

(19)  
(12)

(KR)  
(A)

(51) Int. Cl.<sup>7</sup>  
G11B 7/085

(11)  
(43)

2003-0088526  
2003 11 20

(21) 10-2002-0026030  
(22) 2002 05 11

(71) 3 416

(72) 419 202 1302

212-1002

615 801

109-1503

865-1

111-1604

(74)

:

(54)

C,D 4 가 , A,B,

$$\begin{matrix} P_C & , & (P_B - P_C) & , & P_B & , & C \\ P_A & , & P_D & , & (P_B - P_C) & , & A \\ , & 1 & 가 & , & (P_B - P_C) & , & 2 \\ & & & & & & 1 \end{matrix}$$

$$\begin{matrix} S2 & , & & & 2 & & S1, \\ & & & & (S1-S2) & & 3 \end{matrix}$$

가 . , ,

1			
2		4	
3	4		-
4			1
5			2
6			1
7			2
8a	10b		1

hoto detector) (tracking) (error) (p  
 - (push-pull) , ,  
 (filtering)

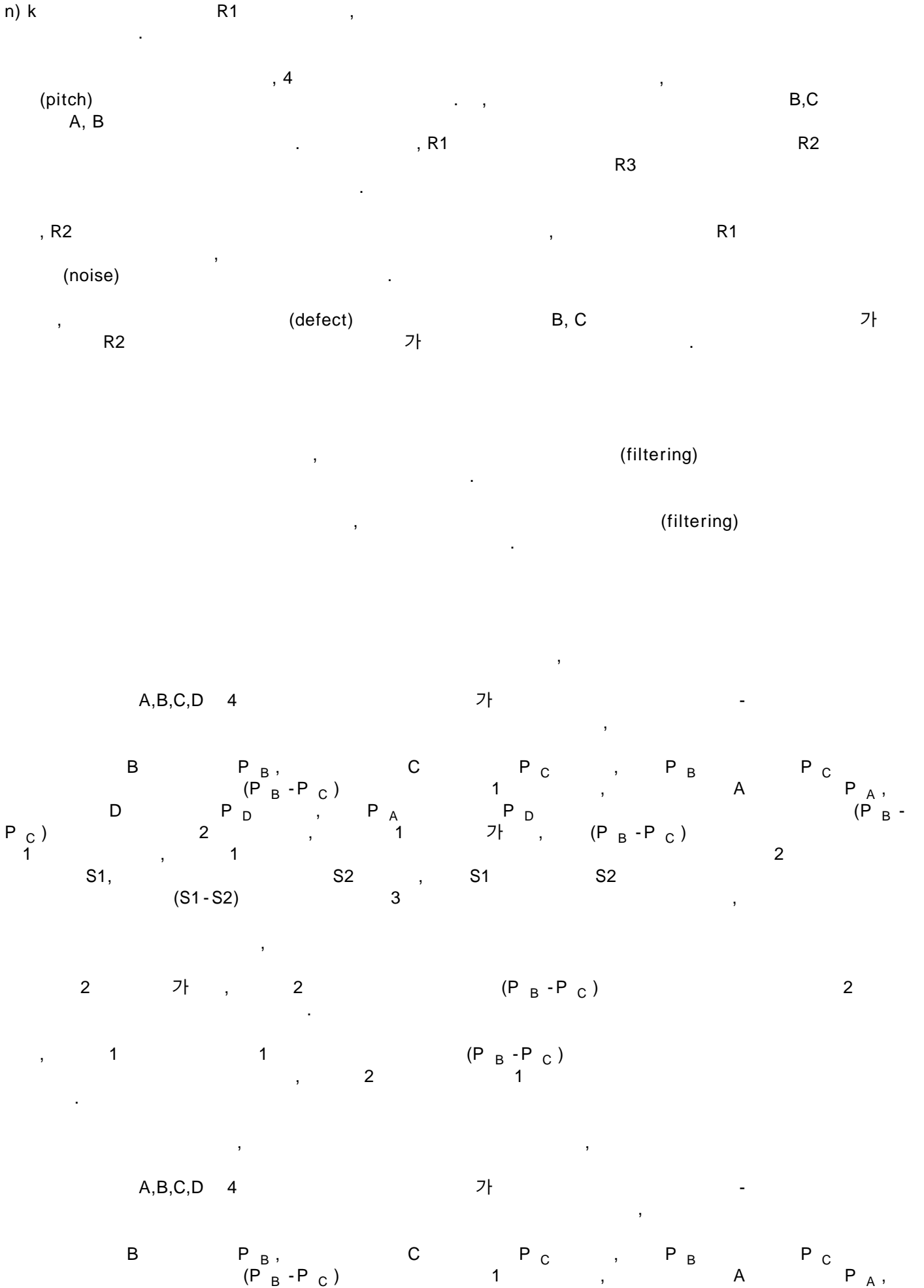
(spot) 가

4 -

1 (15) (17) (pick-up) , (11), (13),  
 ( (15) (17) (13) (11)

