

FIG. 1

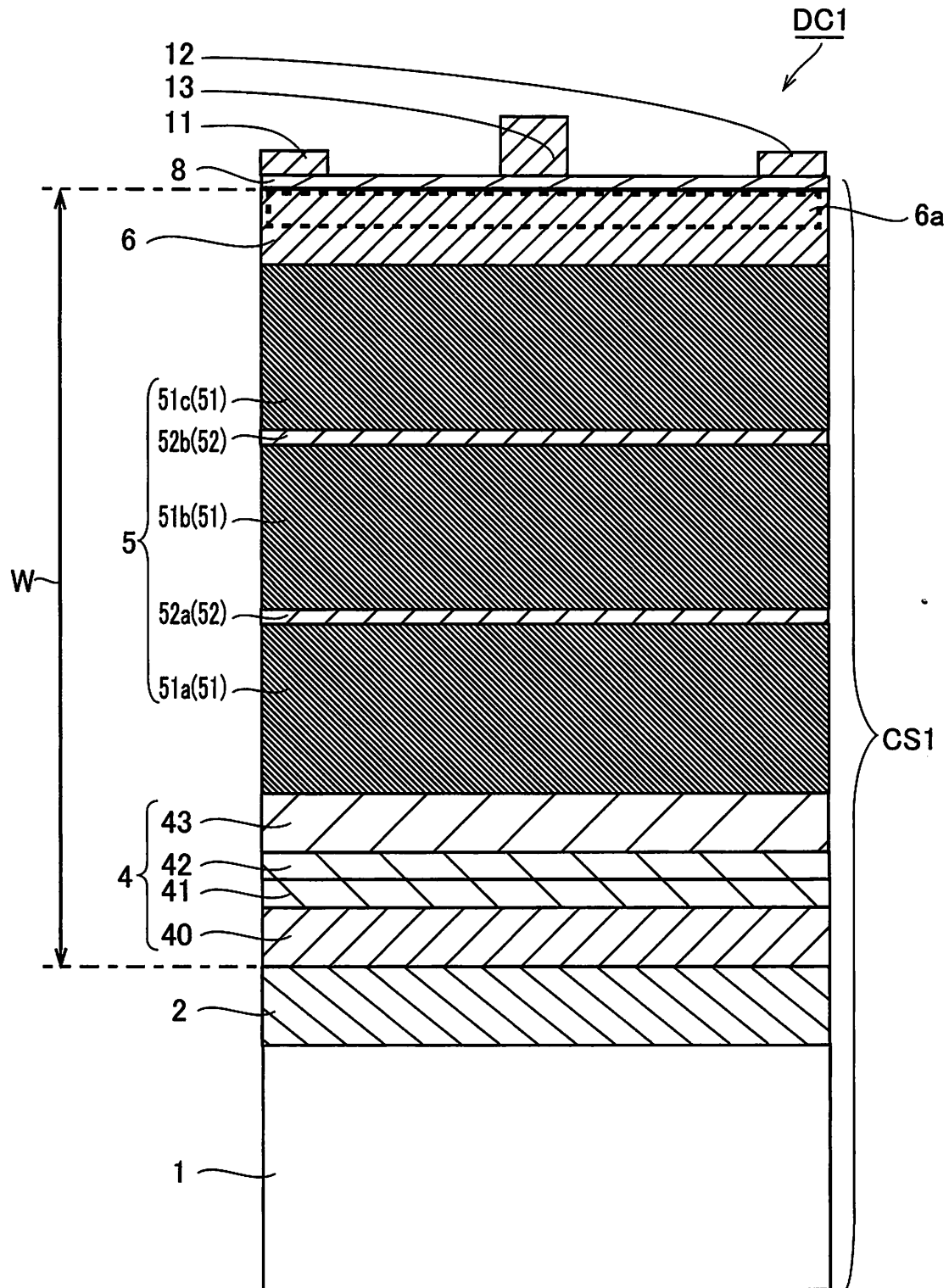


FIG. 2

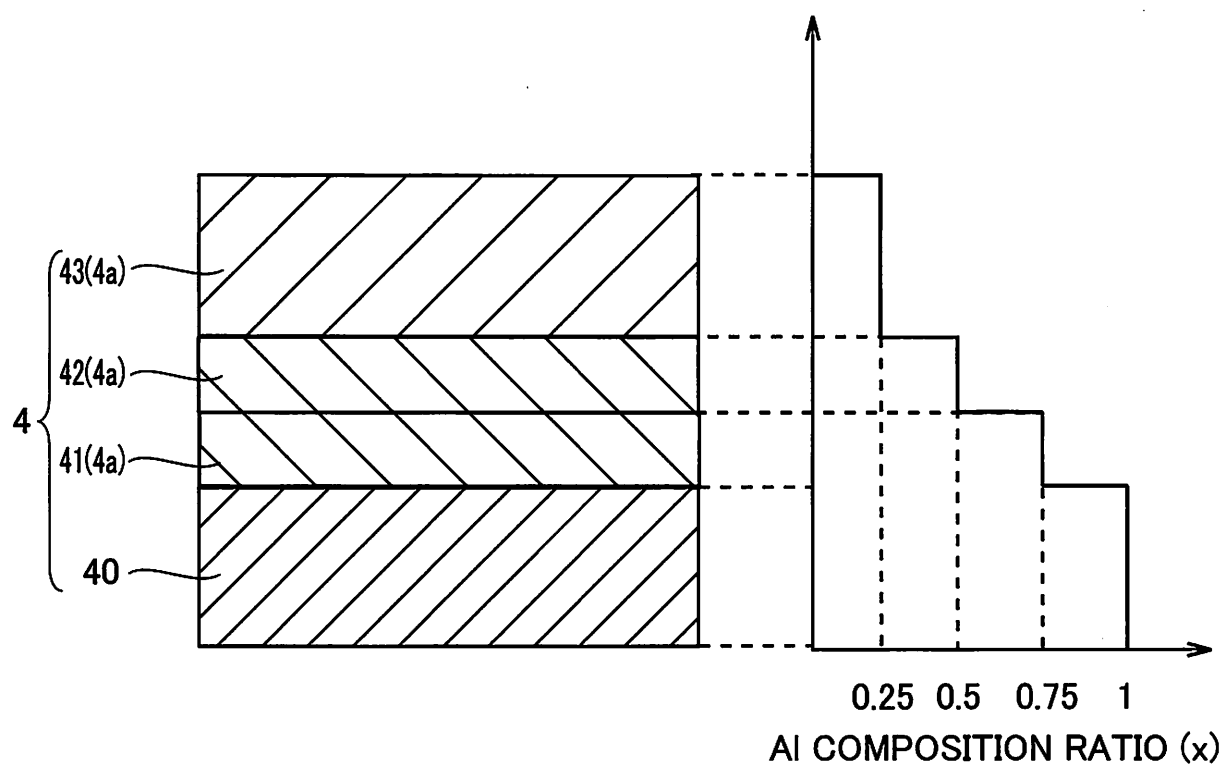


FIG. 3

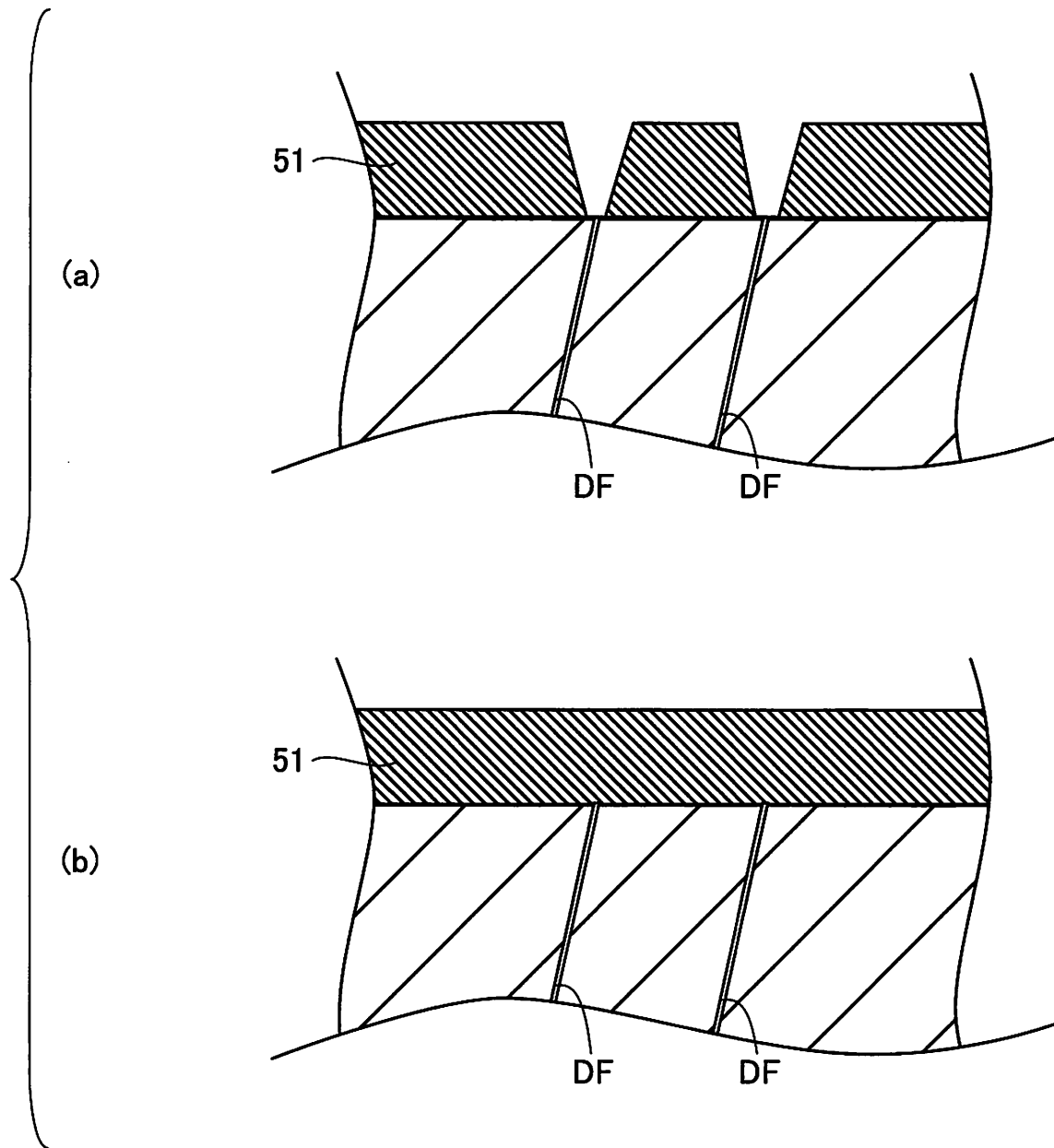


