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 (43) 2001 07 06

(21) 10 - 2000 - 0065266
 (22) 2000 11 03

(30) 99 - 314614 1999 11 05 (JP)

(71) 53188 3000

(72) 가
 가 4 7 - 127

(74)

:

(54) P R F ,

PRF ,
), (172), 가 (174), 가 , (176
 PRF 가 .

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1

2 1

3 1

4 1
5 1
6 1 B
7 1
8 1
9 1
10 가
11
12 (m)
13 1
14 13
15 CFM
16 14
17 14
18 14
19 14
20 CFM

PRF , , , , , PRF
가 PRF () , PRF

, 2 CFM (Colour flow mapping) ,
(Directional Power Doppler Imaging) DPDI , 2
PFD (Pulsatile Flow Detection)

CFM , DPDI , PFD , PRF , , PRF 가

PRF PRF , PRF

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PRF

, PRF 가 , P
RF

PRF

, PRF 가
, PRF

, PRF 가

, PRF , CFM 가 PRF

, PRF 가 , DPDI 가

, PRF 가

, PRF

PFD 가

. PRF

, PRF 가

, PRF

CFM 가

. PRF

가

, PRF 가

. PRF

가

, P

RF

DI 가

DP

, PRF 가

. PRF

가

, P

RF

D 가

PF

가

PRF

PRF

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1 , (2) PZT((Ti) (2) (Zr))
 (2) (6) (6) (2) (2) 가
 (6) 2 (602) , (6)
 (602) (18) (604) / (606)
 / (606),
 / (606) (610) / (606) (610),
 (18)
 , (602)
 (604) (610) (606) (610),
 (4) (202) () 2 (206) (z) (200) (6) 3
 (202) () 4 (202) (206) (200) (206) (x) (2)
 04) (z) , 2 (202) (206) (204) , 5
 () , 2 (206)

(6) B (10) (12) . (6)
 8) B (12) , (10) (4) (12) .
 B (10) B B (10) 6
 (102) , B (104) (10) , (104)
 , A (scope) , A B
 , , , ,
 (12) , , , ,
 (12) 7 (120), MTI (122;),
 (124), (126), (128) (130)
 MTI (12) (120) , MTI (122)
 MTI (122) , (V) (24)
 , (T) (108) (126),
 (PW) (130) ,
 , (V) , (T) (4)
 (2) (2) ,
 ,
 (12) , 8 (152), (154),
 156) (158) ,
 (152) (152) (120)
 (152) (156) (4) ,
 , , , ,
 (158) , , , ,
 ,
 (12) 9 (132), (134)
 (132) DSP() MPU()

(134) . . . (126) , , (V) (132)
 R (R) (128) (T), (8)
 . . .
 (134) (V) (132)
 (V) . . . , (132)
 . . . (V) (134) (132)

(134) . ,
(134) . ,
가 . ,
1/30

(132)	(134)	(VO)	(T)
.	.	(P)	.

10 , , . (a)
10(b) (b) (c) .
10(c) (t1) (t2) R (t3) (t4) .
10(d) (t2) (t3) .
10(e) (t4) .
10(f) (t5) .
10(g) (t6) .
10(h) (t7) .
10(i) (t8) .
10(j) (t9) .
10(k) (t10) .
10(l) (t11) .
10(m) (t12) .
10(n) (t13) .
10(o) (t14) .
10(p) (t15) .
10(q) (t16) .
10(r) (t17) .
10(s) (t18) .
10(t) (t19) .
10(u) (t20) .
10(v) (t21) .
10(w) (t22) .
10(x) (t23) .
10(y) (t24) .
10(z) (t25) .

$$\begin{array}{ccccccc}
 & , & (\vee n) & (b) & (c) & . & (134) \\
 (\vee n) & (\vee O) & (\vee O) & . & . & , & (\vee n) \\
 (132) & & & & & & (P)
 \end{array}$$

$$P \equiv "k \mid Vn" - VO \mid \dots k$$

, (\quad) 11 $(\forall n)$ (VO)
 (V)

$$P = "m \mid Vn" - VO \mid /Vn,$$

(2) , 가 . (m) 가 . ,
(vn) (vn)

, (132) (T), (T) (2), (t), P

B (10) (12) (14) (14), B
 (10) (12) B ,
 , , .
 (2), (6), (12) (14) 偈,

$$(14) \quad (140) \quad , \quad (142), \quad (144), \\ (146) \quad (148) \quad .$$

B (10) (12) B
 , (142) (142)
 (144) , (146) (148) (142)
 (146)

(16) (14) (16), (14)
(16) (16) (16)

(18) (6), B (10), (12), (14)
(16) (18) 가
가

(18), B (20) (18) (20) (18) (20)
(20) , , ,
,

(2) , (2)
, B , B
B B

B /

B , (6) (2) (4)
, . B (10) (6)
(102) , (104) A

$$, B \quad (142) \quad B \quad (10) \quad B \quad (142)$$

, (6) (2) (4)
,

(12) , (120) , MTI (122) MT
 , (124) , (126)
 , (128) , (130)
 , (132) , , ,

(12) , (152), (154), (156), (158)
) .
 (14) (142) (12)
 . ,
 (142) .

(148) (142) B ,
 (144) , (PDI) , (146) (PFD) . 가
 CFM . PDI . PDI
 DPDI() .

PDI 가 가 CFM
PDI 가 가 PDI

(148) B , CFM , DPDI ,
 B (tomogr
 am) . CFM 2 ,
 (blending ratio) ဂ

DPDI . DPDI , 2 가
CFM .

2

가

CFM

PDI

가 CFM

PDI

가

(16)

, B

CFM

가

DPDI

가

, B

가

B

가

PDI

가

, CFM

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가

14 PRF

(148)

(148)

(172)

(172)

(142)

(146)

(172)

CFM

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CFM

가

, 2

(A, B)

2

(A

, B)

(172)

(AB)

CFM

1

(AB)

PRF 가

16

, PRF 1/2

PRF/2

15 CFM

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가

(174)
가 0

(174)

가

(174)

가

(AB)
PRF

+

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17

가
ax) PRF

(178)

(176)
PRFPRF
PRF'(178)
(max)(176)
(max)

PRF

(m

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(176)

RF

(178)

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PRF

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PRF

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PRF

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PRF

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PRF

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PRF

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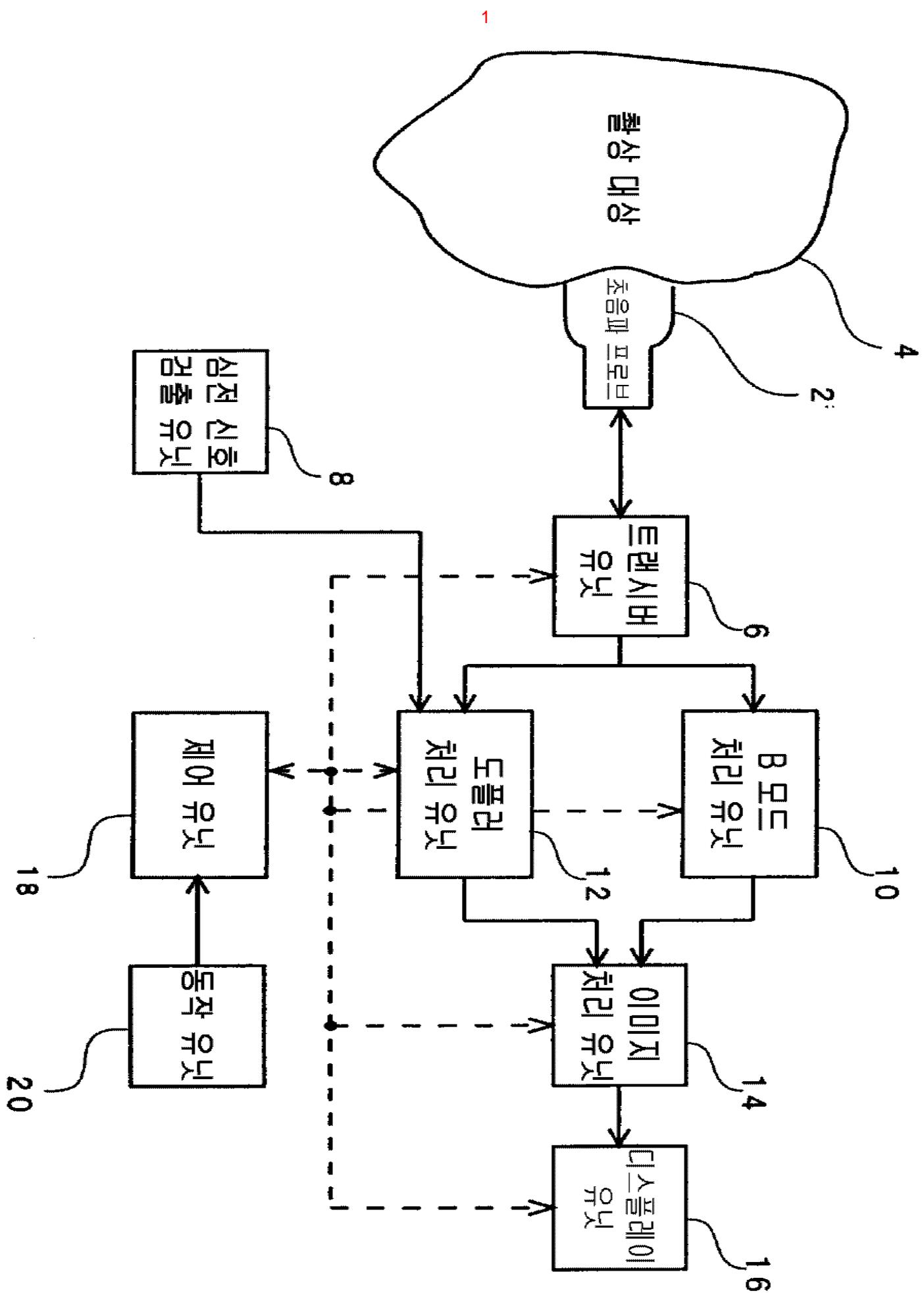
가

27.