2 (17) 4 (17) (radial) A,B,C,D 4

3 4 B - C P<sub>C</sub> , (P<sub>B</sub> - P<sub>C</sub>)  
 1 , 2 , A P<sub>B</sub> , P<sub>A</sub> , D P<sub>C</sub> P<sub>D</sub> , (P<sub>A</sub> - P<sub>D</sub>)  
 R1, R2 , (R1 - R2) k 3  
 3 R3 , R3 = (P<sub>A</sub> - P<sub>D</sub>) - k(P<sub>B</sub> - P<sub>C</sub>)  
 -P<sub>C</sub>) 가 (track cross) (shift) , (P<sub>A</sub> - P<sub>D</sub>) , (P<sub>B</sub> - P<sub>C</sub>) R1 R2  
 , R2 (gai



$P_C$ ) D  $P_D$ ,  $P_A$   $P_D$  1 가 1 ( $P_B -$   
 $2$  1, 1 S1, S2, S1 S2  
 $2$  (S1-S2) 3  
 $2$  ( $P_B - P_C$ ) 2 가 2  
 $2$  1  
 4 1  
 $2$  4 A, B, C, D  $P_A, P_B, P_C, P_D$ , 1  
 (41) ( $P_B - P_C$ )  
 $2$  (43) ( $P_A - P_D$ )  
 $1$  (45) 1 (41) (S2a) ( $P_B - P_C$ )  
 $1$  (45) BW1, BW1 S2a  
 (defect)  
 (47) 1 (45) k  
 $3$  (49) 2 (43) S1 (47) S2, (S1-S2)  
 $5$  2  
 $4$  ( $P_A - P_D$ ) BW2 2 (50) 4 2 (43)  
 가 2 BW2 1 (45) BW1 가  
 BW2  
 $6$  1  
 $2$  A, B, C, D 4 가  
 ( 61 ).  
 $61$  4 A, B, C, D  $P_A, P_B, P_C, P_D$ , 1  
 (41) ( $P_B - P_C$ ) 1 ( 63 ).  
 $63$  2 (43) ( $P_A - P_D$ ) 2 ( $P_A - P_D$ ) S1  
 ( 64 ). 64 63  
 $64$  1 (45) ( $P_B - P_C$ ) BW1 ( )  
 $66$  ). BW1 ( $P_B - P_C$ ) (defect)  
 $66$  (47) 1 (45) k S2 ( 67 ).

67, (S1-S2) 3 (49) 2 (43) S1 (47) S2  
 ( 69 ).

7 2

6 1 , 6 61 67

67, 2 (43) S1a (P<sub>A</sub>-P<sub>D</sub>) BW2 2 (50)  
 (45) BW1 ( 71 ). 2 BW2 1  
 가 , BW2 .

71, (S1a-S2) 3 (49) 2 (50) S1a (47) S2  
 ( 73 ).

8a 10b 1  
 (land)-(groove) 405nm, (NA:Numerical Aperture)가 0.8  
 가 0.32um

5, 8a 3 R1 (P<sub>A</sub>-P<sub>D</sub>) R2 (P<sub>B</sub>-P<sub>D</sub>)  
 c) R3 , R2

8b 8a 4 S1 R1 S2b R2가 1  
 1 (45) , S3 3 (49) S2b S3 8a  
 , R2 R3

9a 가 (tracking off) , 3 R3  
 , R2가

9b 9a 4 R2가 S3 R3  
 1 S2b ,

10a 9a 가 (tracking off) , 3 R2 R3  
 , 가

10b 10a 4 S2b S3  
 1 ,

(filtering) , , 가 , 가 .

(57)

1.

A,B,C,D 4

가

-

B  $P_B,$  C  $P_C,$   $P_B$   $P_C$   
 $(P_B - P_C)$  1 ;

A  $P_A,$  D  $P_D,$   $P_A$   $P_D$   
 $(P_B - P_C)$  2 ;

1 가 ,  $(P_B - P_C)$  1 ;

1 ;

2 S1, S2 , S1 S2  
 $(S1 - S2)$  3

2.

1 , 1 ,

1  $(P_B - P_C)$

3.

1 , ,

2 가 , 2  $(P_B - P_C)$  2

4.