FIG. 4

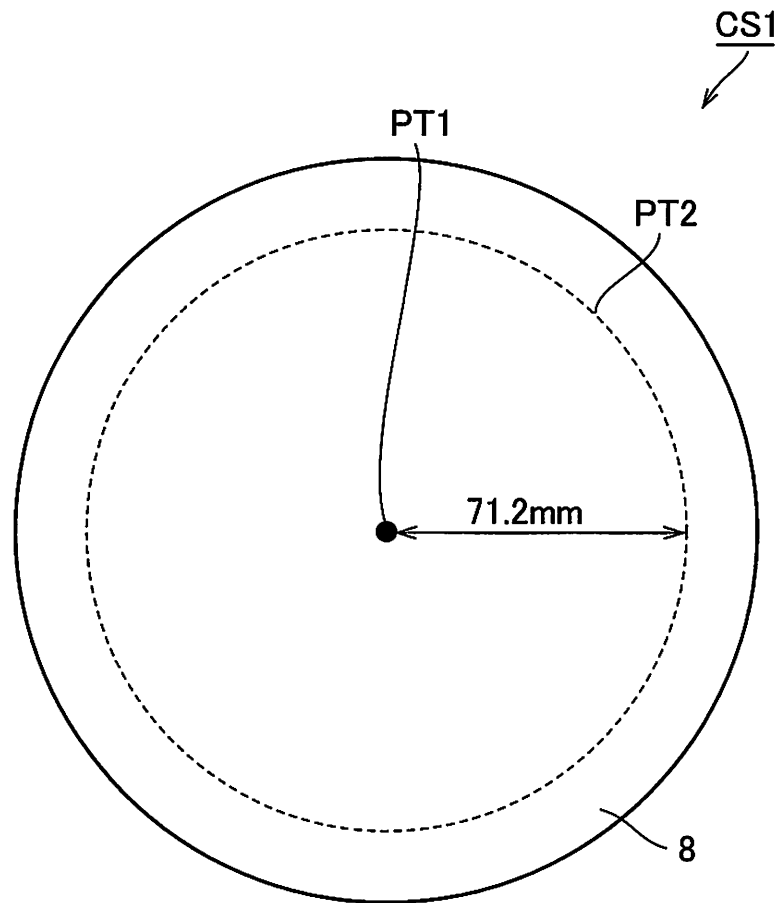


FIG. 5

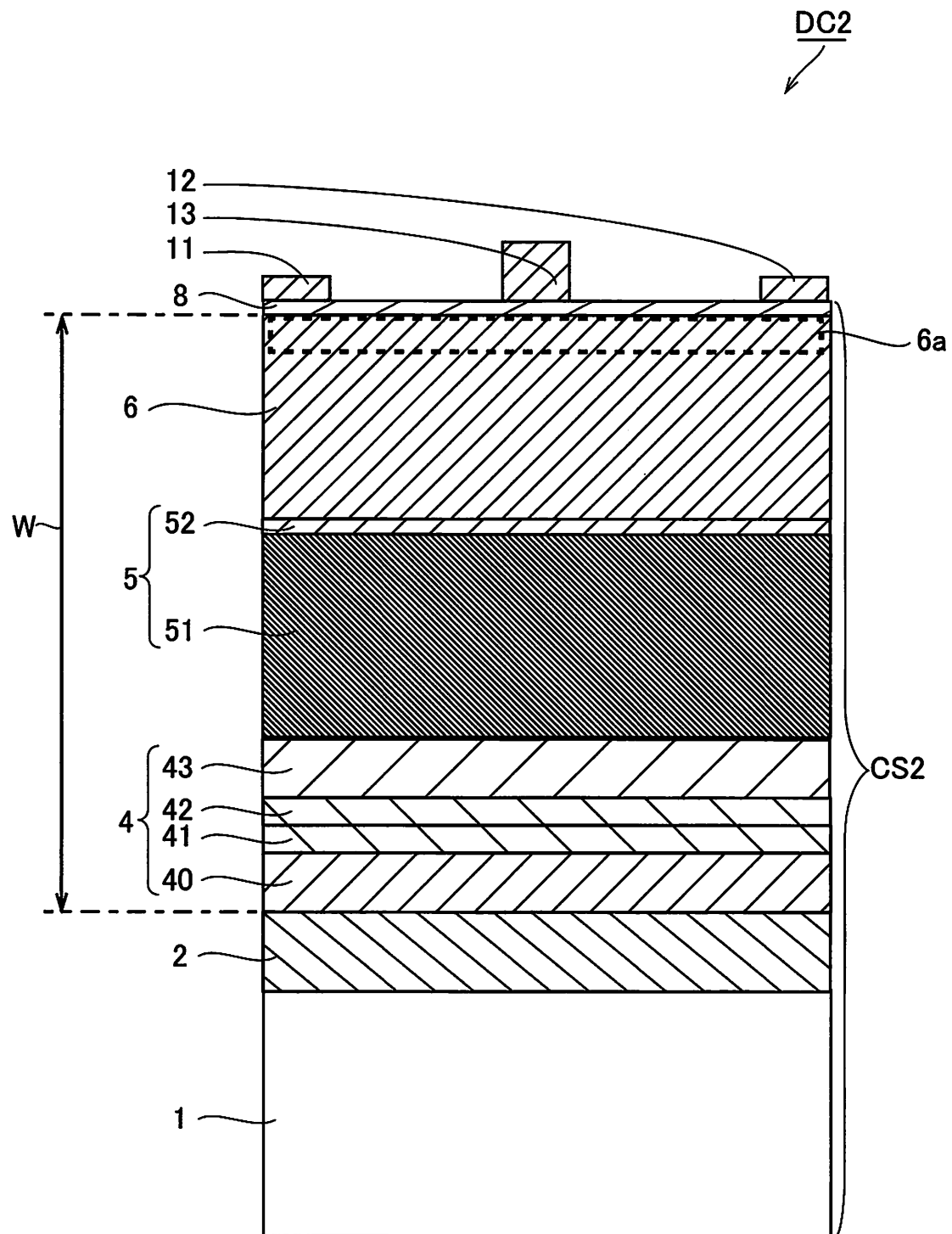


FIG. 6

