

(19)
(12)

(KR)
(B1)

(51) 。 Int. Cl. ⁶
F02M 37/08

(45)
(11)
(24)

2001 12 24
10 - 0317013
2001 11 27

(21)
(22)

10 - 1999 - 7002920
1999 04 03

(65)
(43)

2000 - 0068707
2000 11 25

(30)

97 - 213540

1997 08 07

(JP)

(73)

가

가

1

1 - 1

(72)

1

1 - 1

가

가

1

1 - 1

가

가

1

1 - 1

가

가

1

1 - 1

가

가

(74)

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(54)

가

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가

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가

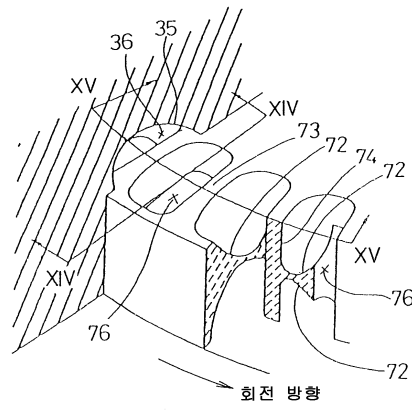
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가

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(in - tank system)

가 1

1
 (3)
 (4)
 (3) (1) (2)
 (5)가
 (8) (4) (5) (9) (10)
 (armature)(7)가 (6) 가 (7) ,
 (12)가 (3)
 (11)가 (4) (7) (12) (13) ,
 (13) 가 (14) (13) (15)
 (4) (16) (17)가 , 가
 (5) (18)가 (3) (18)
 (19) , (5) (20) (19)
 (20) (18) (5)
 (18) (5) (22)
 (21)가 (21) , (7) (8)
 (1) (8) (21)가
 (19) , (20) (6)
 가 , (16)

95 - 54726 가 2 4
 , 2 , 3 2 , 4 3 - ()
) , 5 3 - () (21)
 (23)가 , (23) (22)
 (5) (18) (21) (22) (35)
 (35) (19) (20) (36)가 (22)
 , 4 , , (23)
 , 5 (24) (23) (25) (26) ,
 (22) , 3 가 (28)가
 , 가 (29) 가
 (30) (31) (32)가 .

(21) , 가 (19) (20) , 4
 (21) (22) (36)
 , (35) (22) (36)
 가 (21) (22) ,
 (22) (23) (24, 25) 가 ,
 (26) 가 , .

94 - 299983
 95 - 189973

가 ,
 가 가 , 가
 , 가 (22)
 , 3 가 (28) ,
 가 (29) 가 (30) (31)
 (32)가 , (22)
 가 , (22) ,
 (5) (18) (35) (22) () ()
 37)가 , (37)가 (22) ()
 37) 가 , (20) (21) (22)
 (1) , (20) (21)
 (21) , .

3	2			,	
4	3	-		,	
5	3	-		,	
6	1			,	
7	6	-		.	
8	6	-		,	
9	2			,	
10	3			,	
11	4			,	
12				,	
13	5			,	
14	13	X	-X	,	
15	13	X	-X	,	
16	5			,	
17	5			,	
18	6			,	
19	6			,	
20	6			,	
21	7			,	
22	7			,	
23	8			,	
24	8	9		,	
25	10			,	
26	10			,	
27	10			,	

28 11 ,
 29 11 ,
 30 11 ,
 31 ,
 32 / ,
 33 / ,
 34 ,
 35 / ,
 36 ,
 37 .

, 1 가 6 8 (, 6) , 8 6 -
 () . , 7 6 -

(41) (43)가 , (43)
 (42) . (42) , 7
 , 8 (42)
 (43) (44) (45)가 ,
 (45) ,
 , (42) (43) (44) (45)
 ,
 가 .

, 5 (22) (23) (24)
 (G) (stagnation)가 . (42) ,
 (45) , 가
 , (42) 가 ,
 ,
 ,
 ,
 ,
 가 .

2 가 9 . 9 (54)

(56)가 (51) (53) (55) (51) (52)
 , , 8 가 , (51) (52)
 . (55) . ,

, 3 가 10 . 10
 (57) (58) (59)가 ,
 . , 8 가 , .