3 , 2 1

5.

A,B,C,D 4

가

-

B  $P_B,$  C  $P_C,$   $P_B$   $P_C$   
 $(P_B - P_C)$  1 ;

A  $P_A,$  D  $P_D,$   $P_A$   $P_D$   
 $(P_B - P_C)$  2 ;

1 ; 1 가 1 1

1 ;

2 S1, S2 , S1 S2  
 $(S1 - S2)$  3

6.

5 , 1 ,

1  $(P_B - P_C)$

7.

5

2

2

$$(P_B - P_C)$$

2

가

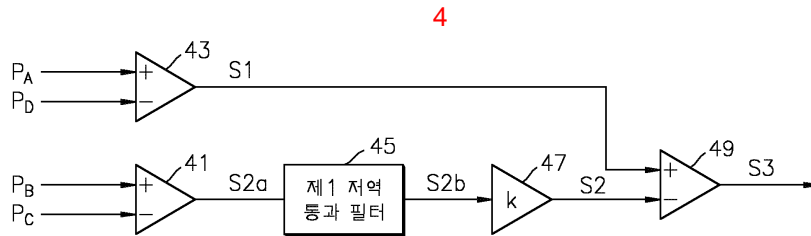
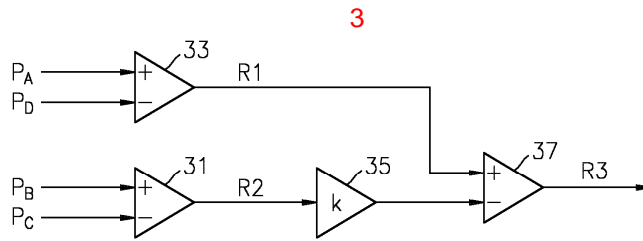
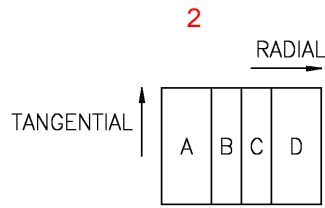
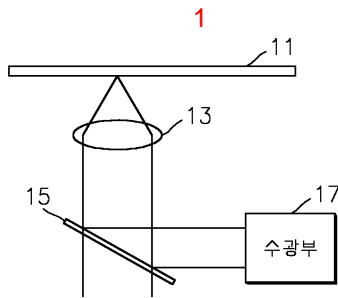
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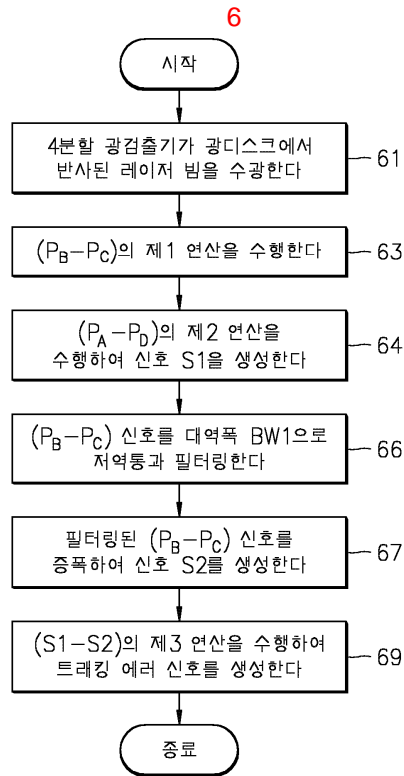
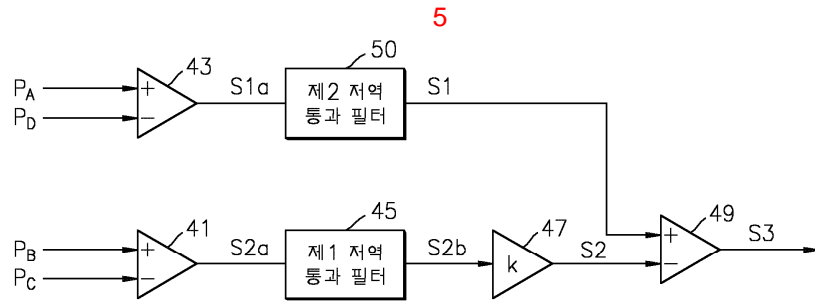
8.