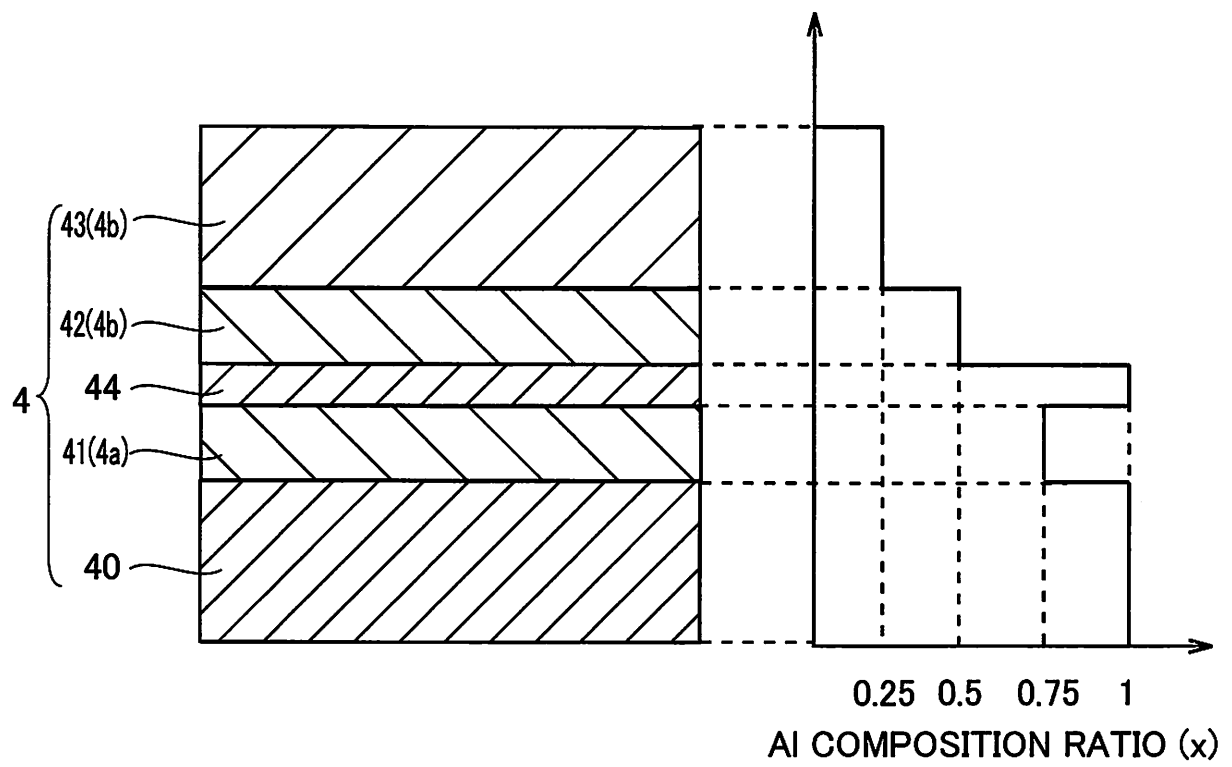


FIG. 7

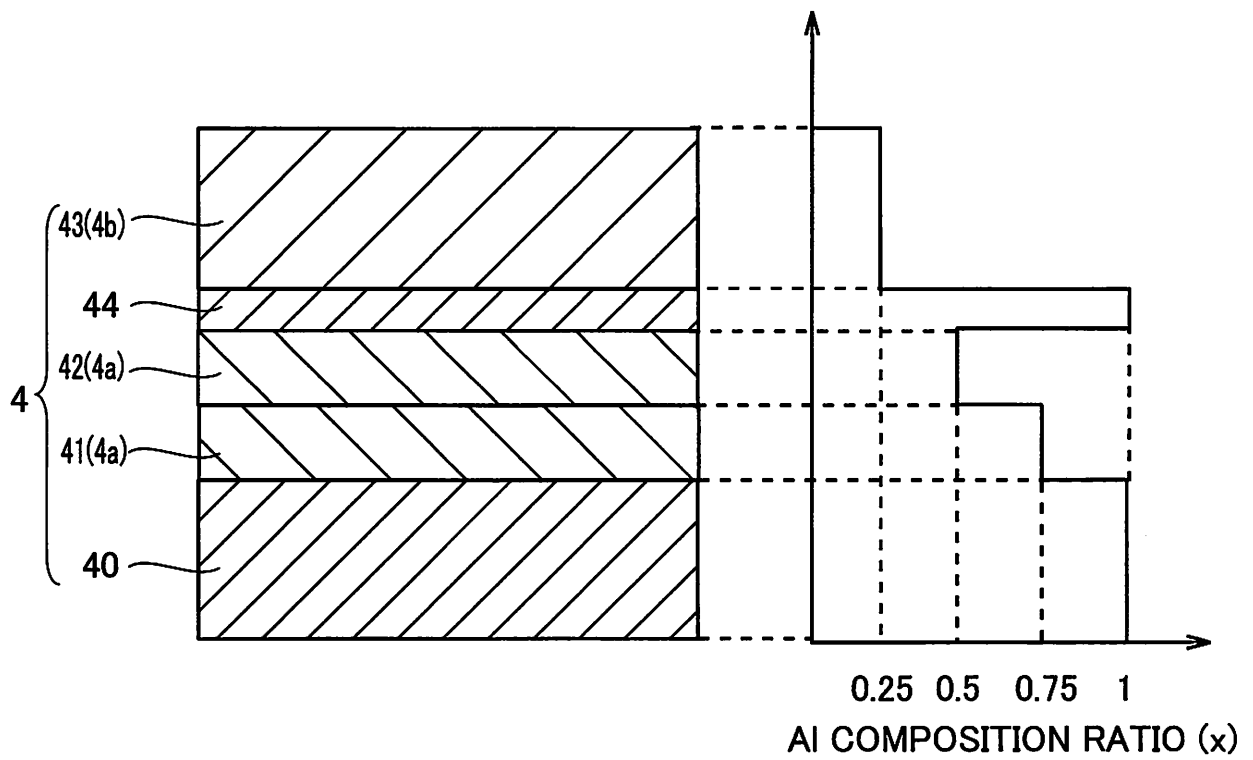


FIG. 8

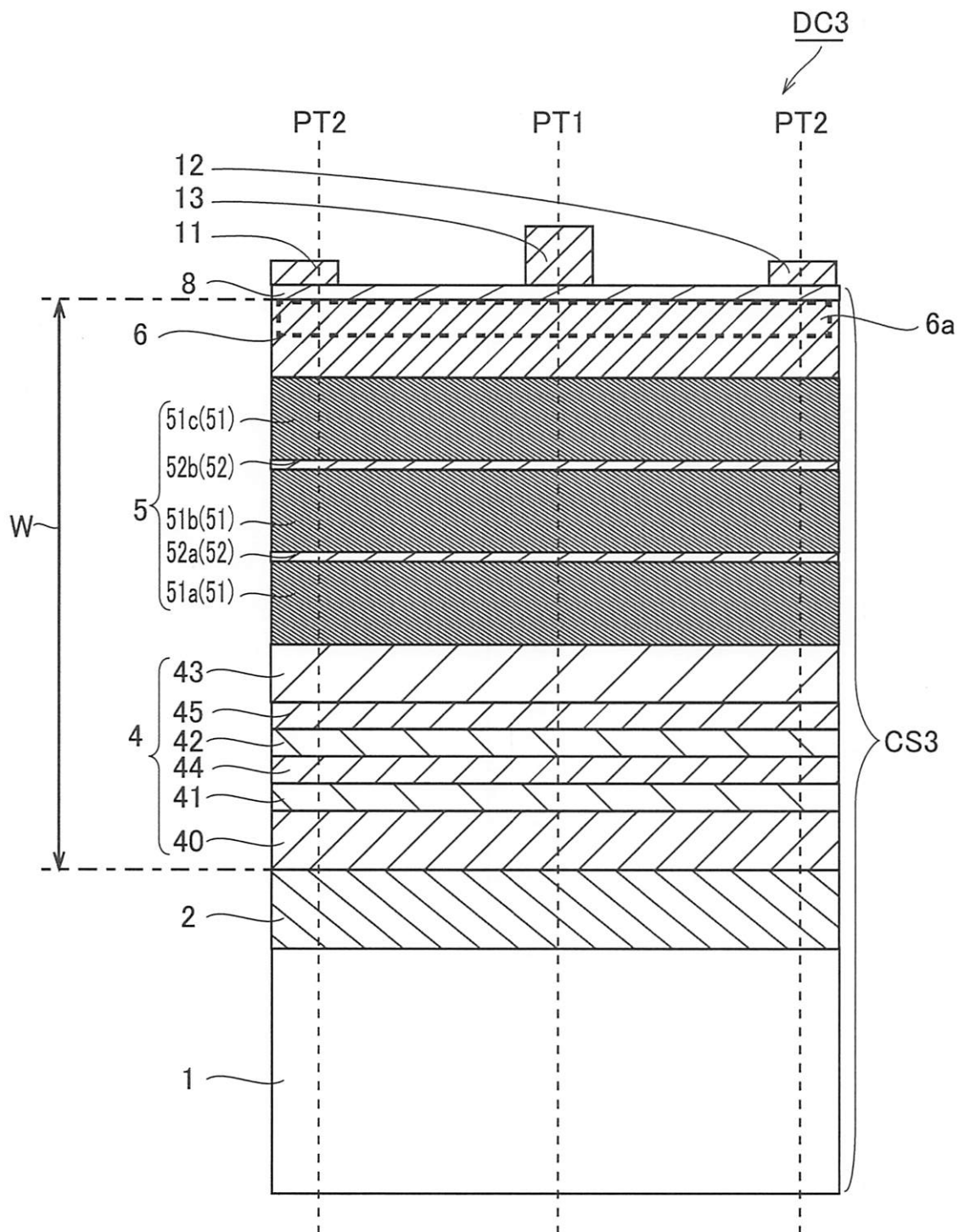