가 11 . 11 , 가 4
 (61), 가 (62), 가 (63)
 (63) (65) , 가 (64) 가 (62) 가
 , 가 (62) 가 (64) (66) , 가 (62)

, 12 가 가
 (202) 가 (204) (206)가
 , (H) 가 , ,
 가 (202) 가 (203) 가
 , , 가 (62) 가 (64) (66)가
 , 가 , 가
 (62)가 , 가 (62) 가 (63) (65)가
 . , 가 (61) 가 (63) 가 (64) (67) (68)
 , ,

, 가 ()가 . 가 (19) (36)
 가 (35) , (5) (1
 8) (37)가 (37)가
 , 5 가 13 15
 . , 13 () , 15 13 XV - XV ()
 () , 14 13 X - X
 (72) 14 (71)
 , 15 (72) (73)
 (74) (75)가 ,

(75) , (72) (72) (72) , (72) , (72) (71) (72) (76) 가 16 (76) (W) (76) (L) 가 (72) (B) 2/3 (72) 7 11 가 가 .

(72) (76) (72) (76) (37)가 (37)가 (72) (37) (37)가 (37)가 .

(37)가 , .

, 1 가 , (19) (18) , (20) (5) 가 , 가 (20) (18) (20) 6 가 18 20 , 18 , 19 , 20 (100) (101) (102) (101) (102) (W), (102) (L) (102) (W) (B) $\frac{3}{4}$.

(101) , (101) (101) (20) , 18 (J) (101) 가 (10 2) (20) (20) , 7 가 21 22 , 21 (110) (112) , 22 (111) .

, 가 8 가 23 24 , 23 (120) , 24 가 (R) (125) S , $\frac{2}{3} \cdot S$ $\frac{1}{4} \cdot S$, 가 (r) 11 , 가 가 , 가 .

, (25%) .

/ 가 32 . , (W) . / , 0.3
 (B) ,
 0.2 0.9
 0.6 .

/ 가 33 . , (Y) . , 33
 (X) , (Y) 1.36mm
 / , 2.2 4.2 2.0 4.5 .

가 34 . 3.2mm² 6.3mm²
 , 3.5mm² 6mm² .

/ 가 35 . , (T)
 가 [(t)],
 (E) , $E = T + 2t$. , 35
 (T) 30mm , / 0.5
 0.9 , 0.55 0.85 .

가 36 . , 가 (M)
 가 (N) M/N . 0.36 0.76
 , 0.4 0.75 .

(M) 가 37 . , 가
 (N) (K) (M+N)/K .
 , 0.75 1.1
 , 0.8 0.97 .

, () , ,
 ,

(57)

1.

가

.

2.

1 ,

.

3.

1 ,

.

4.

,

가

가

가

.

5.

4 ,

가

가

.

6.

4 ,

가

가

가

.

10.

4 ,

,

.

11.