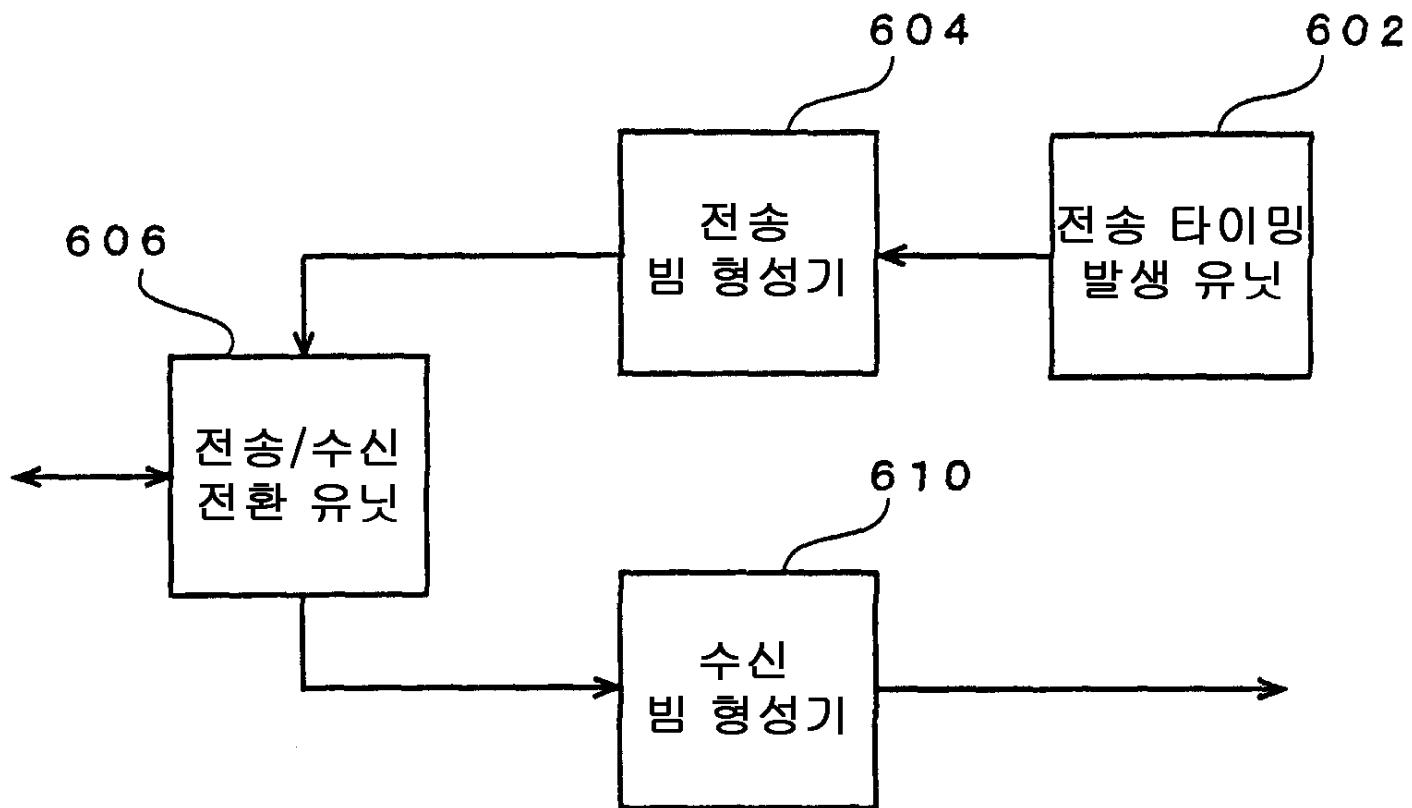
25

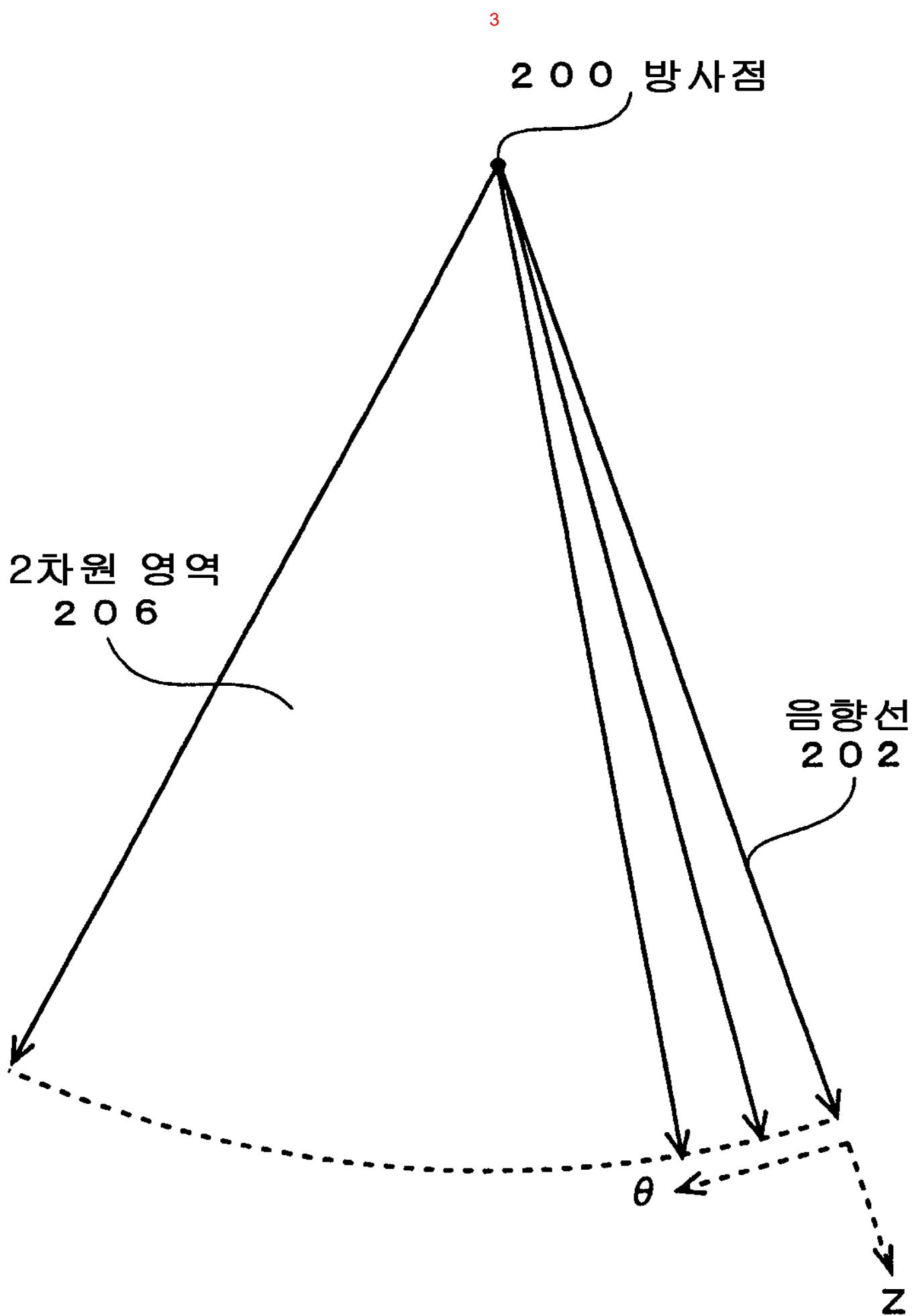
,

가



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6