FIG. 9

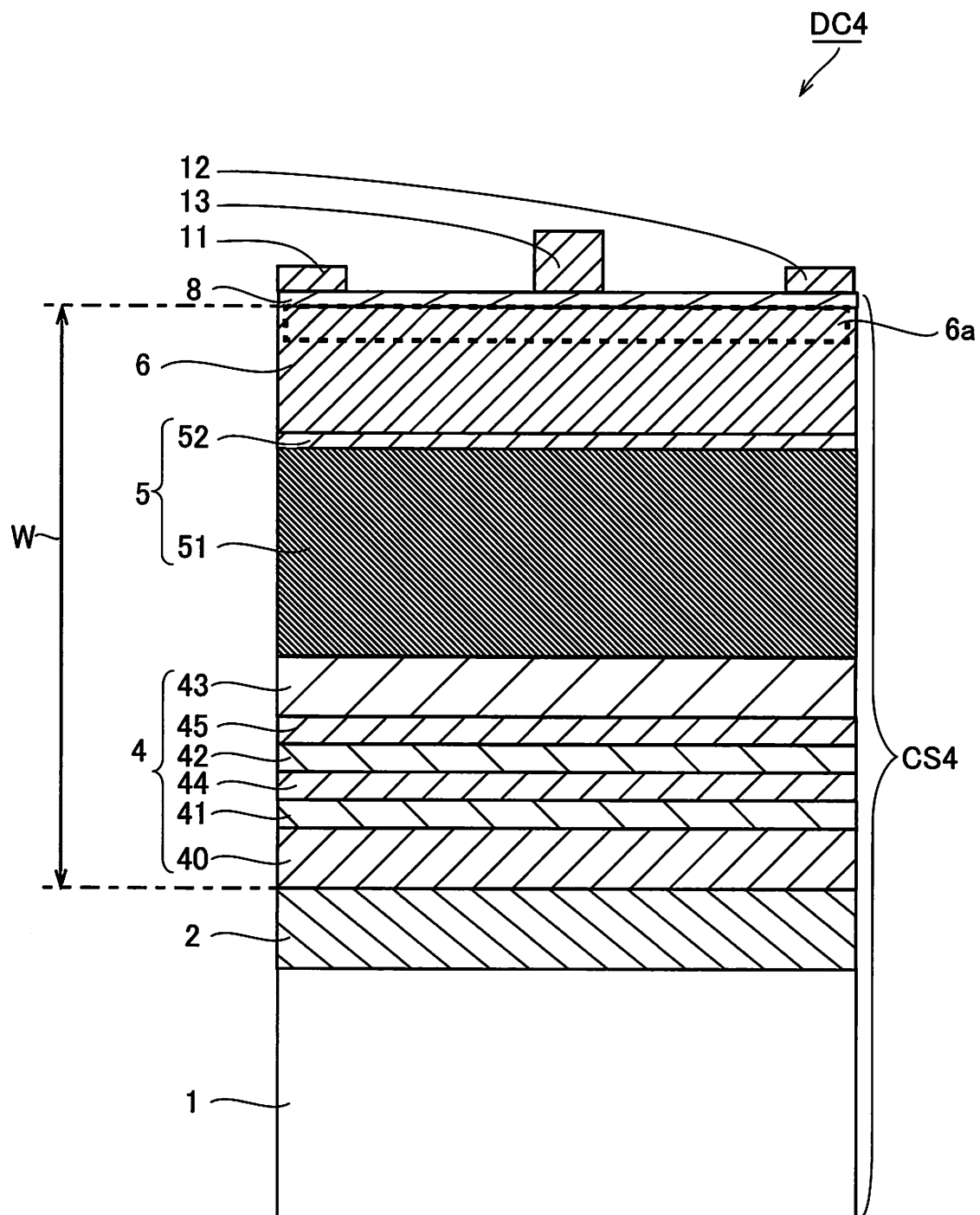
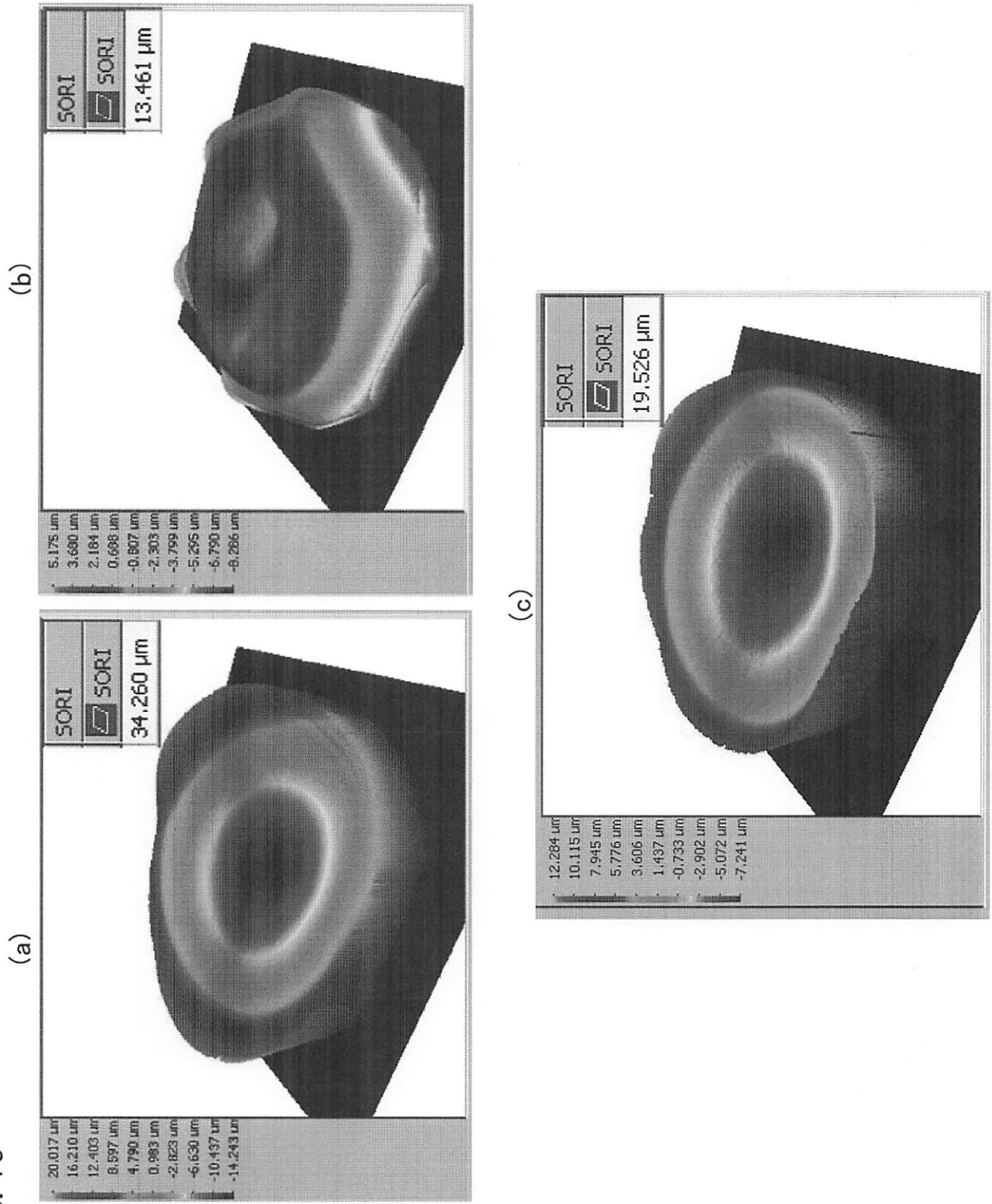
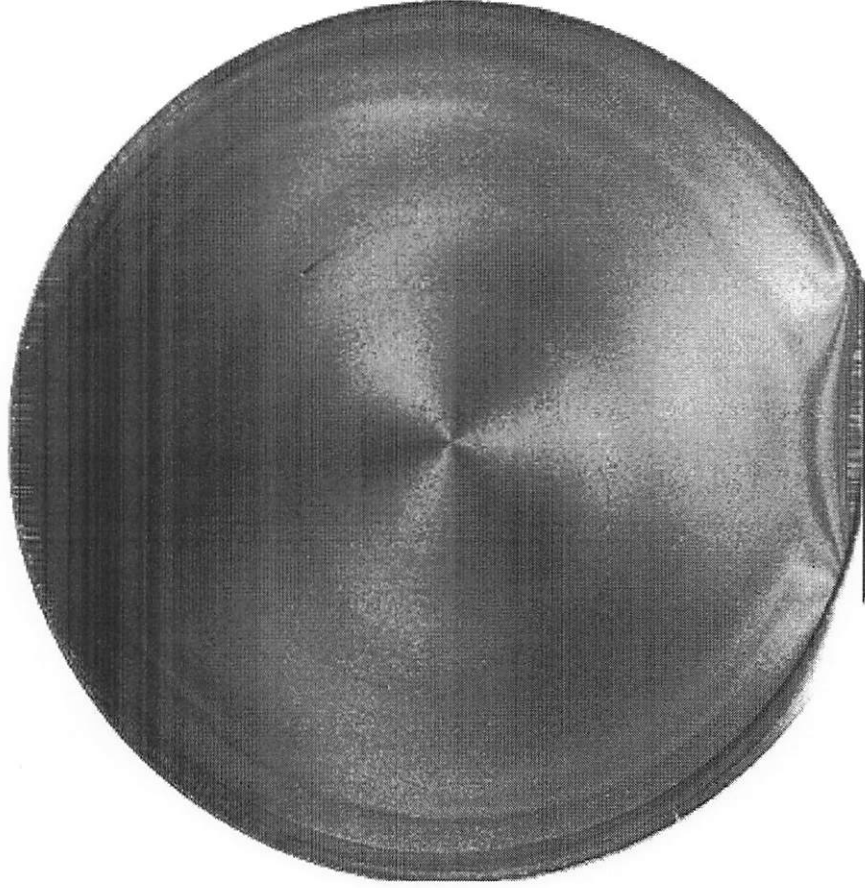


