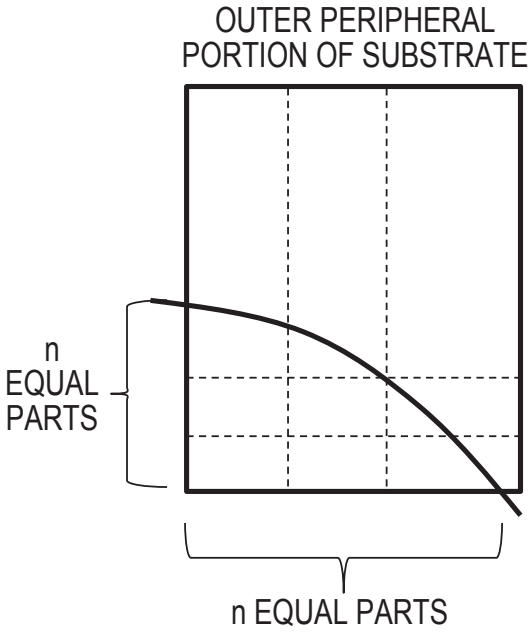


FIG. 10B

FIG. 11

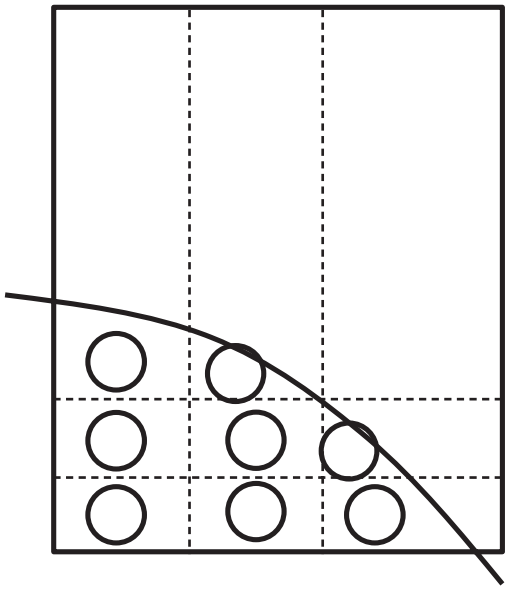


FIG. 12

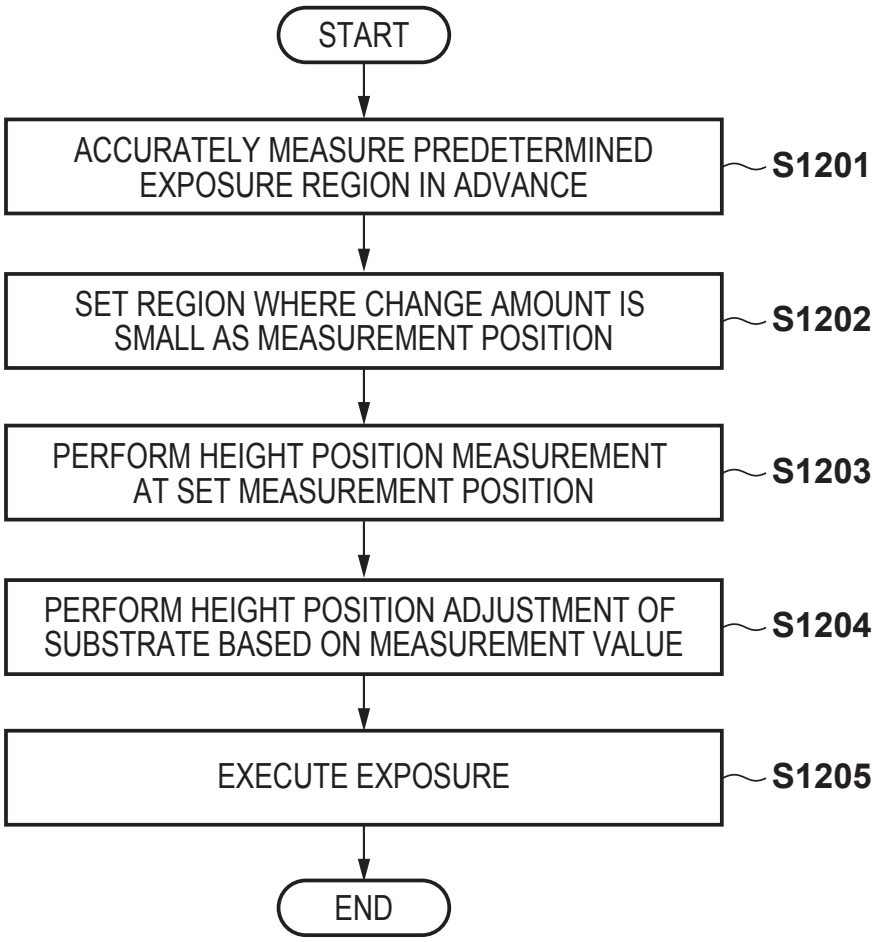

START
ACCURATELY MEASURE PREDETERMINED EXPOSURE REGION IN ADVANCE
S1201
SET REGION WHERE CHANGE AMOUNT IS SMALL AS MEASUREMENT POSITION
S1202
PERFORM HEIGHT POSITION MEASUREMENT AT SET MEASUREMENT POSITION
S1203
PERFORM HEIGHT POSITION ADJUSTMENT OF SUBSTRATE BASED ON MEASUREMENT VALUE
S1204
EXECUTE EXPOSURE
S1205
END