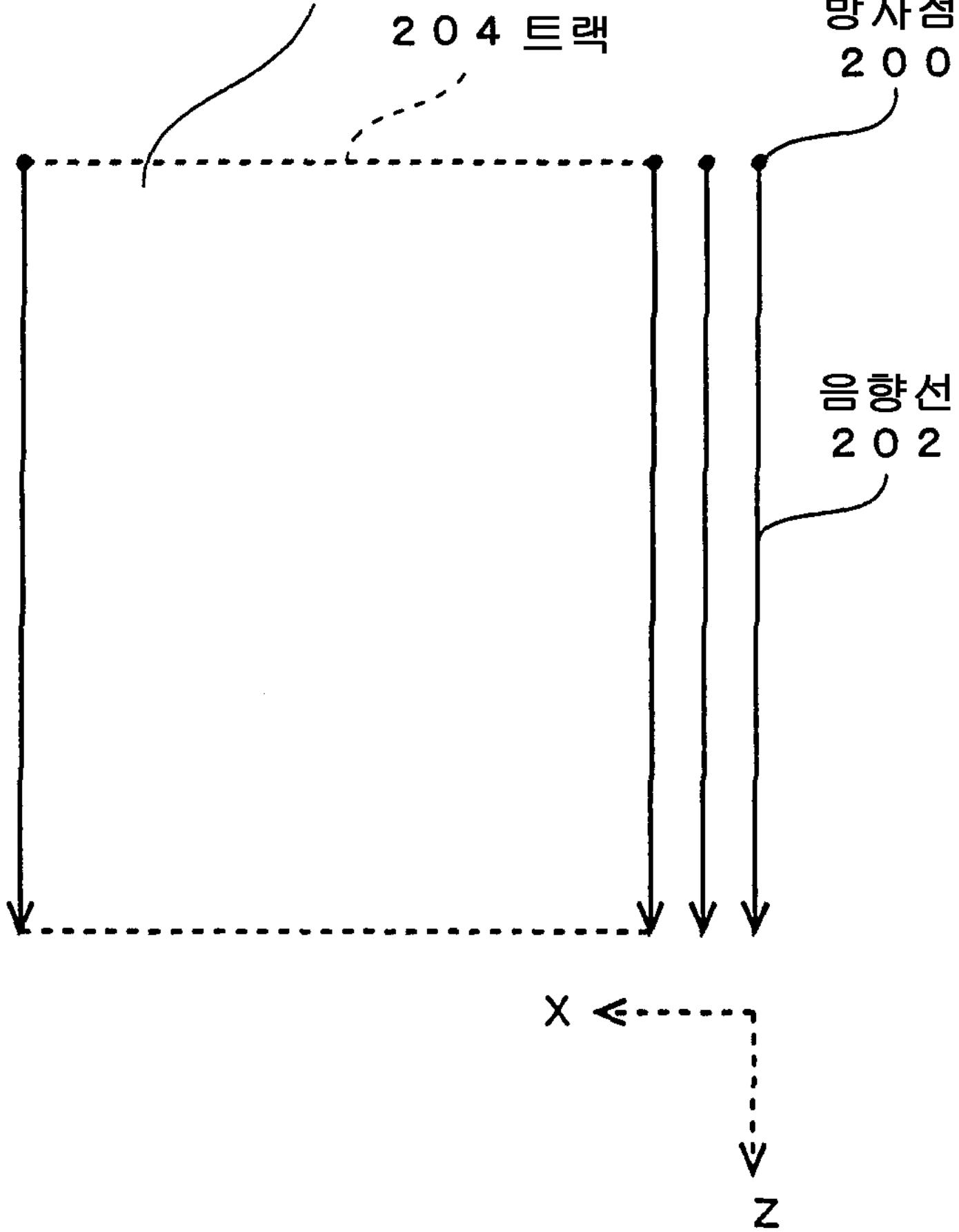
4

206 2차원 영역

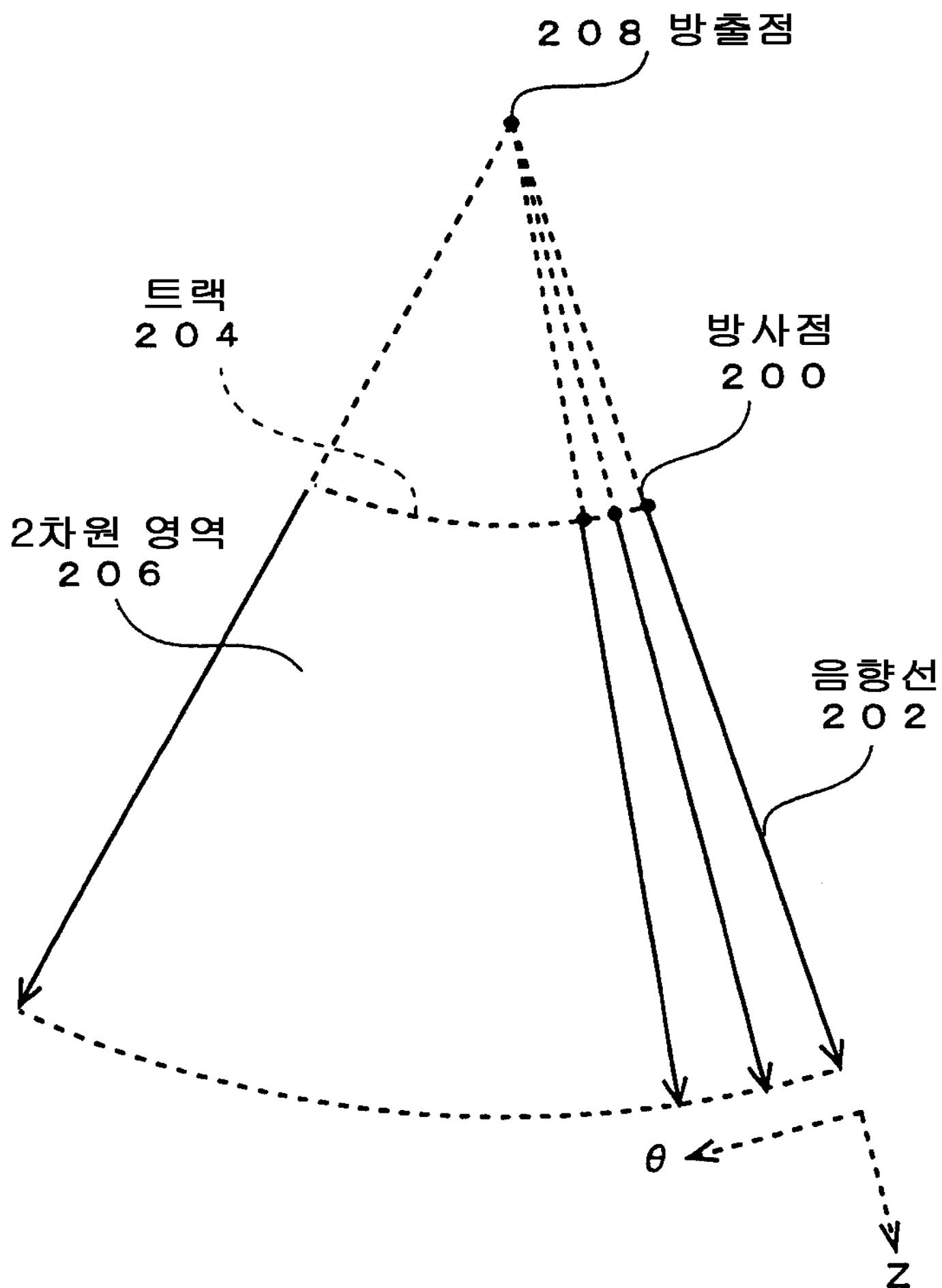
204 트랙

방사점 200

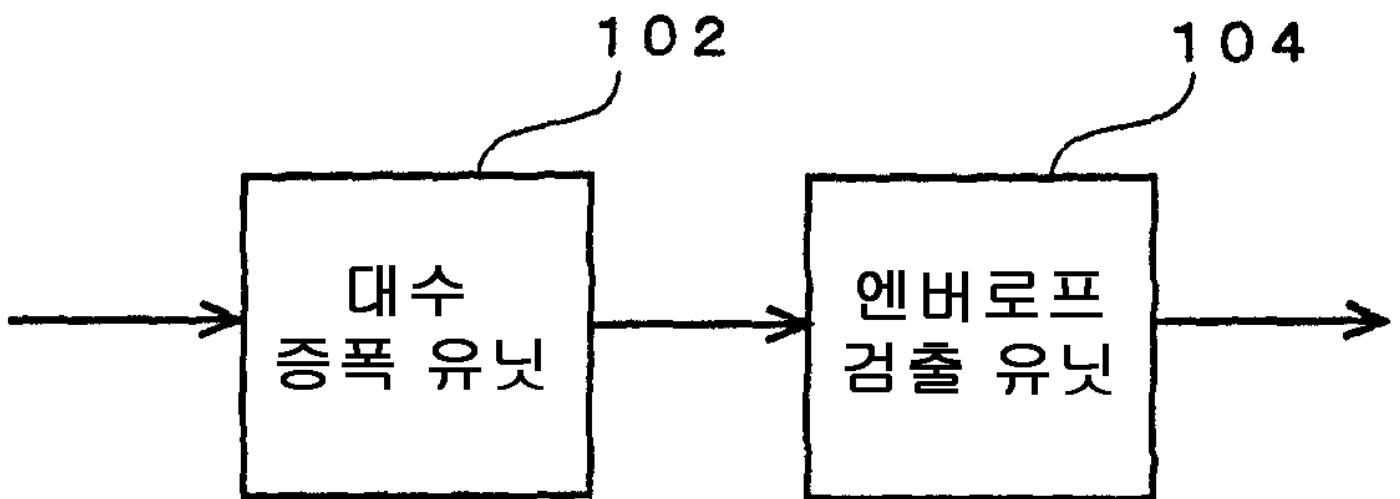
음향선 202

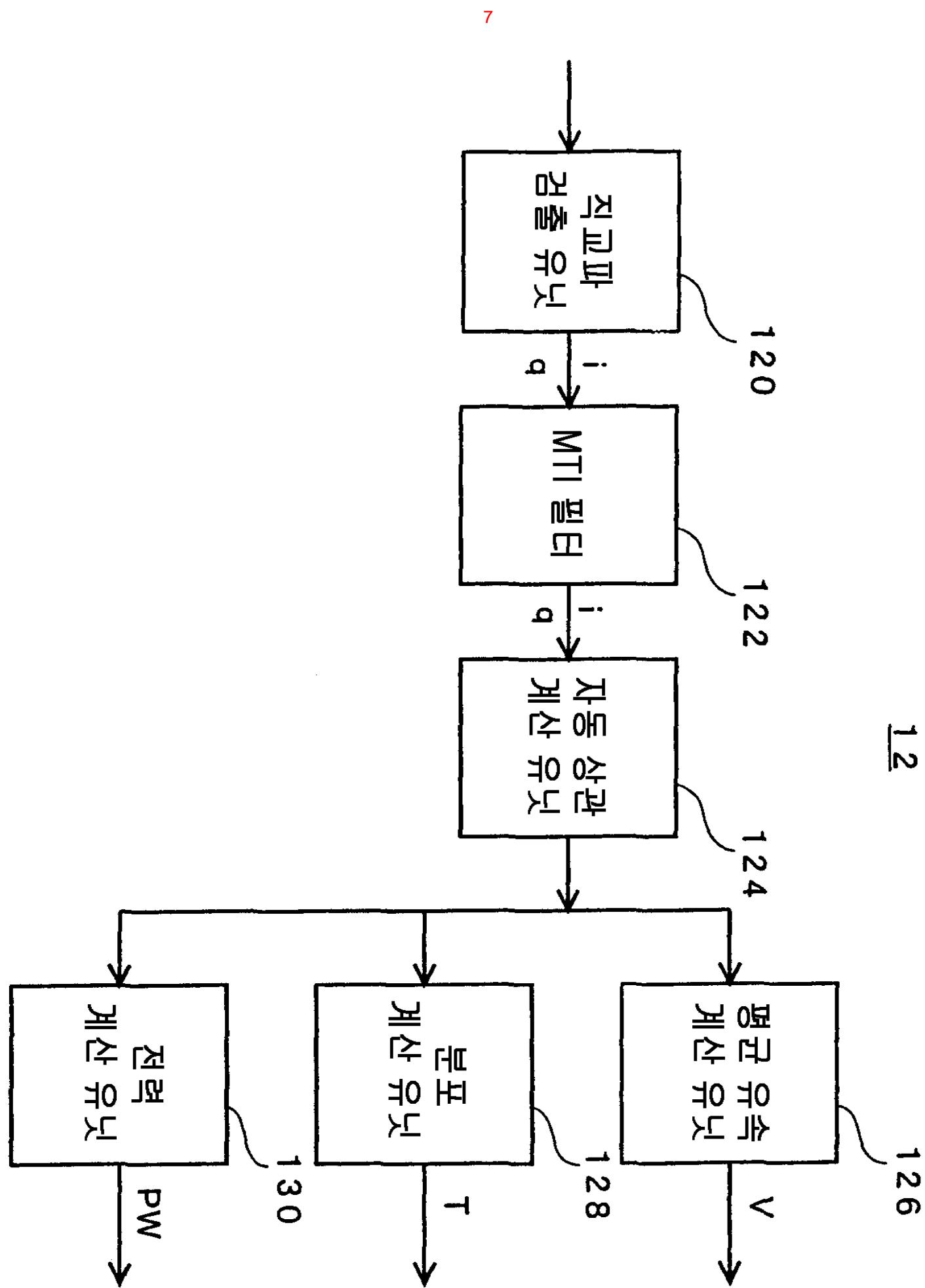