FIG. 10



(a)



(b)

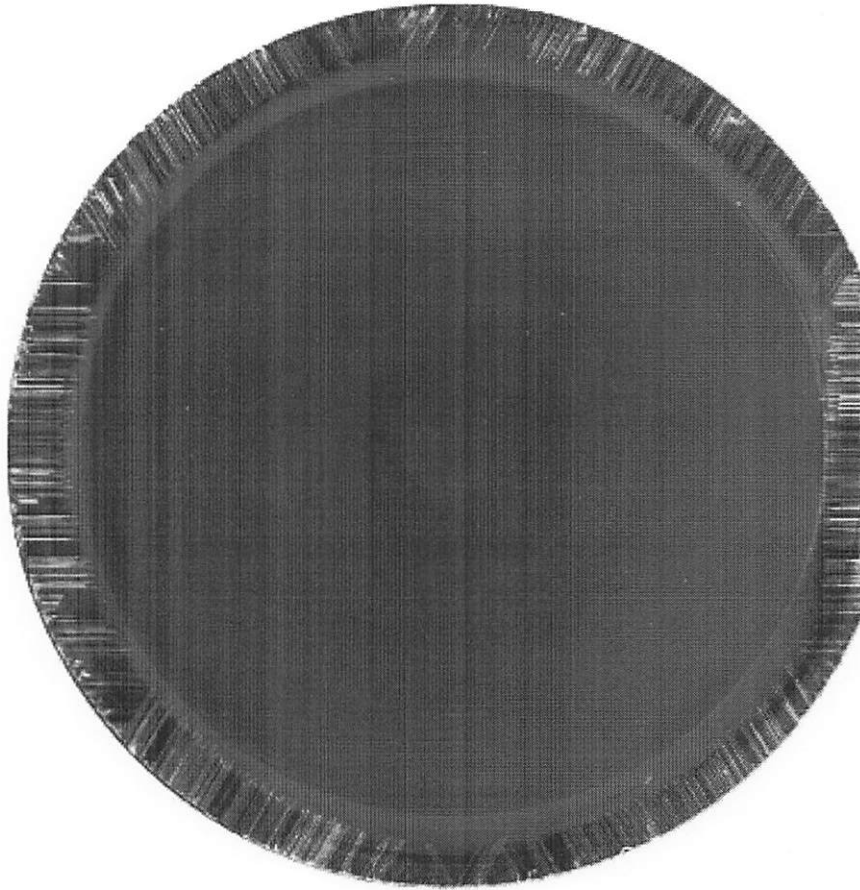
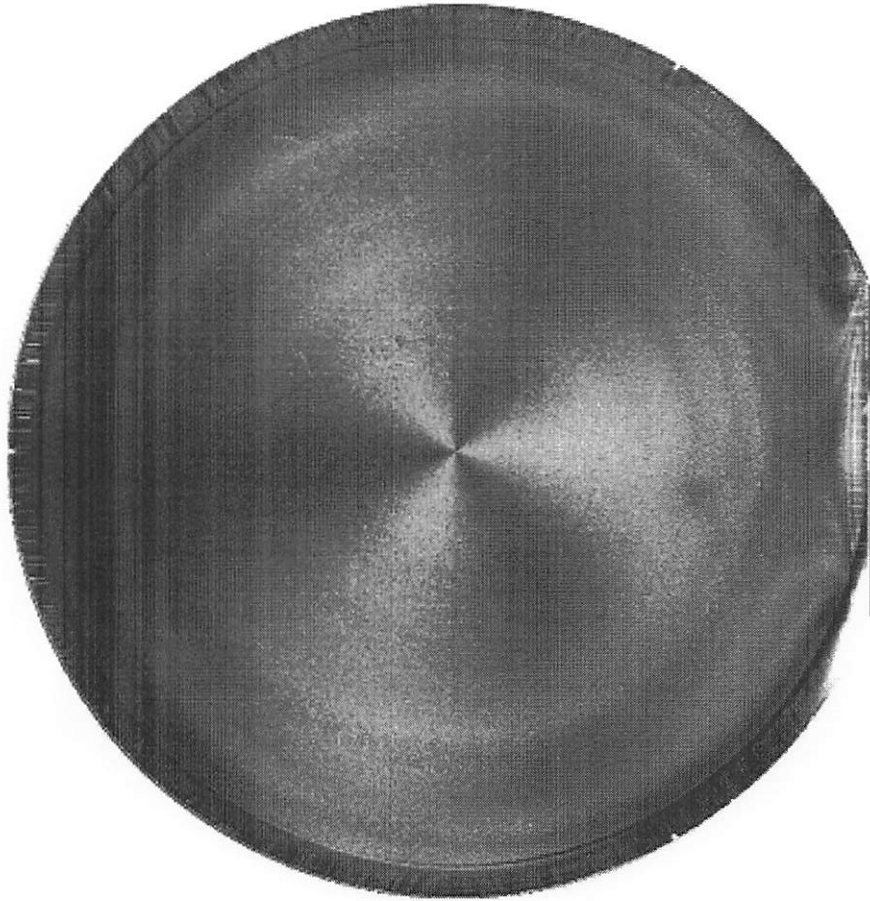


FIG. 11

(a)



(b)

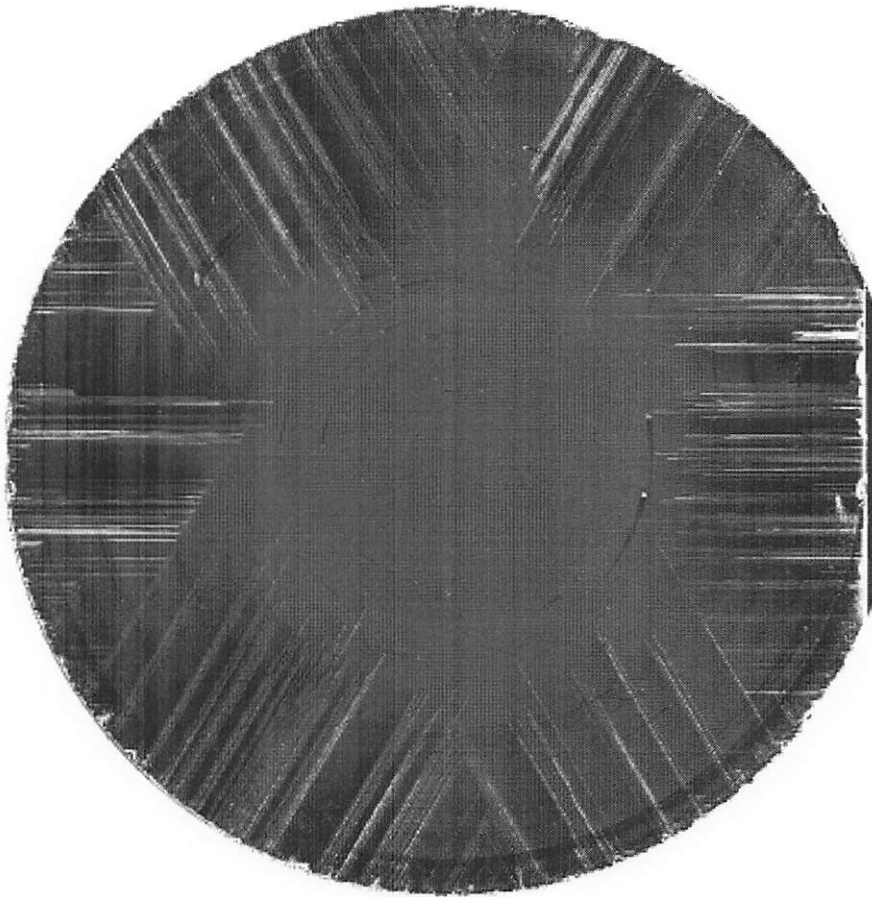
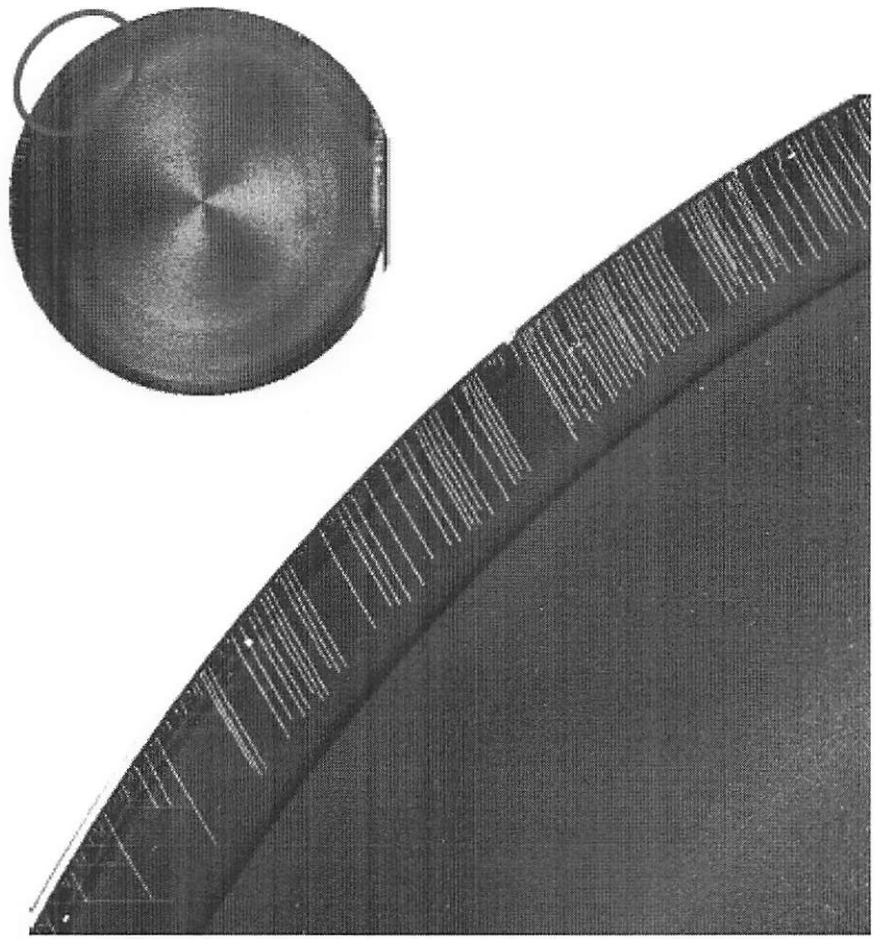