7

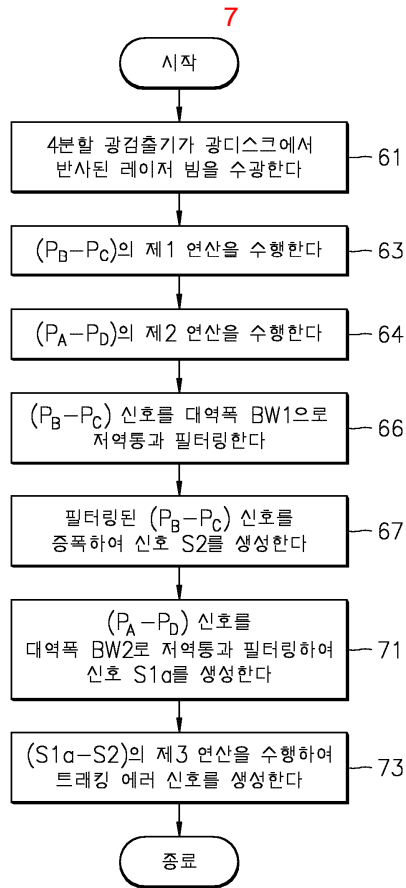
2

1

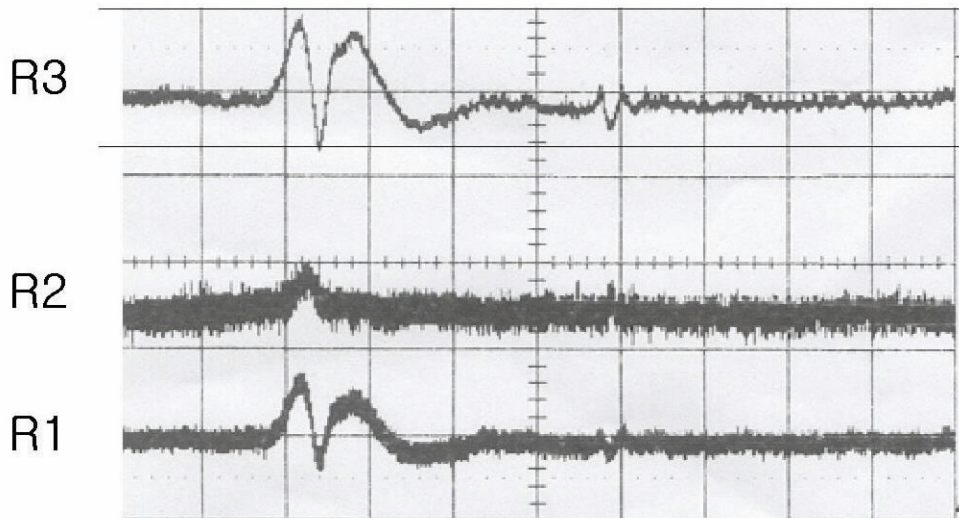


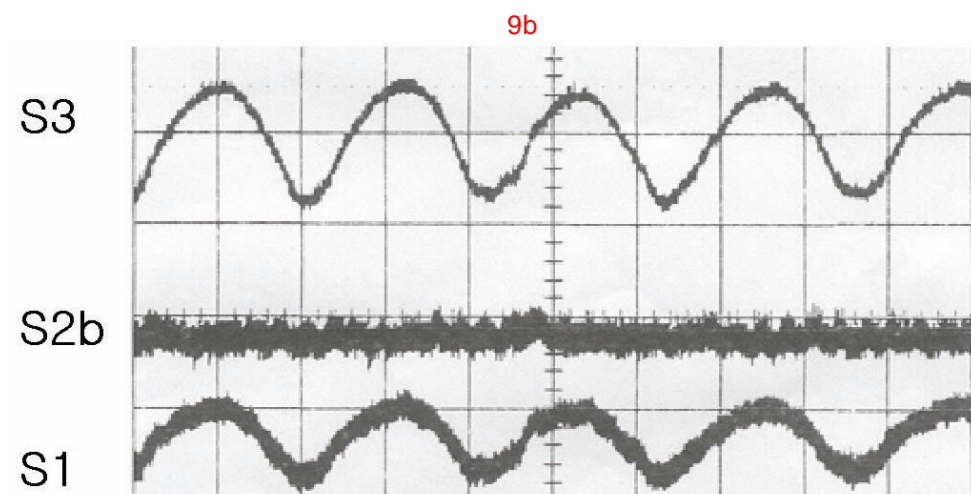