4 ,

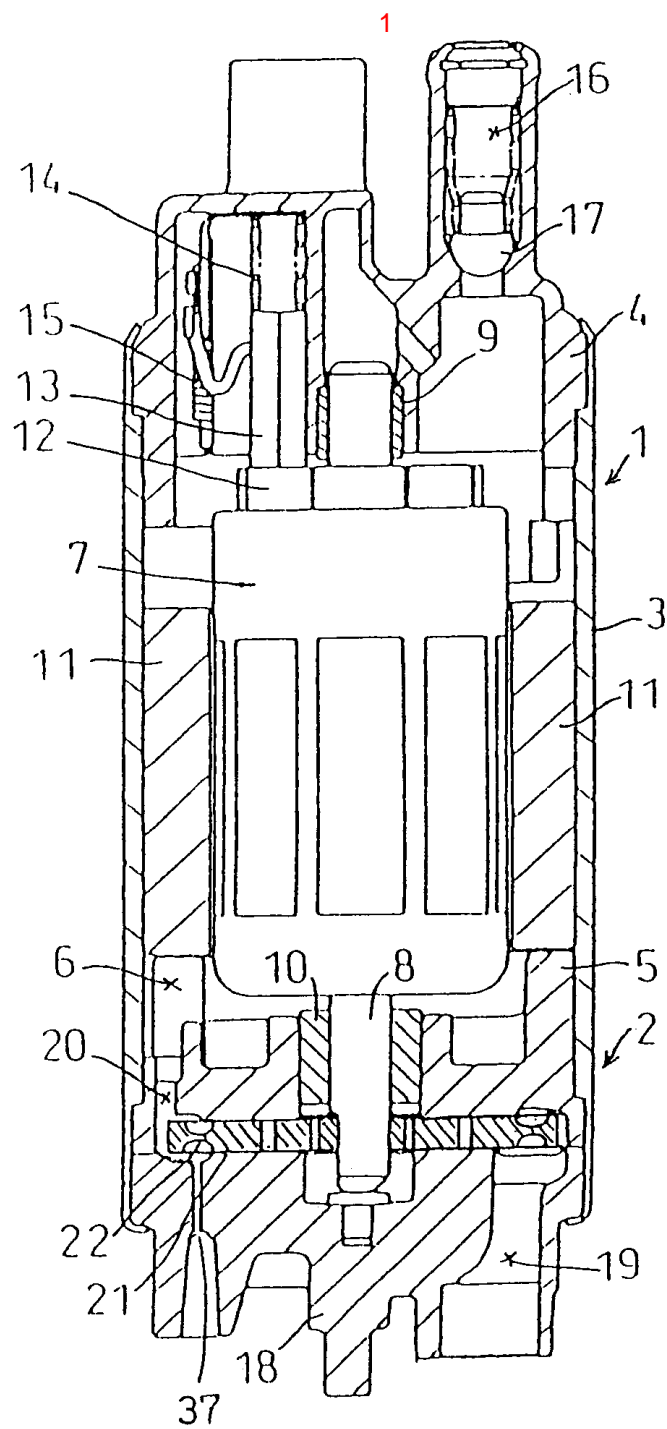
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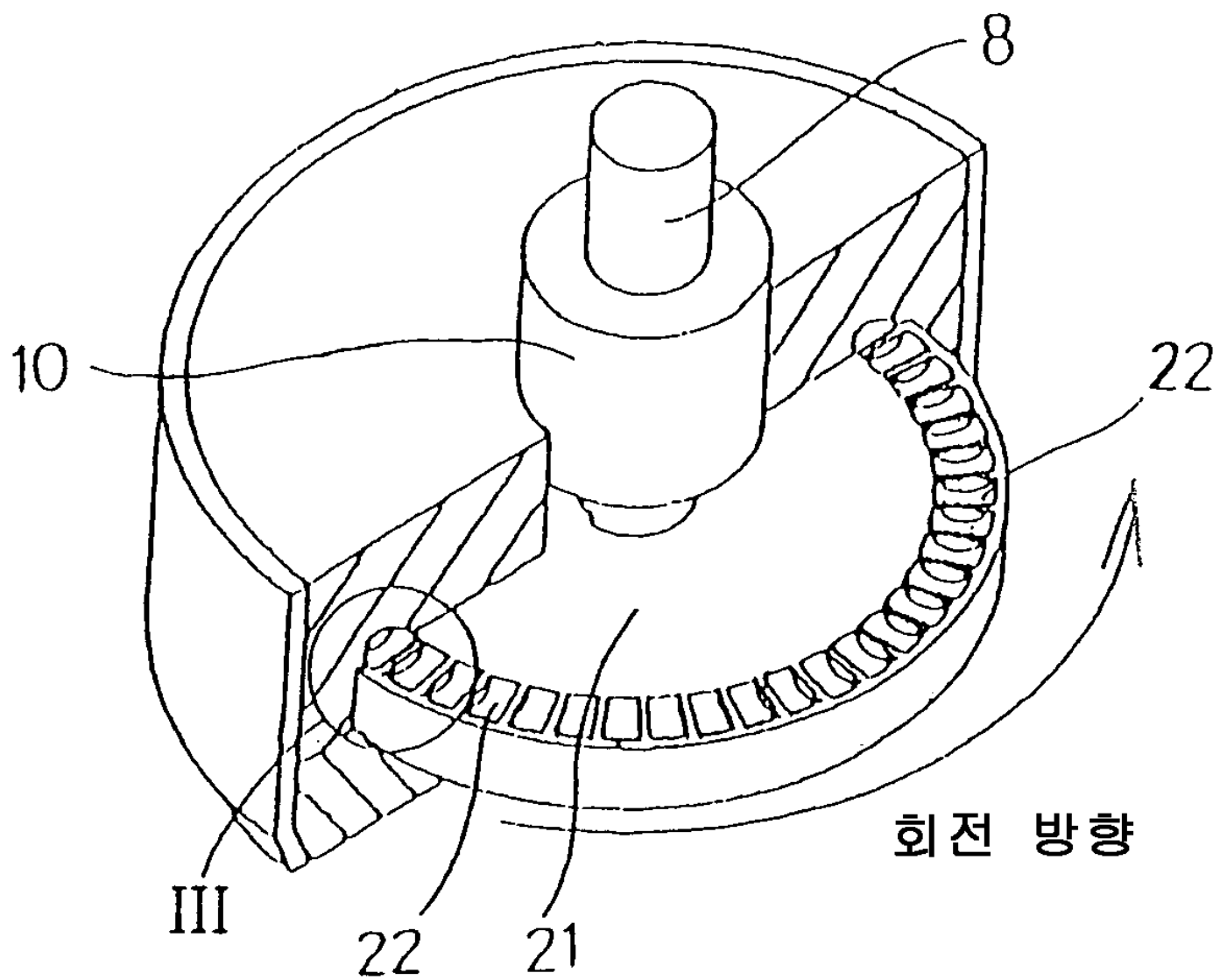
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4 ,