FIG. 12

(a)



(b)

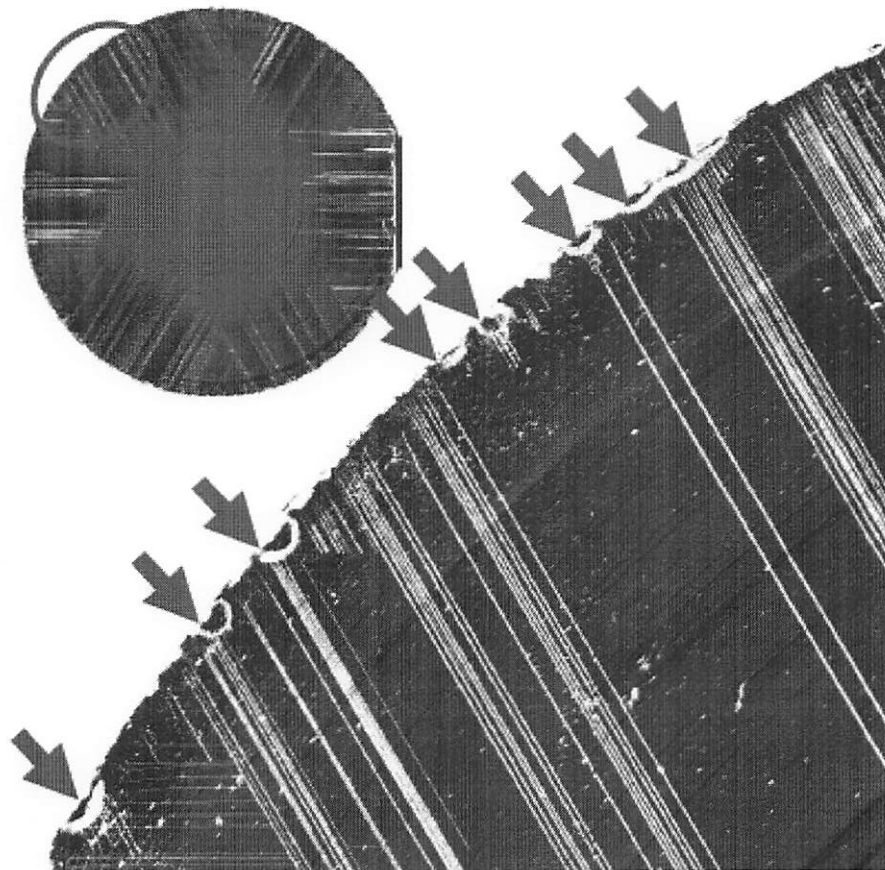
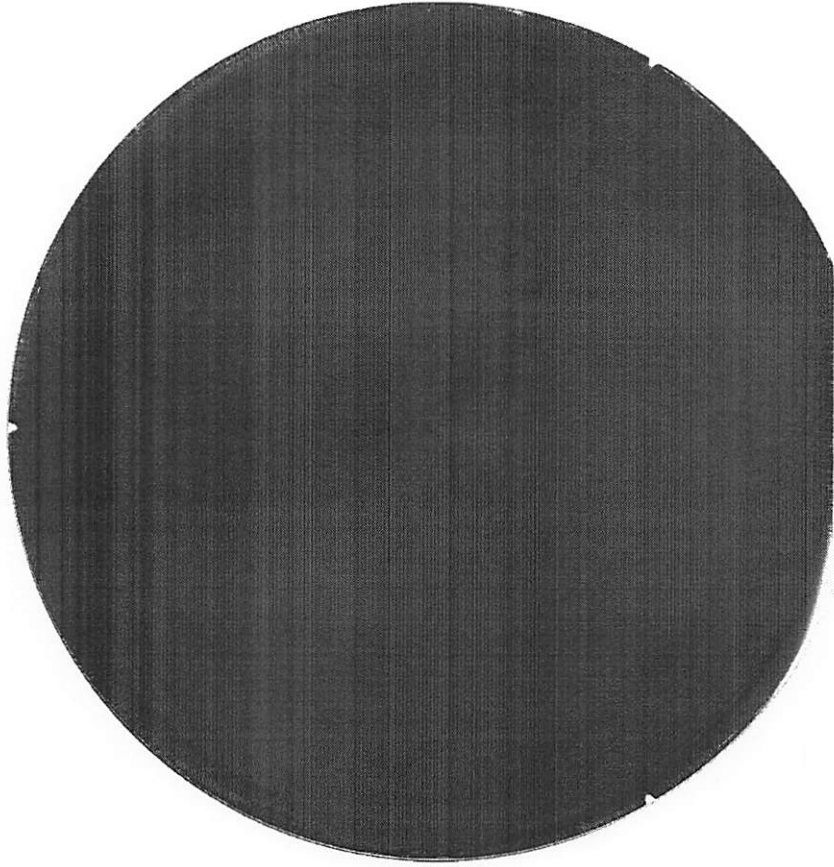


FIG. 13

(a)



(b)