FIG. 13

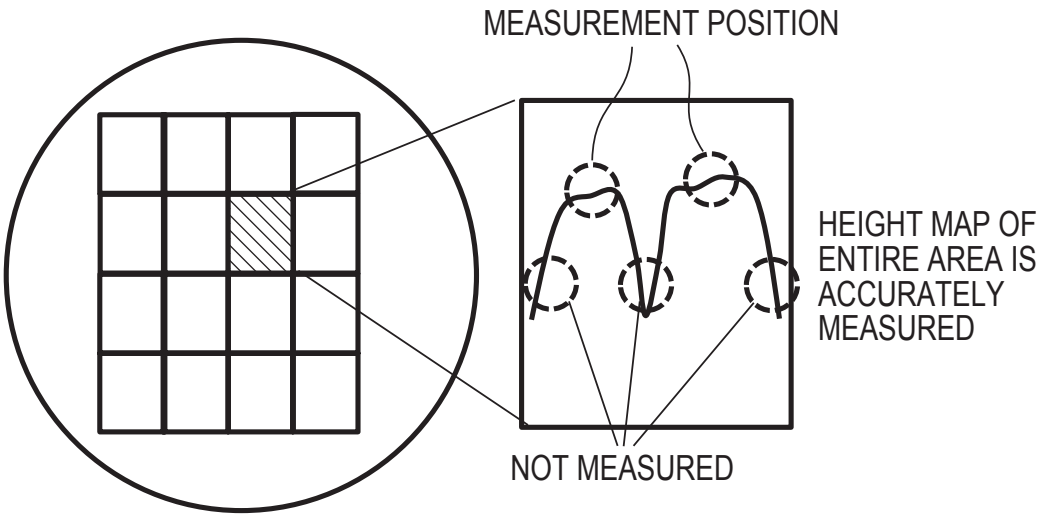


FIG. 14

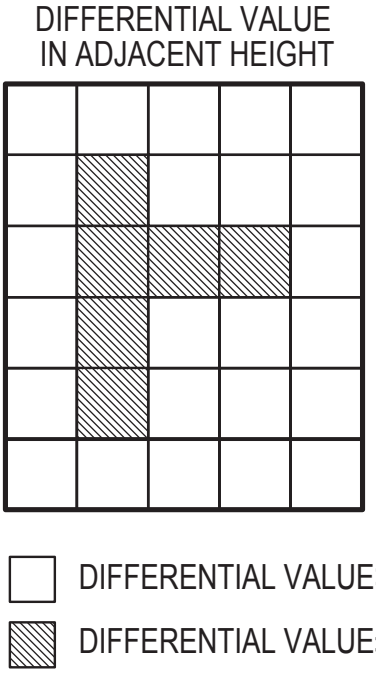


FIG. 15

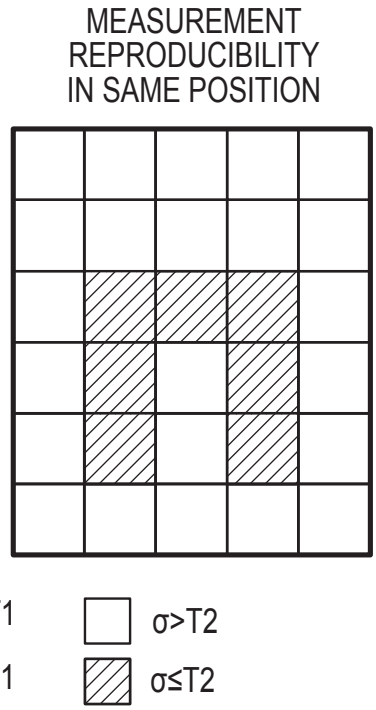


FIG. 16

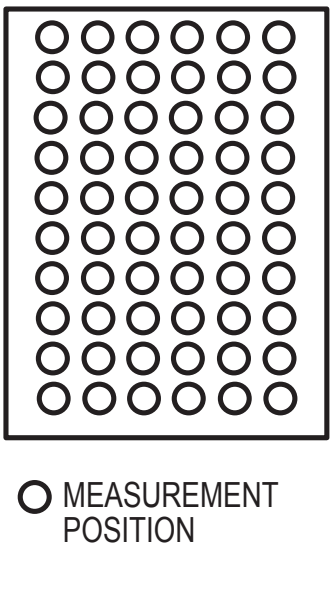


FIG. 17A

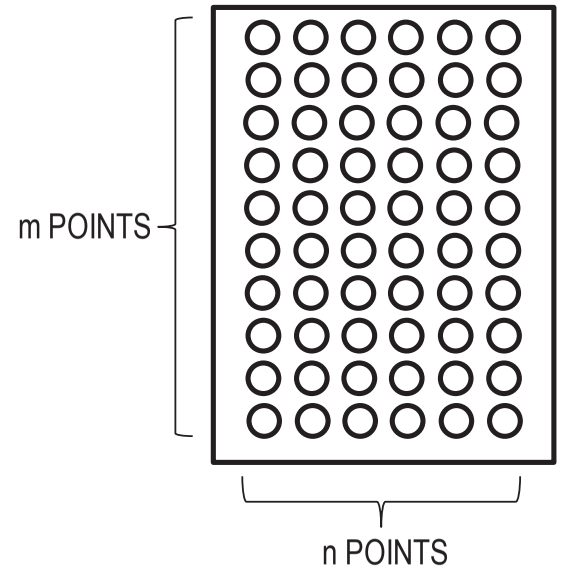