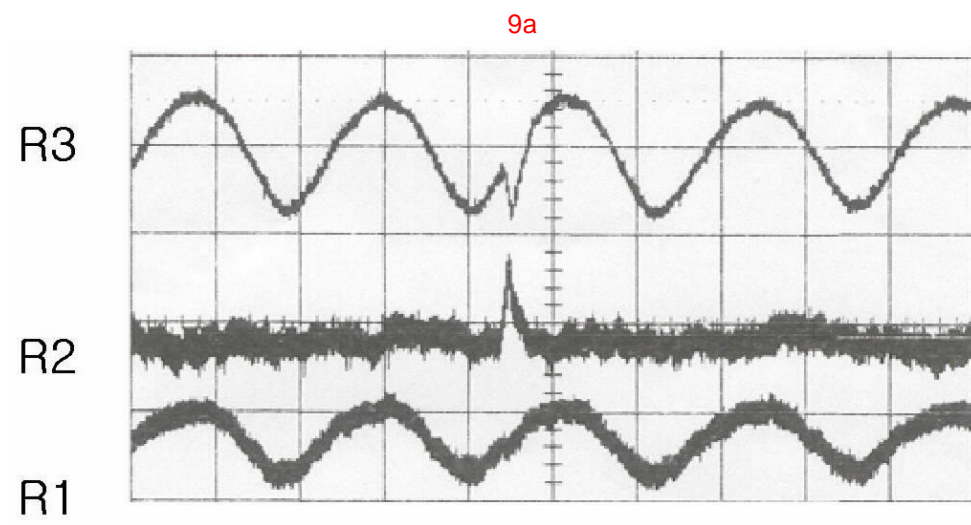
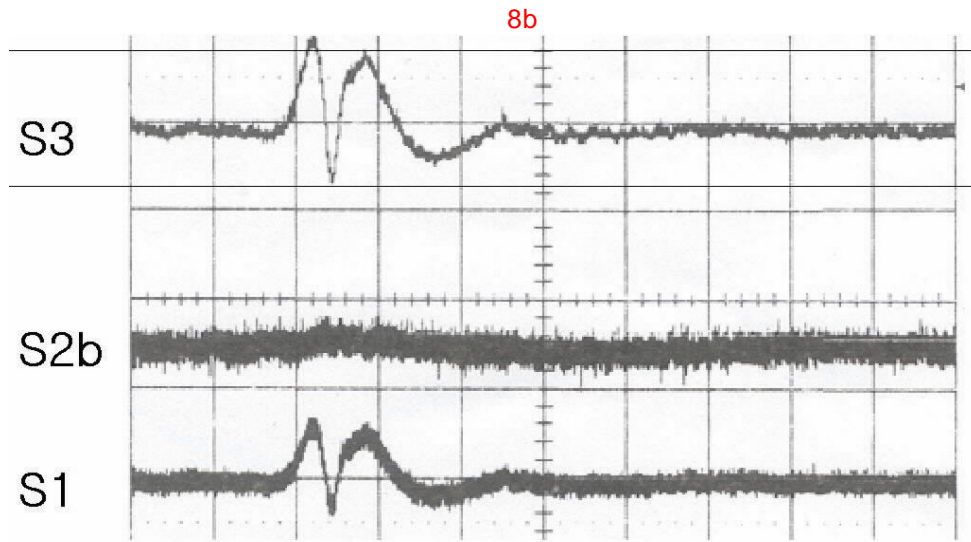




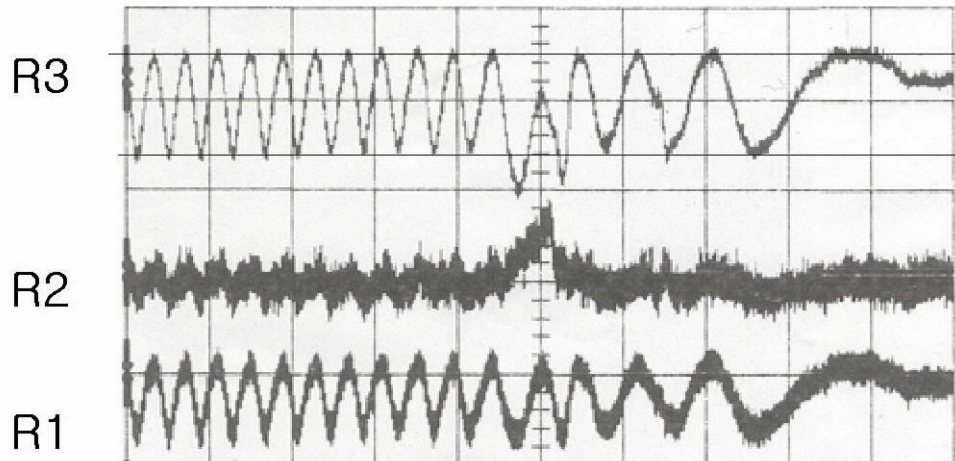


**8a**





10a



10b