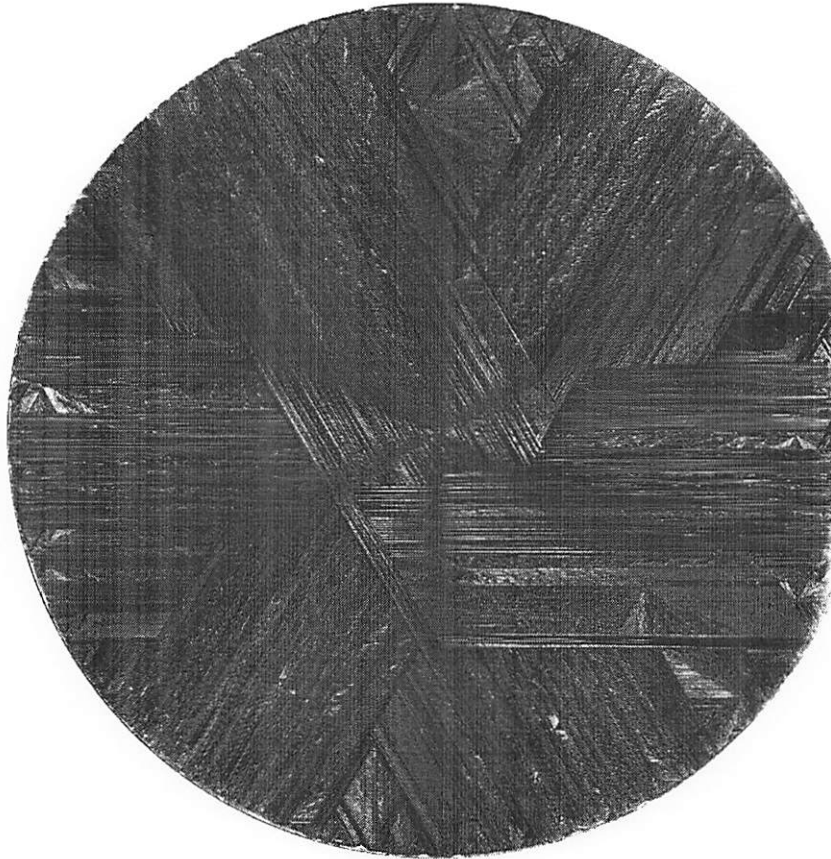


FIG. 14

FIG. 15

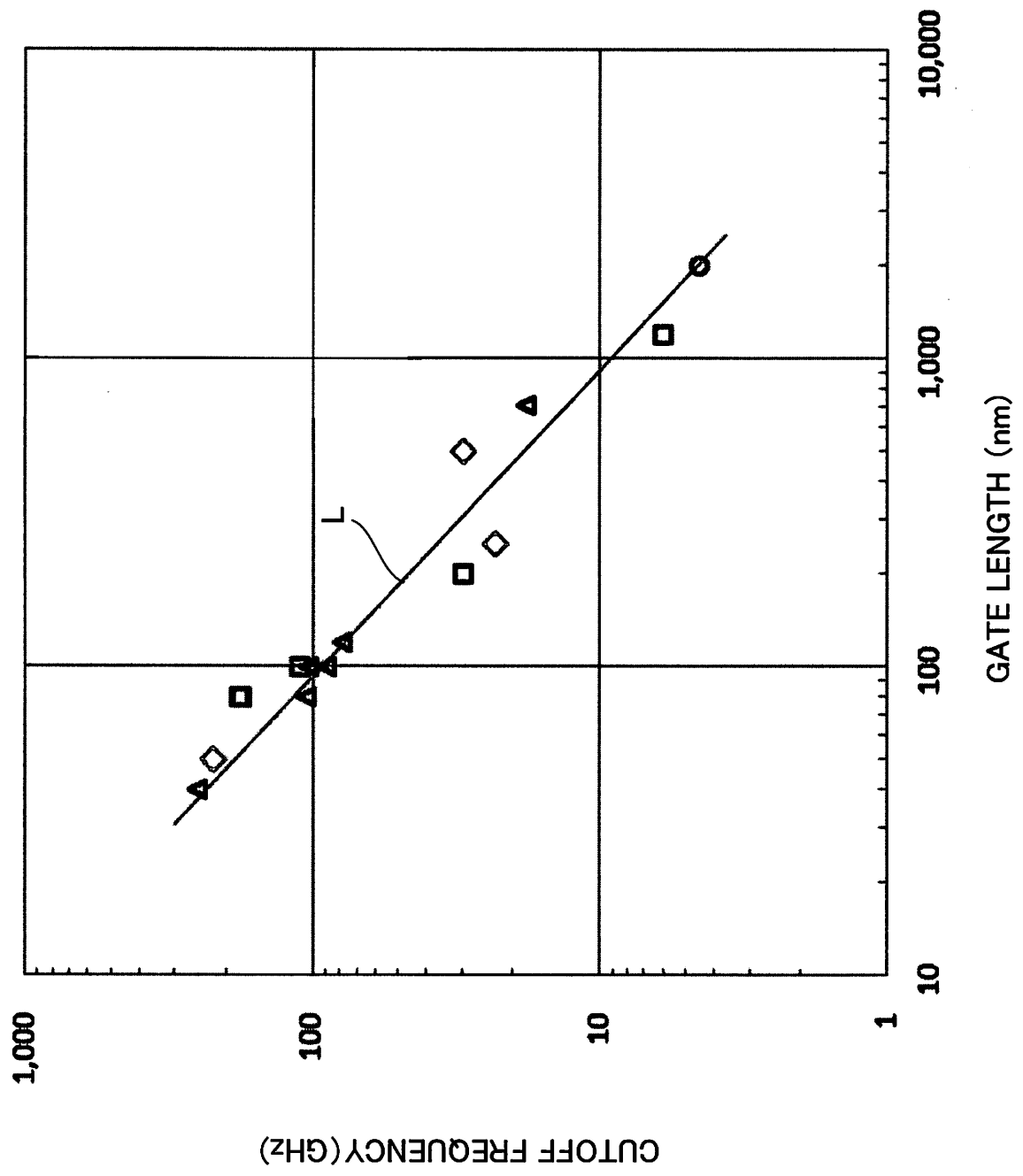


FIG. 16

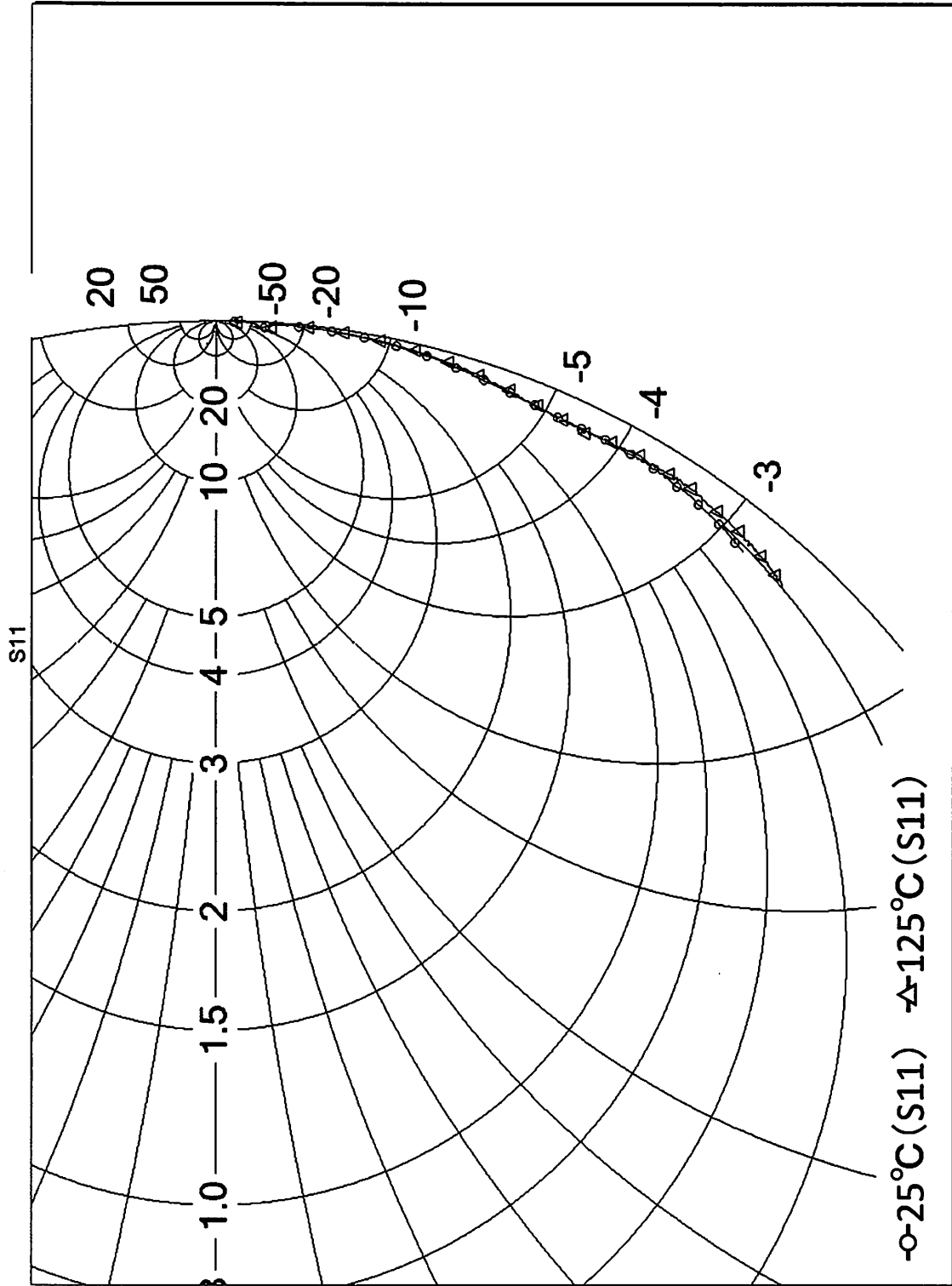


FIG. 17

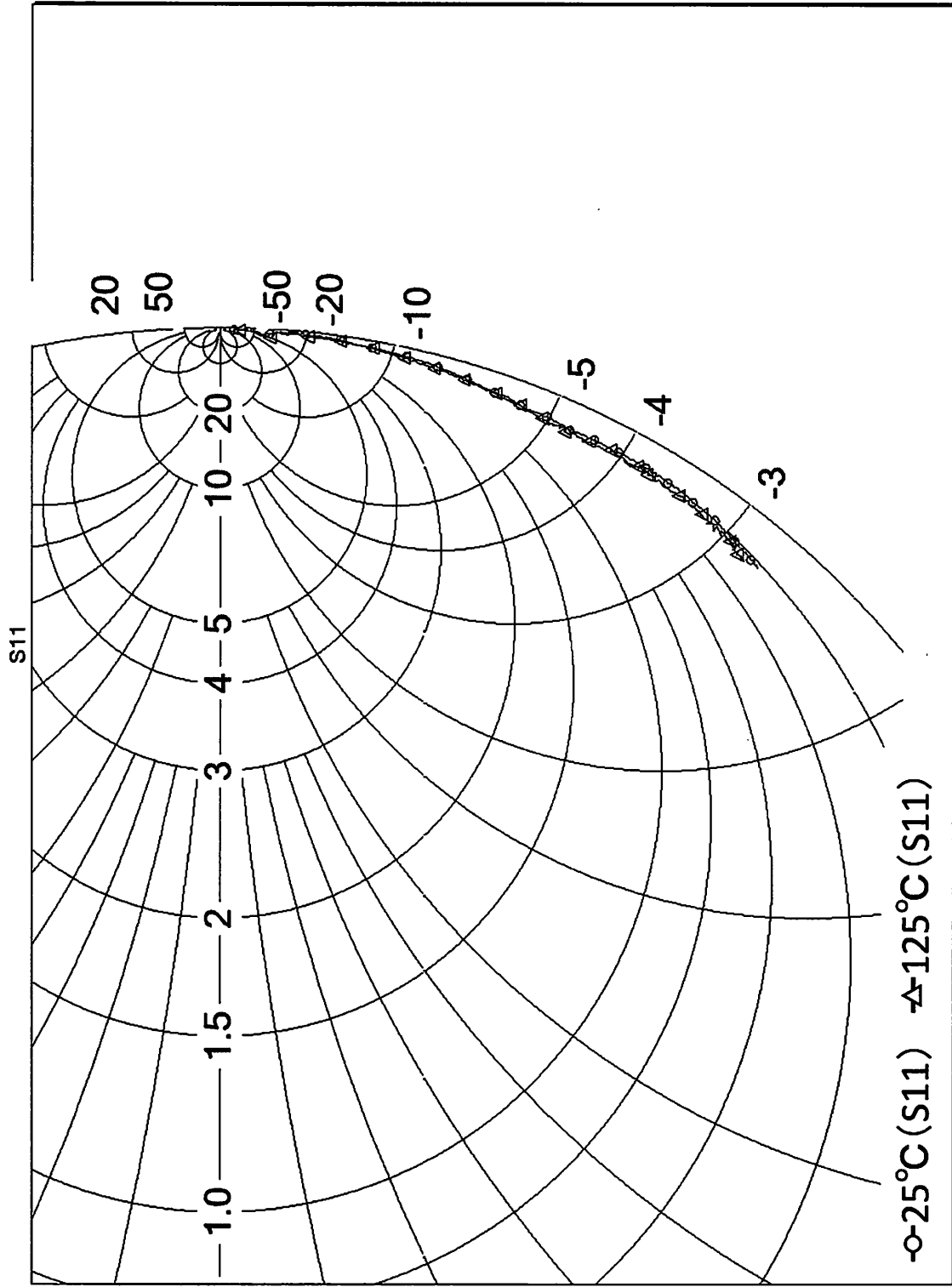


FIG. 18

SAMPLE	SAMPLE 10	SAMPLE 11
C-GaN LAYER 51c CONCENTRATION ERROR ΔC	0%	258%
C-GaN LAYER 51b CONCENTRATION ERROR ΔC	21%	312%
C-GaN LAYER 51a CONCENTRATION ERROR ΔC	33%	448%

FIG. 19

SAMPLE	SAMPLE 10	SAMPLE 11