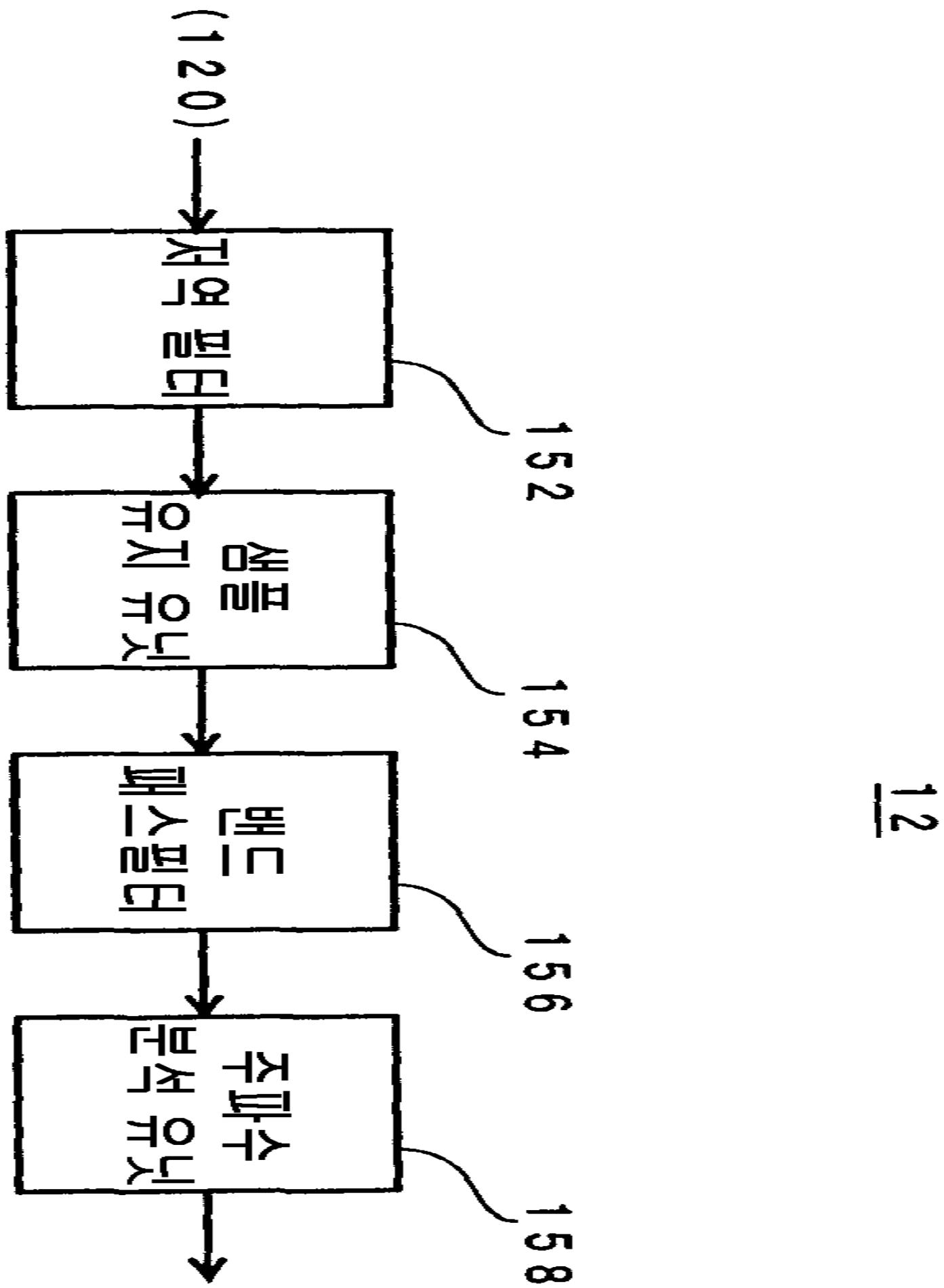
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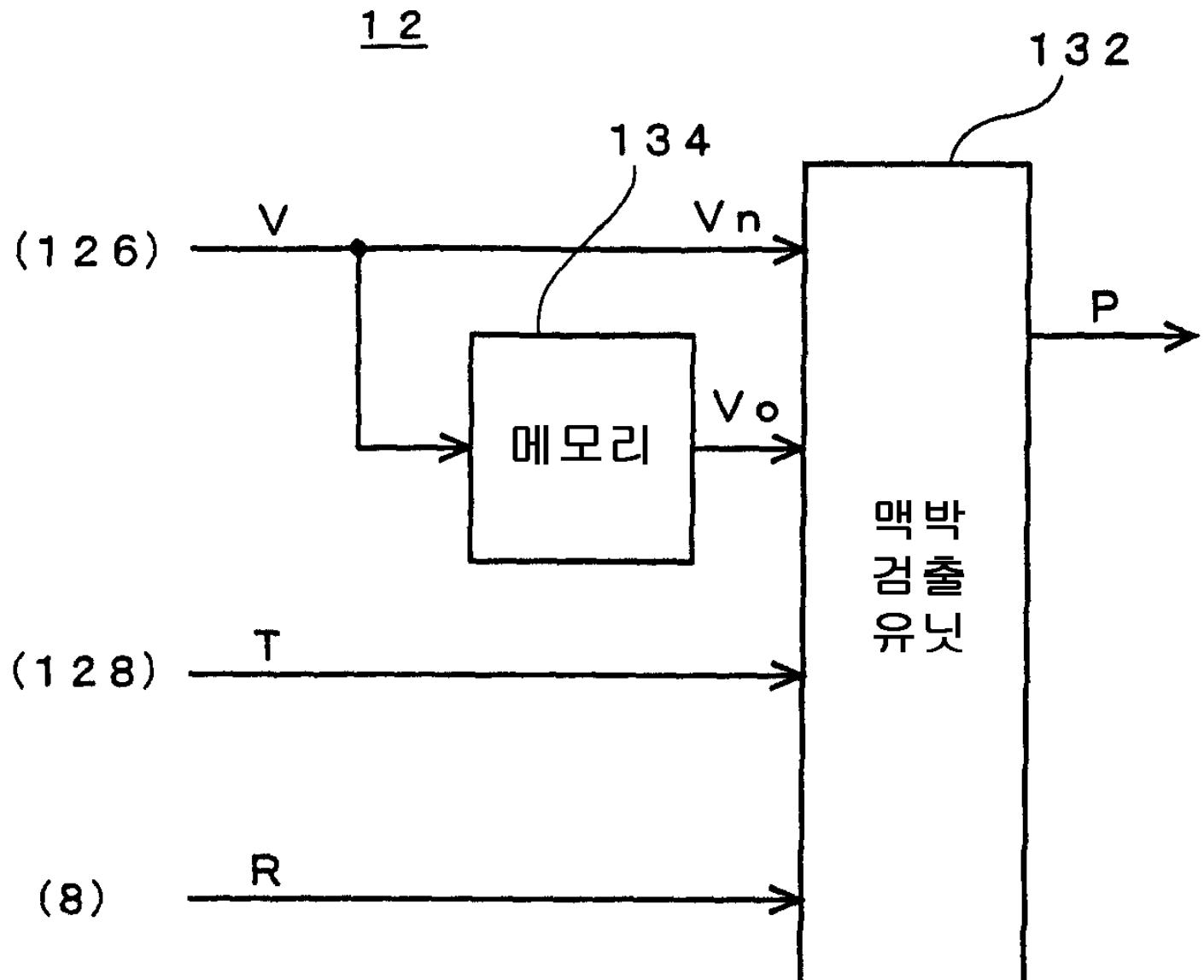