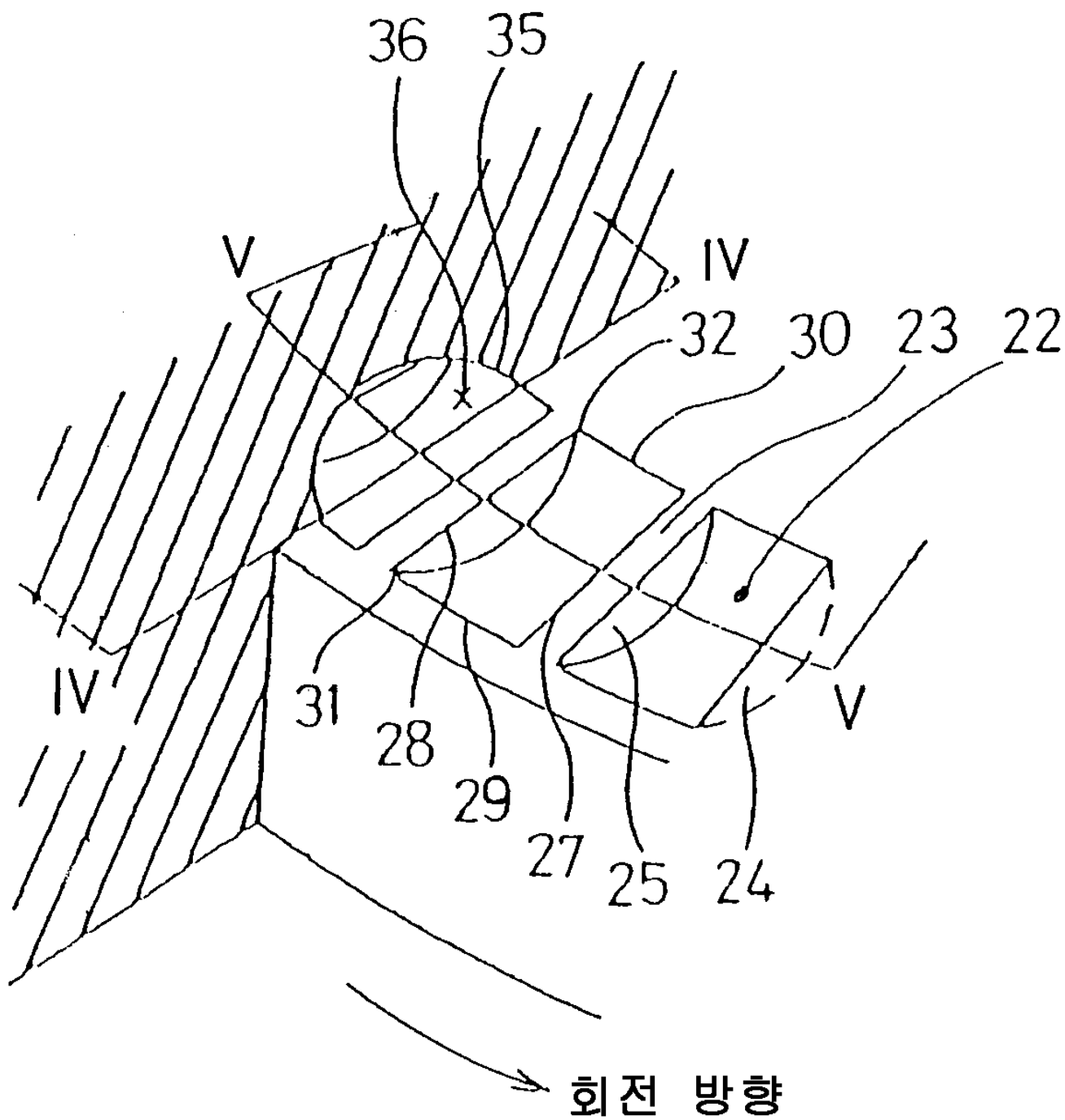
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