C-GaN LAYER 51c THICKNESS ERROR ΔW	1.2%	11%
C-GaN LAYER 51b THICKNESS ERROR ΔW	1.8%	11%
C-GaN LAYER 51a THICKNESS ERROR ΔW	3.9%	9%

FIG. 20

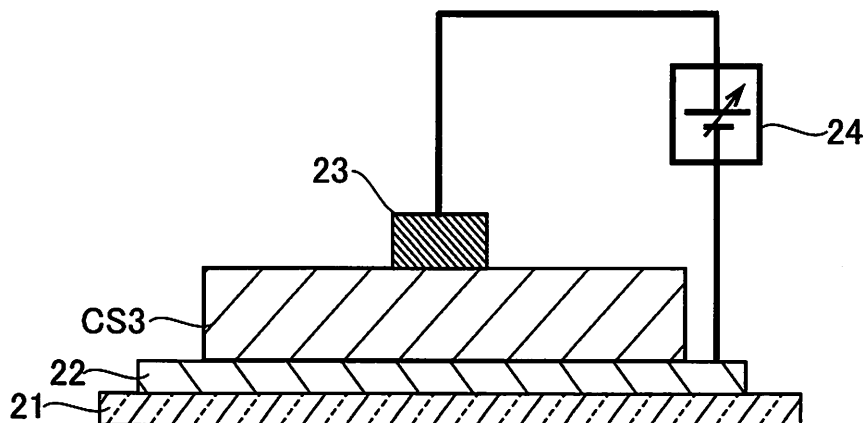


FIG. 21

SAMPLE	SAMPLE 10		SAMPLE 11	
POSITION	CENTER	EDGE	CENTER	EDGE
DEFECT DENSITY (PIECES/cm ²)	1.8	1.8	207	7.1

FIG. 22

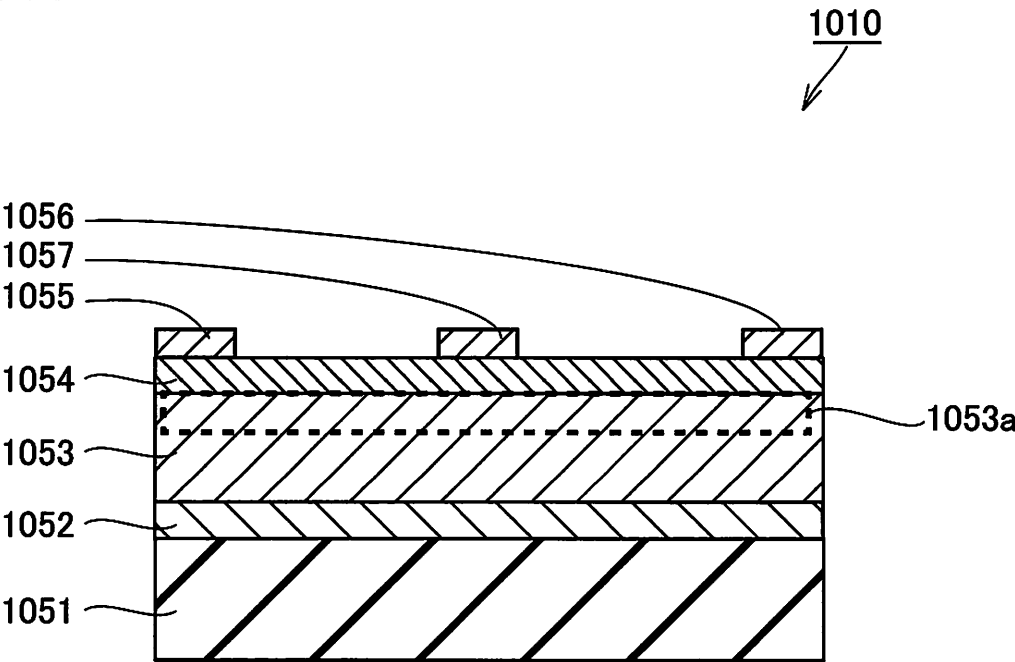


FIG. 23

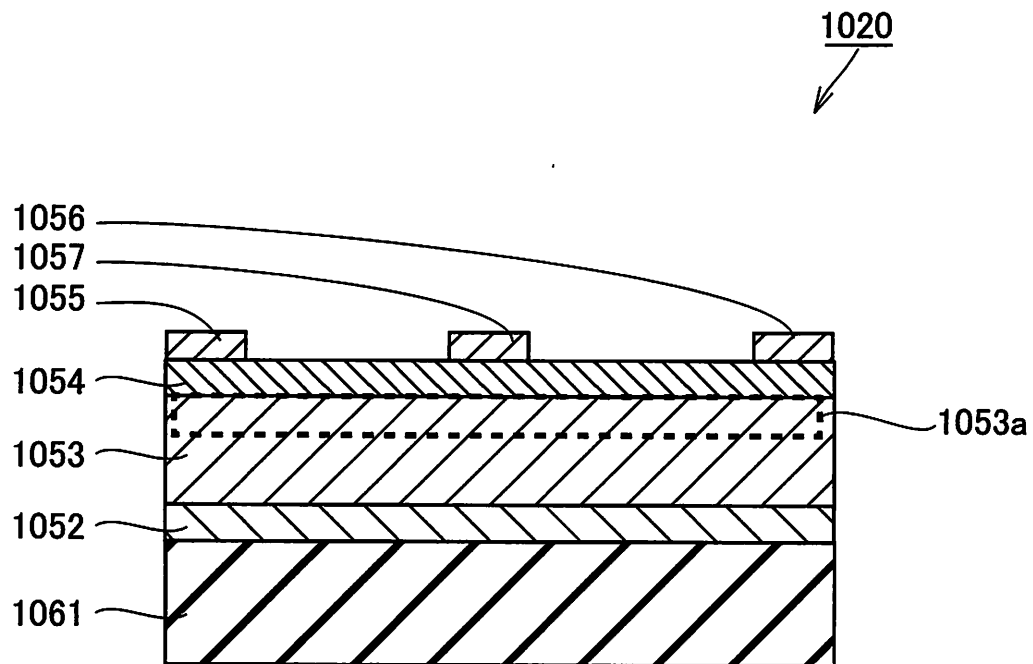


FIG. 24