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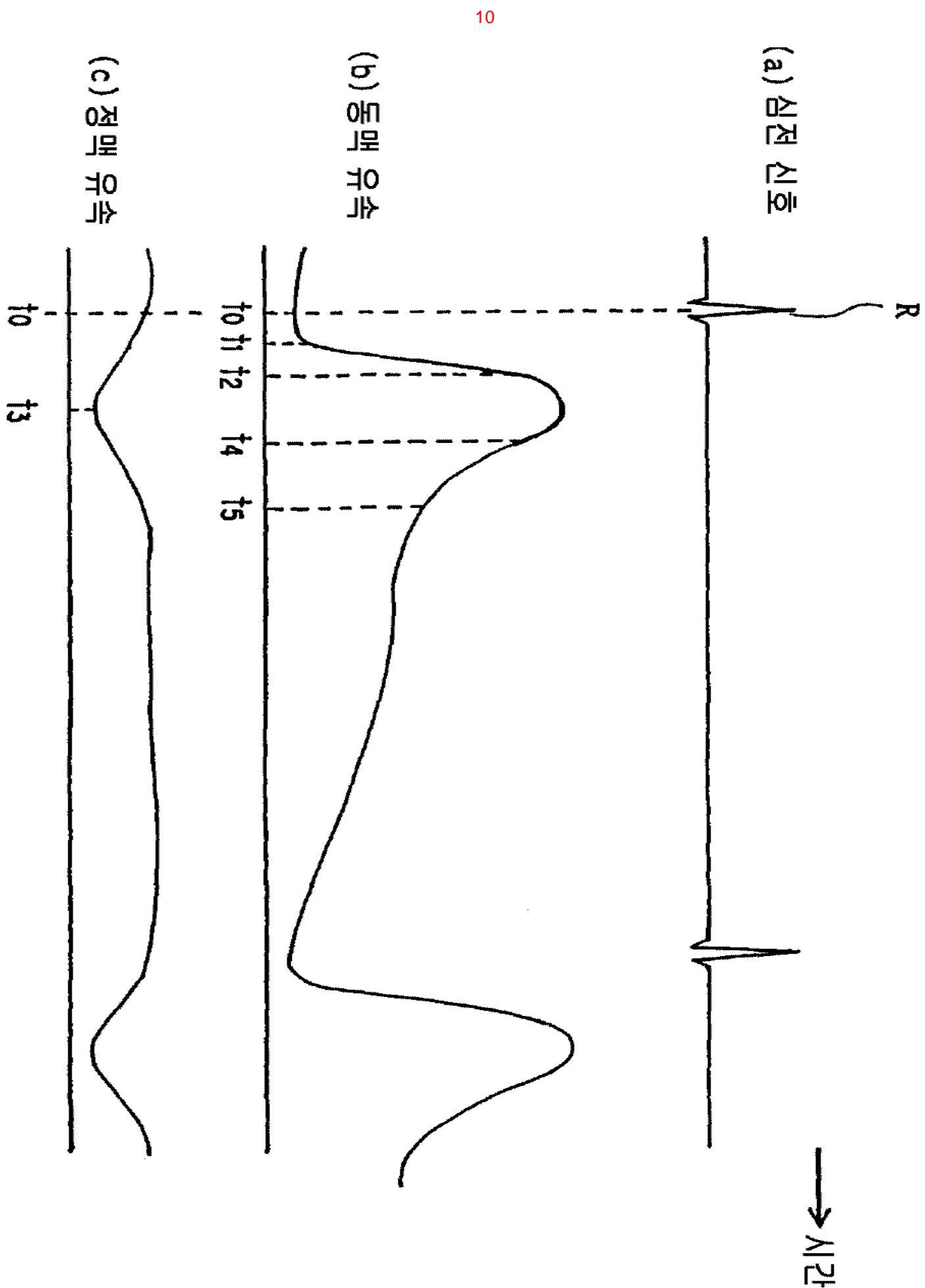
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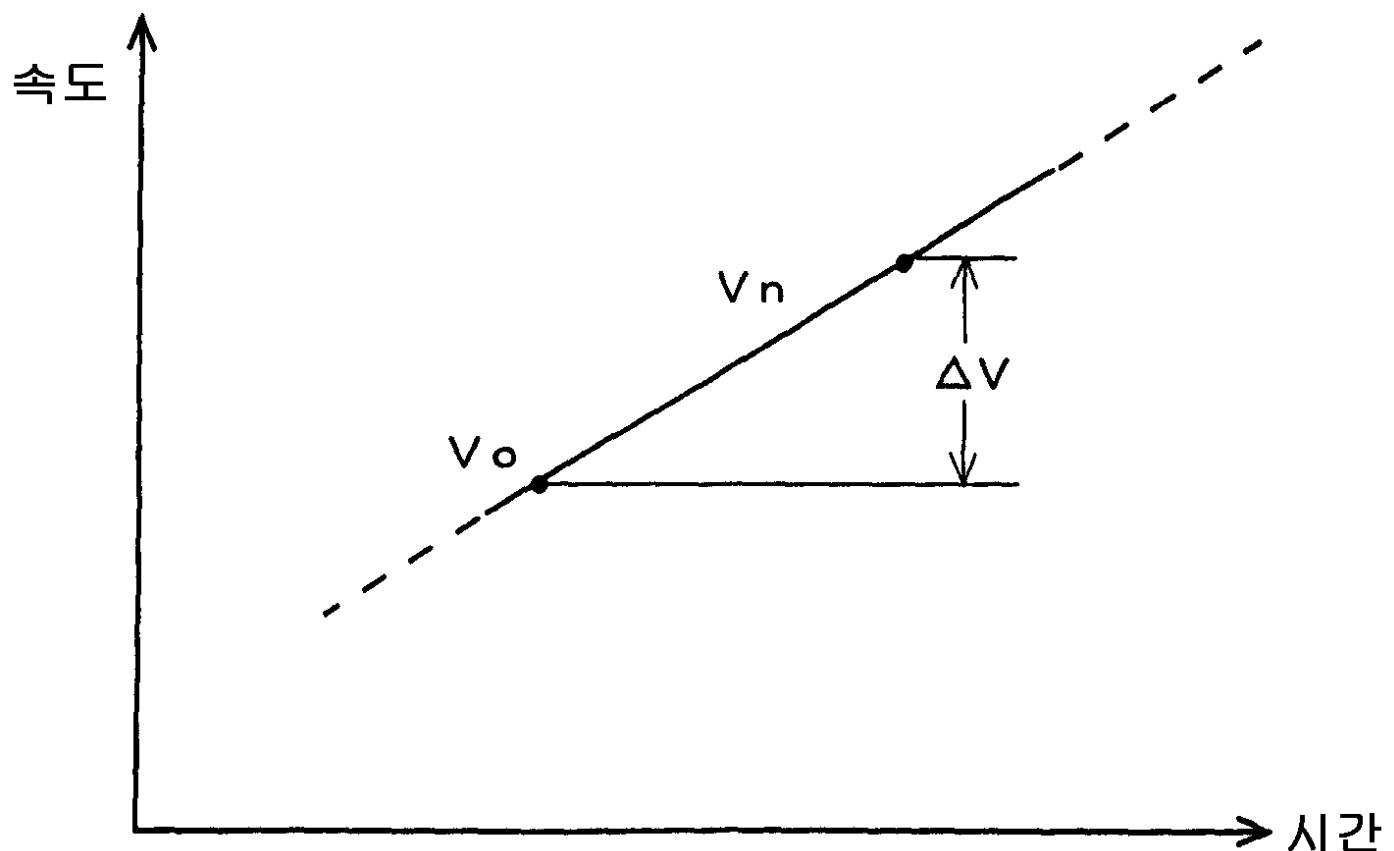