FIG. 17B

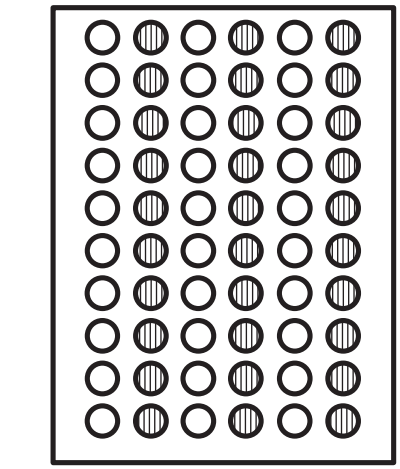


FIG. 17C

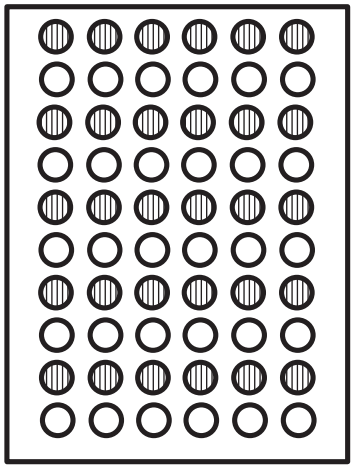


FIG. 18

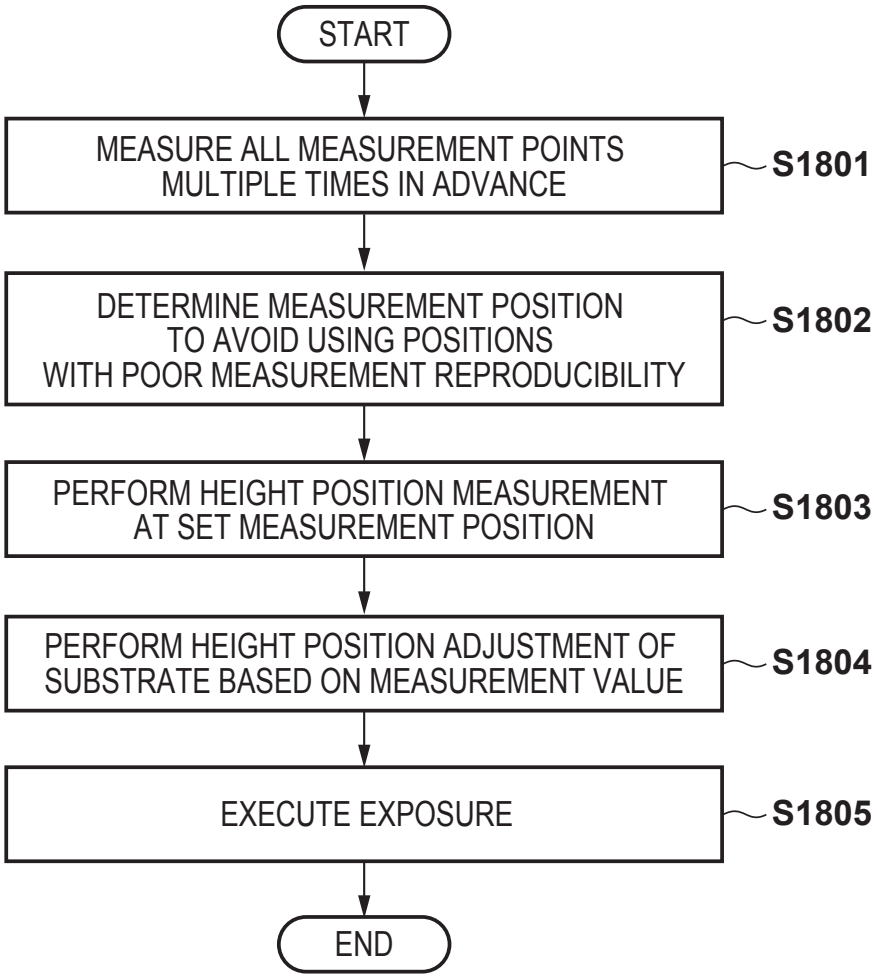

START
MEASURE ALL MEASUREMENT POINTS MULTIPLE TIMES IN ADVANCE
S1801
DETERMINE MEASUREMENT POSITION TO AVOID USING POSITIONS WITH POOR MEASUREMENT REPRODUCIBILITY
S1802
PERFORM HEIGHT POSITION MEASUREMENT AT SET MEASUREMENT POSITION
S1803
PERFORM HEIGHT POSITION ADJUSTMENT OF SUBSTRATE BASED ON MEASUREMENT VALUE
S1804
EXECUTE EXPOSURE
S1805
END