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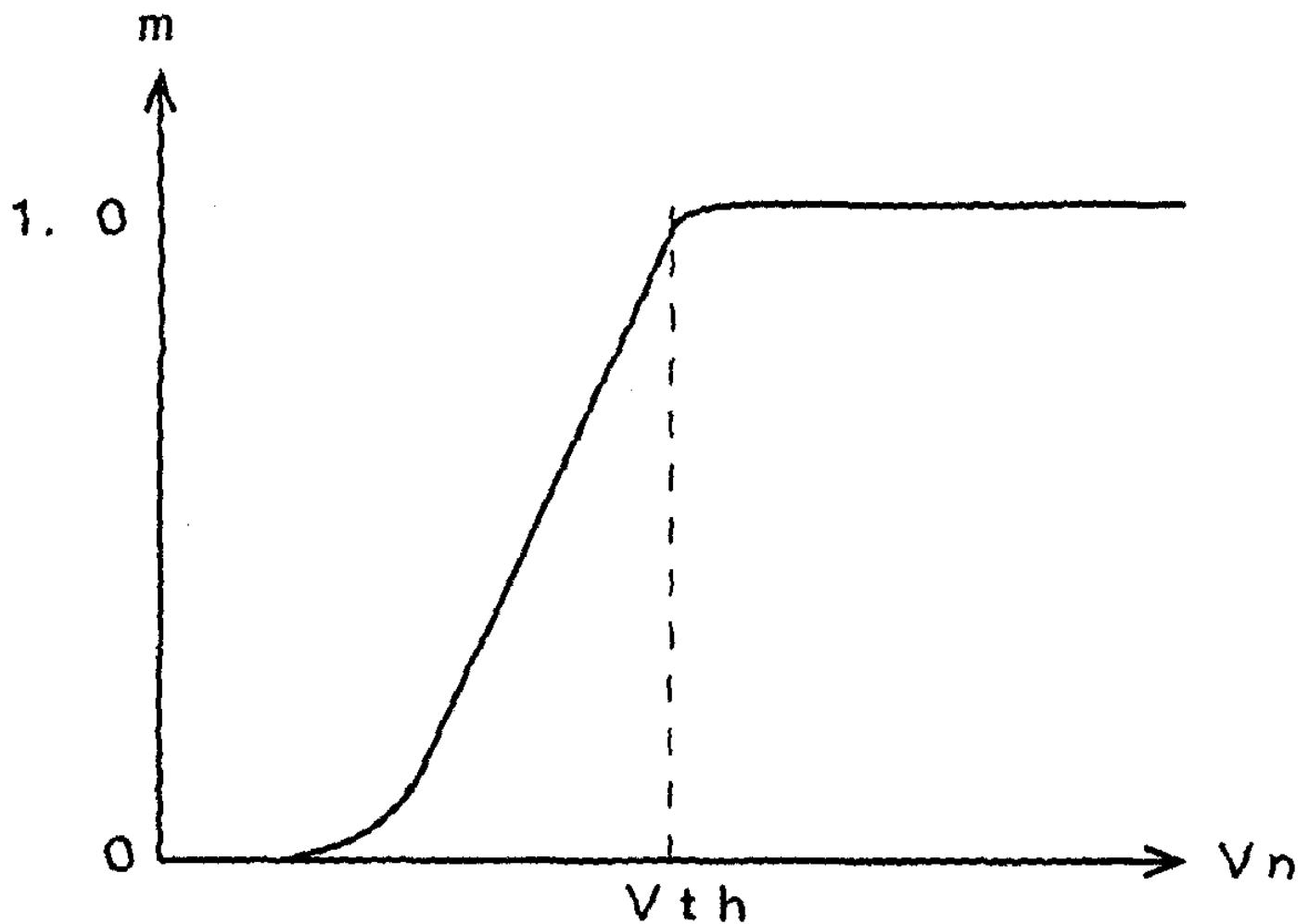
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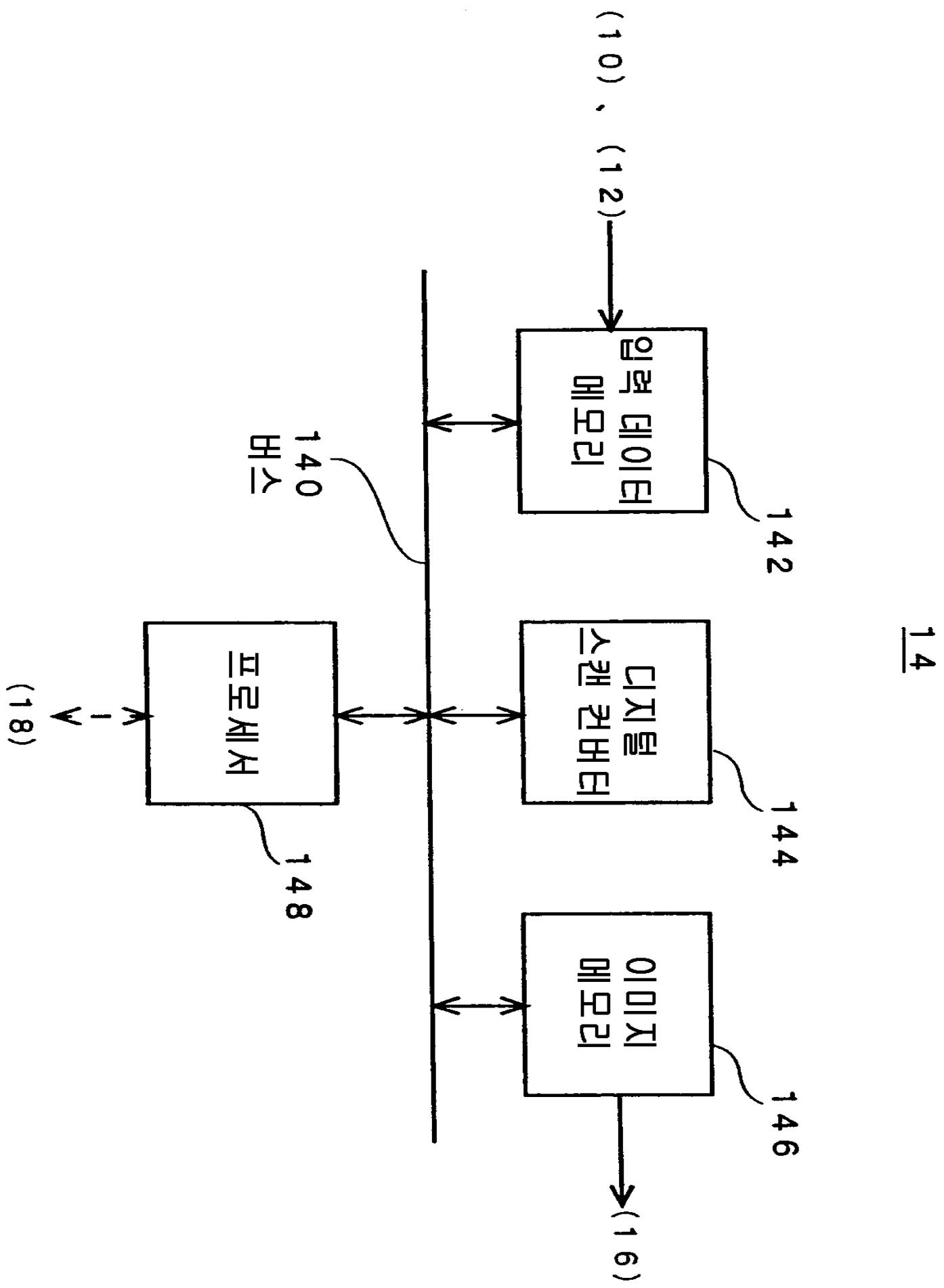
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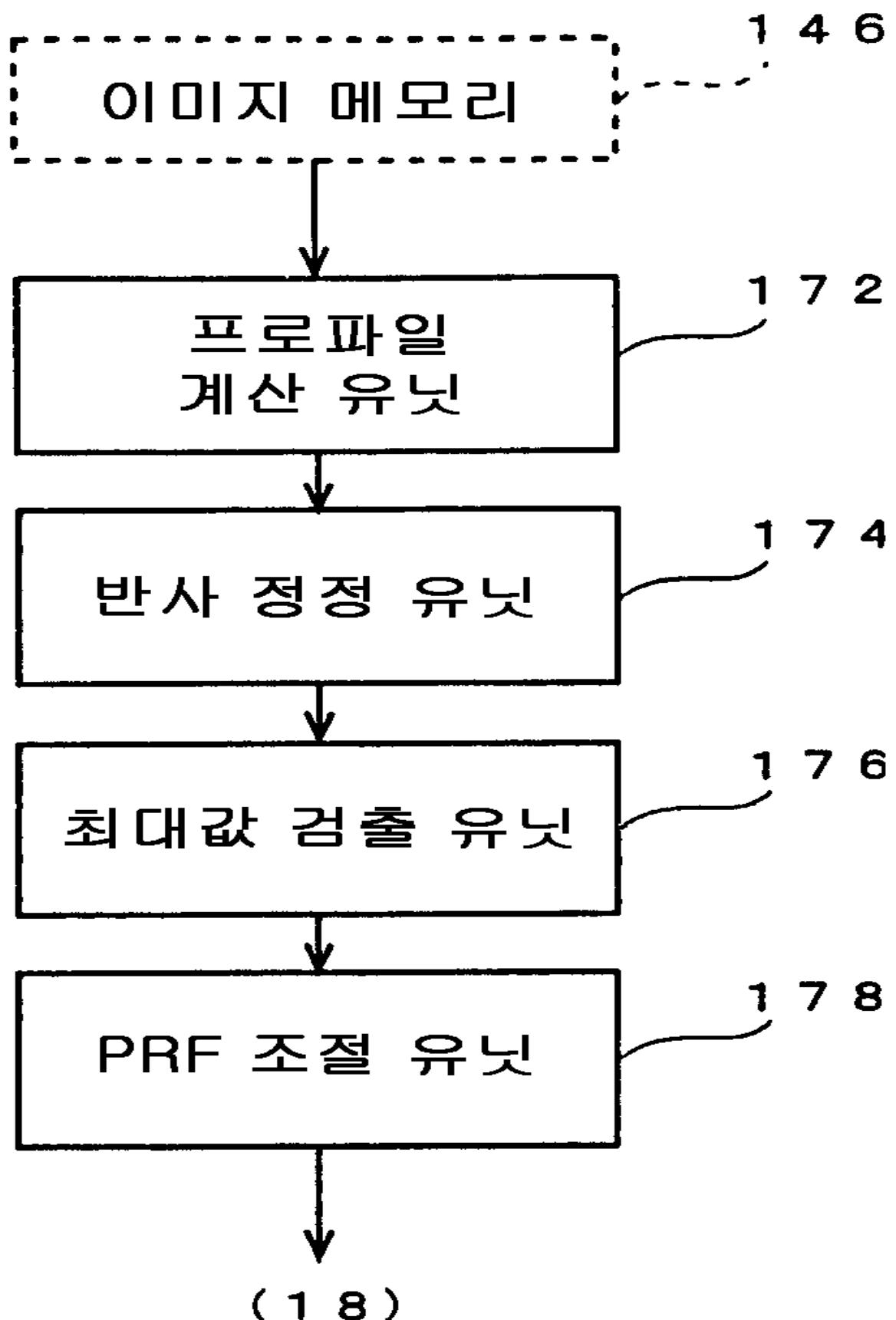
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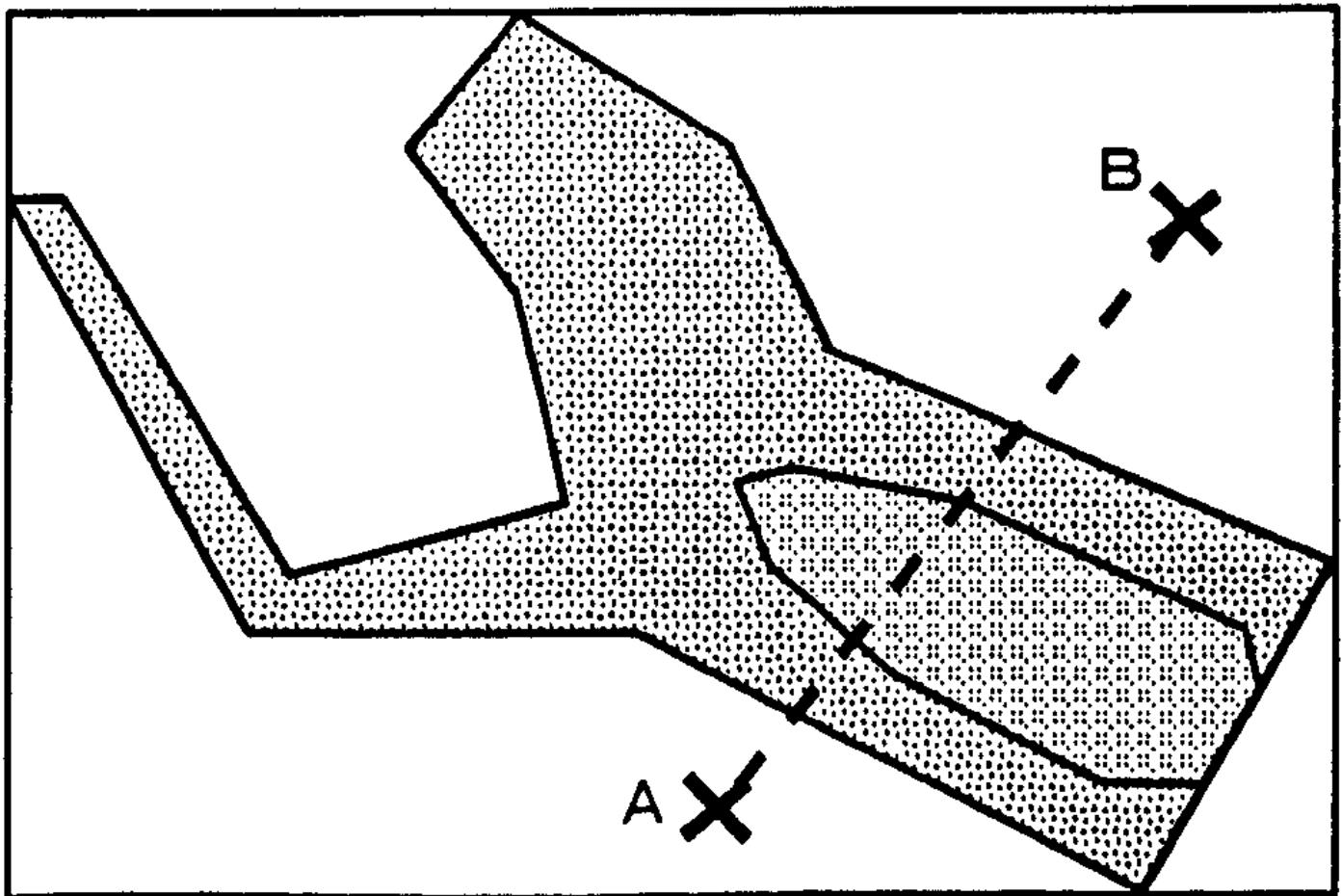
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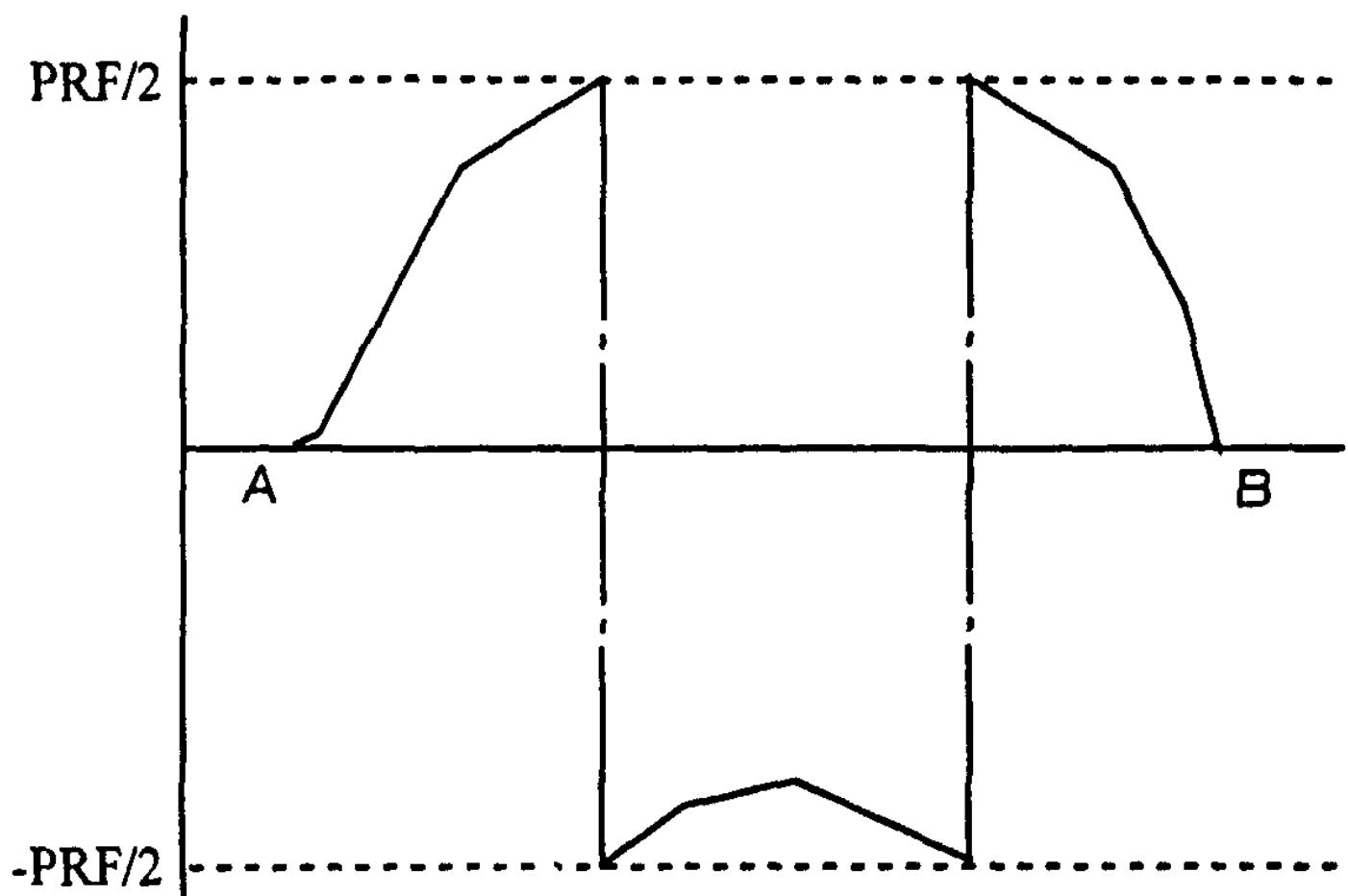
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1 4 8