FIG. 19

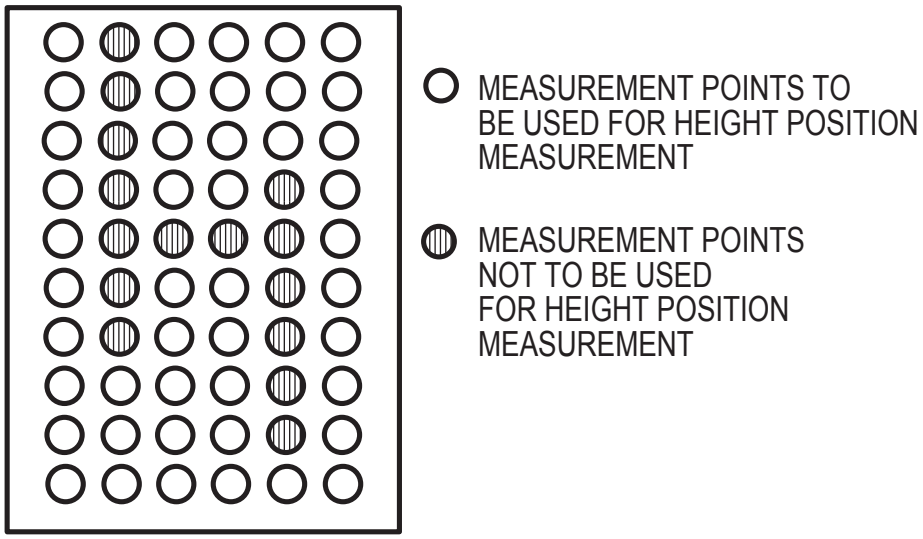
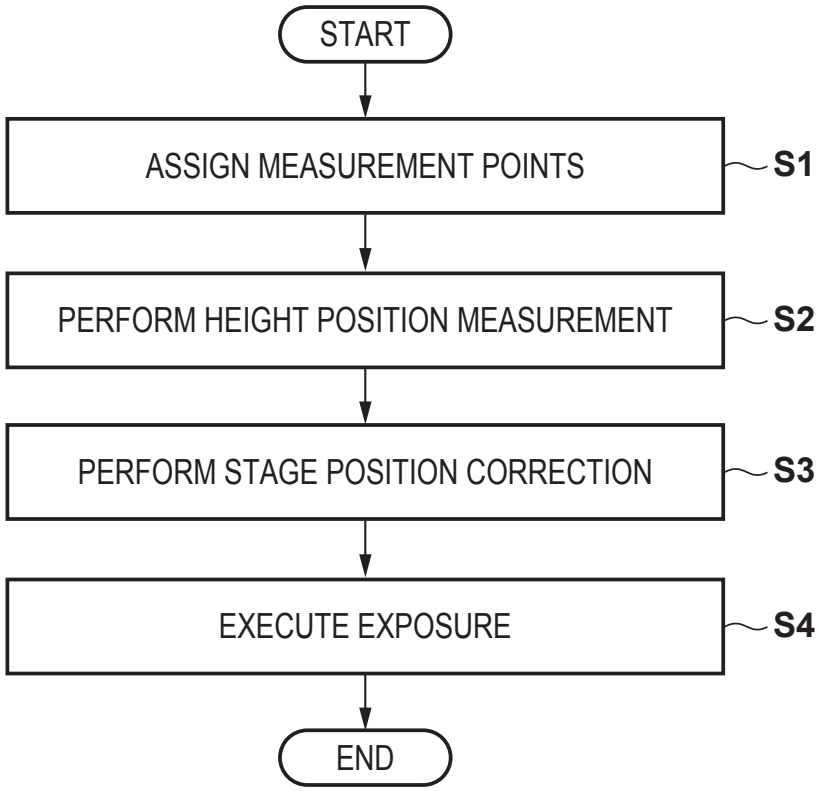

MEASUREMENT POINTS TO BE USED FOR HEIGHT POSITION MEASUREMENT
MEASUREMENT POINTS NOT TO BE USED FOR HEIGHT POSITION MEASUREMENT

FIG. 20


START
ASSIGN MEASUREMENT POINTS
S1
PERFORM HEIGHT POSITION MEASUREMENT
S2
PERFORM STAGE POSITION CORRECTION
S3
EXECUTE EXPOSURE
S4
END