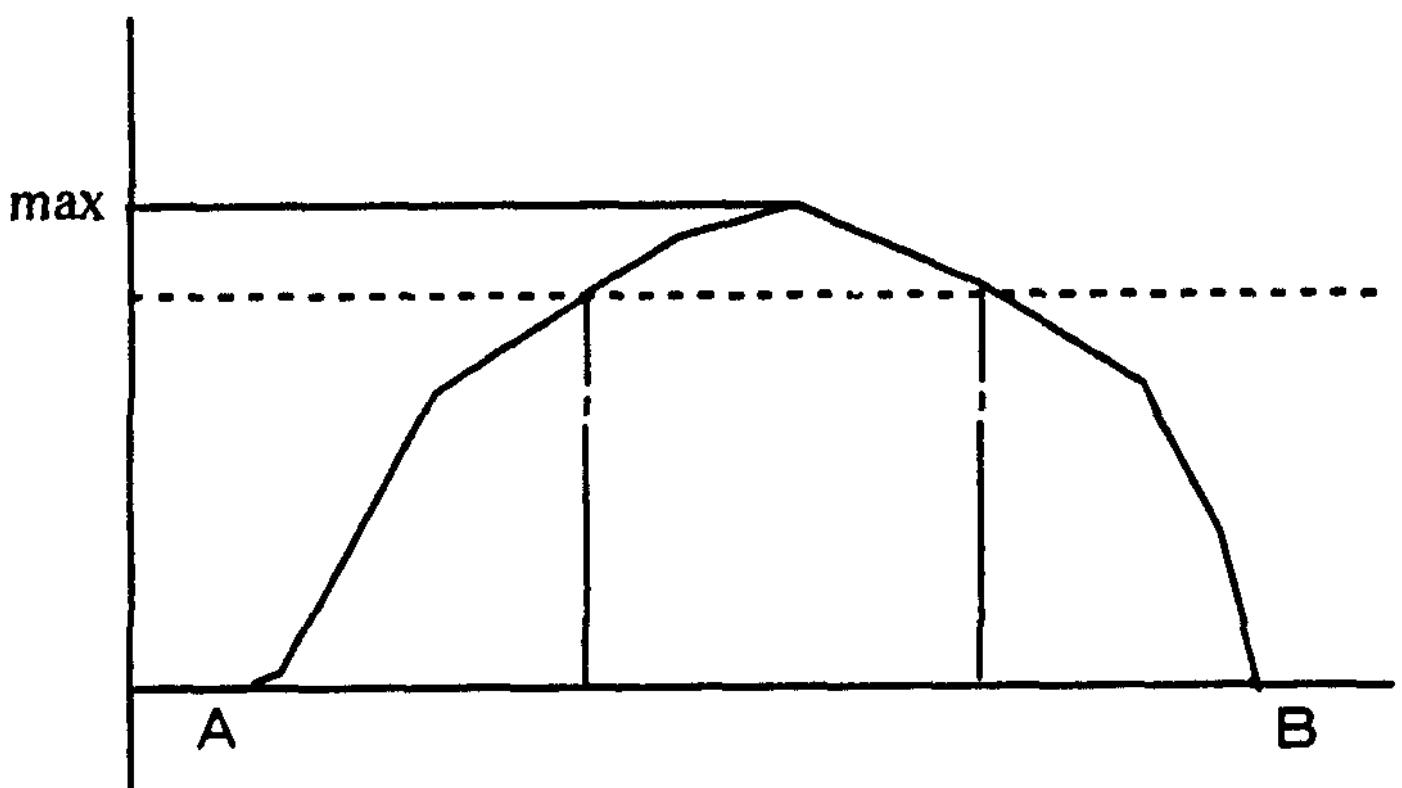
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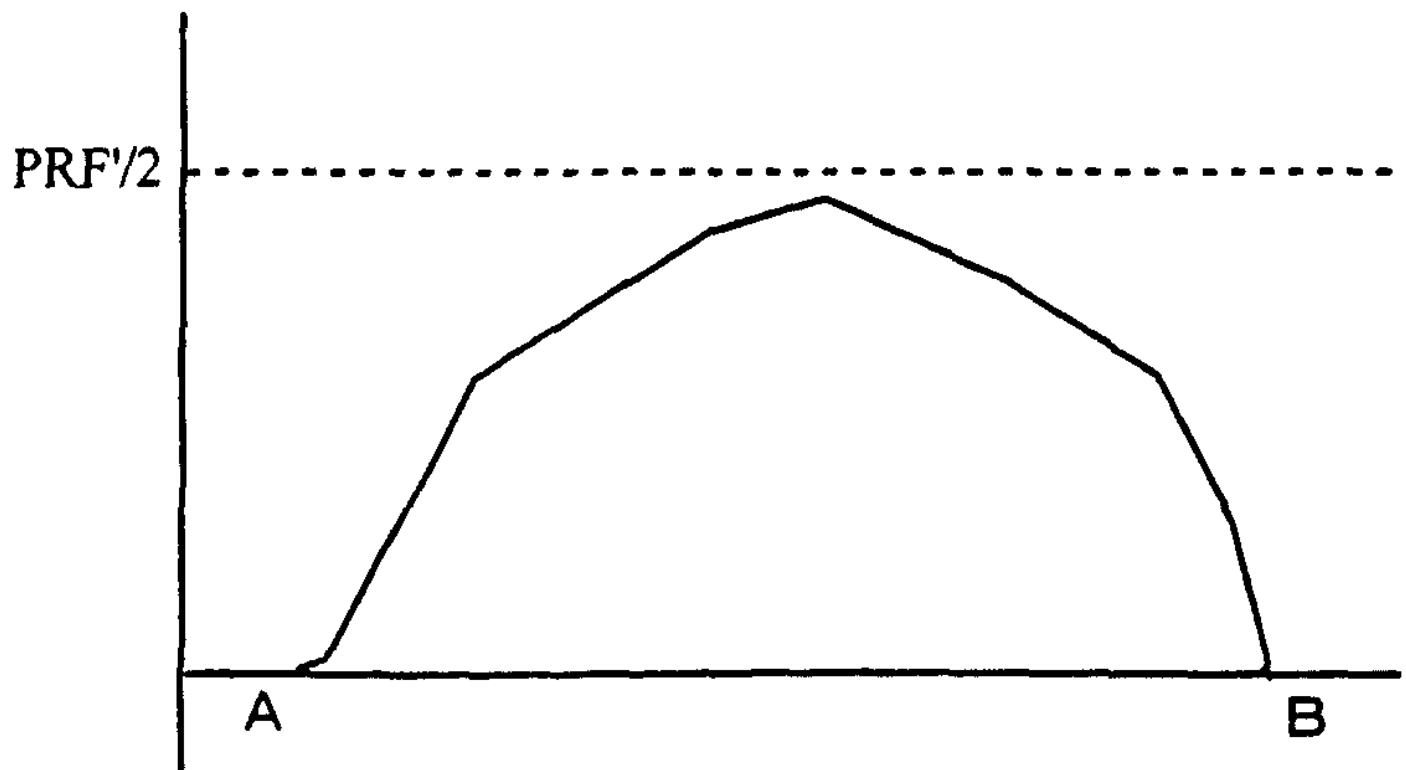
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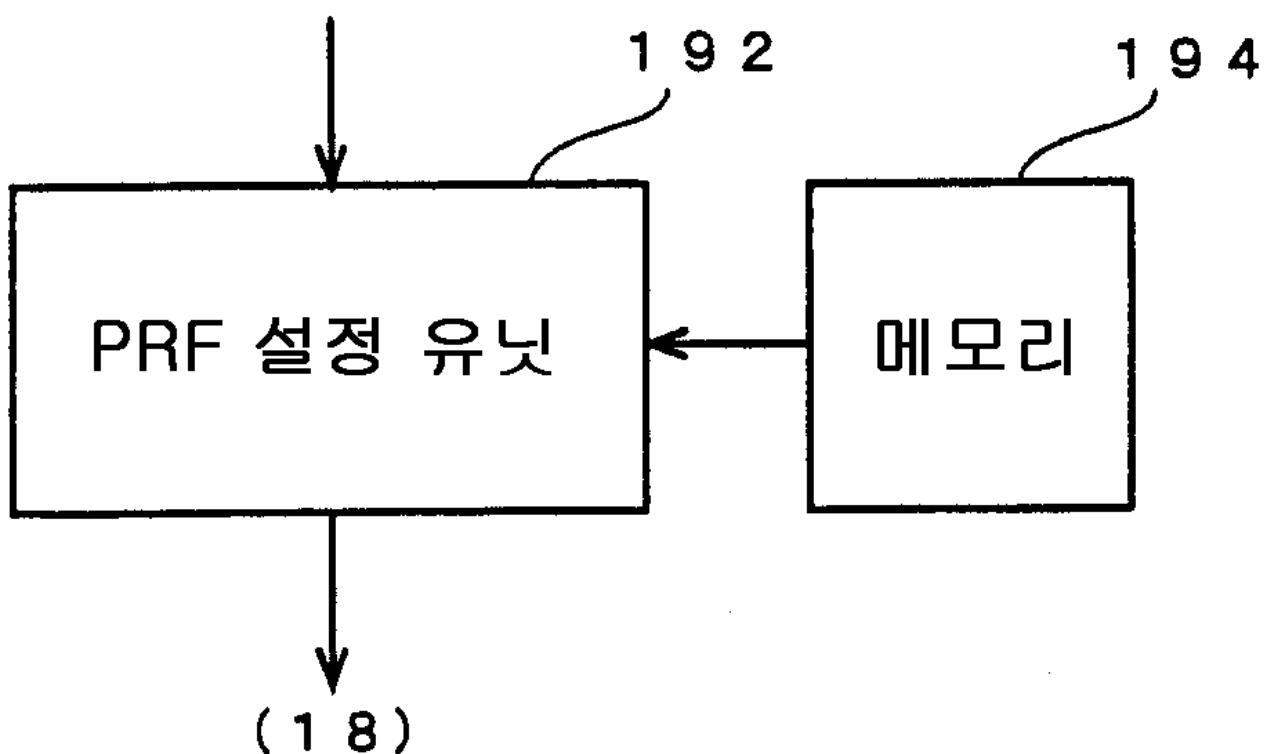
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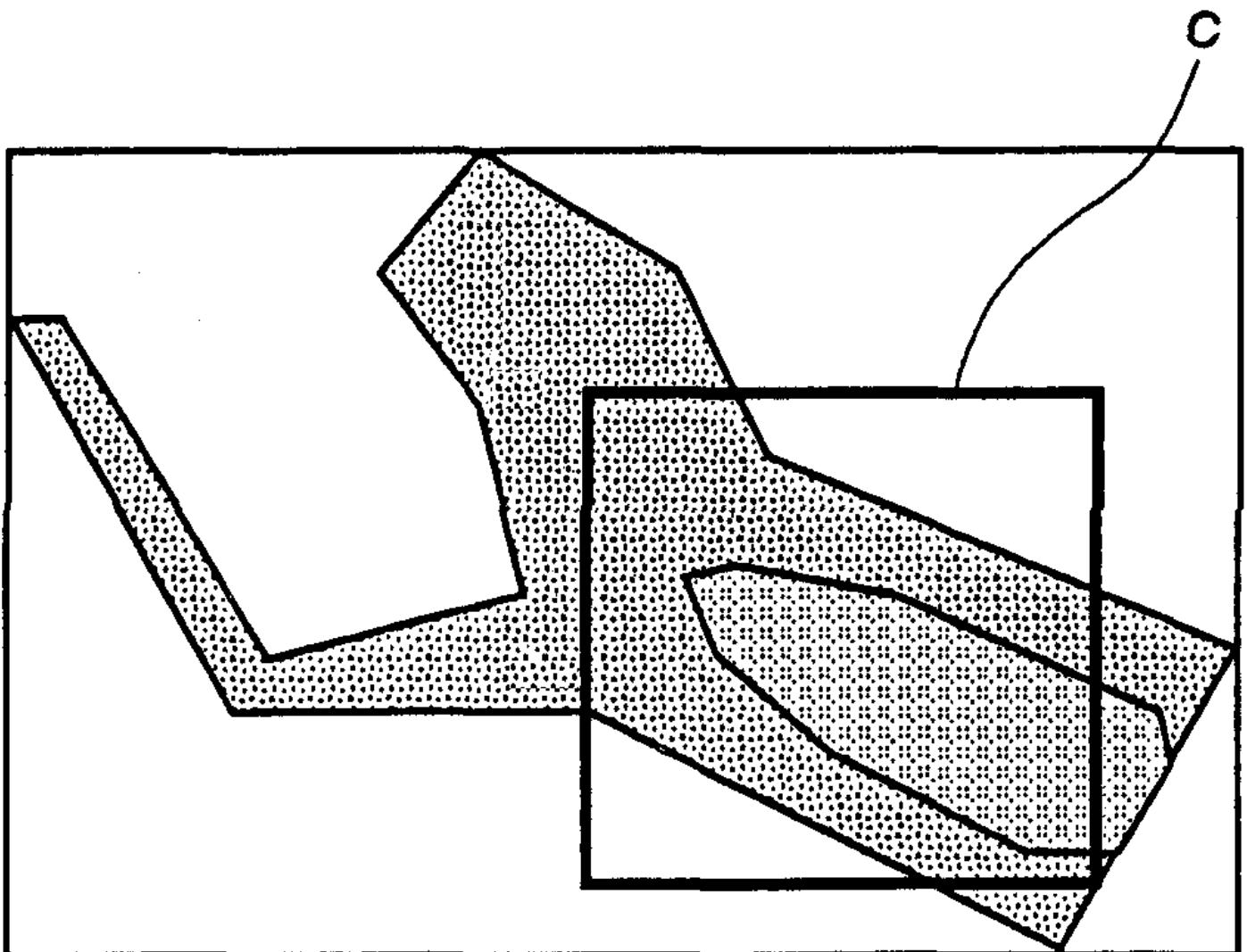
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(176)



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专利名称(译)	PRF调整方法和装置，以及超声波成像装置		
公开(公告)号	KR1020010060257A	公开(公告)日	2001-07-06
申请号	KR1020000065266	申请日	2000-11-03
申请(专利权)人(译)	지이메디컬시스템즈글로벌테크놀러지컴파니엘엘씨		
当前申请(专利权)人(译)	지이메디컬시스템즈글로벌테크놀러지컴파니엘엘씨		
[标]发明人	KATAOKA HIROAKI		
发明人	KATAOKA,HIROAKI		
IPC分类号	G01S7/524 A61B8/06 G01S G01S7/52 A61B G01S15/89 A61B8/14 G01S15/00		
CPC分类号	G01S7/52017 G01S7/5205 G01S15/8906		
代理人(译)	KIM, CHANG SE 张居正 , KU SEONG		
优先权	1999314614 1999-11-05 JP		
其他公开文献	KR100749973B1		
外部链接	Espacenet		

摘要(译)

为了获得最佳PRF，基于超声回波的多普勒频移计算回波源的速度分布，计算172速度分布的分布，校正分布的反射174，(176)，基于上述调整超声波传输的PRF。 1