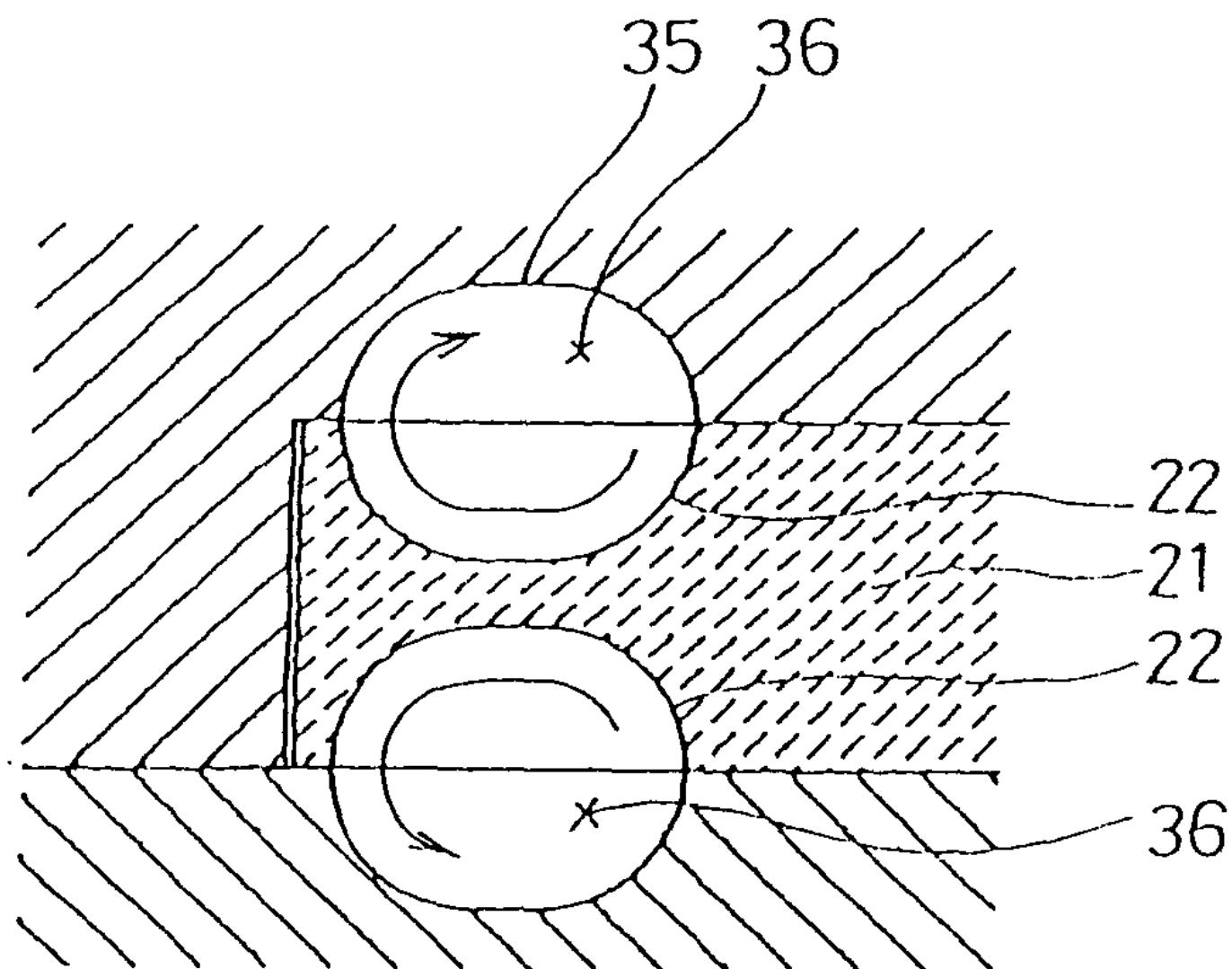
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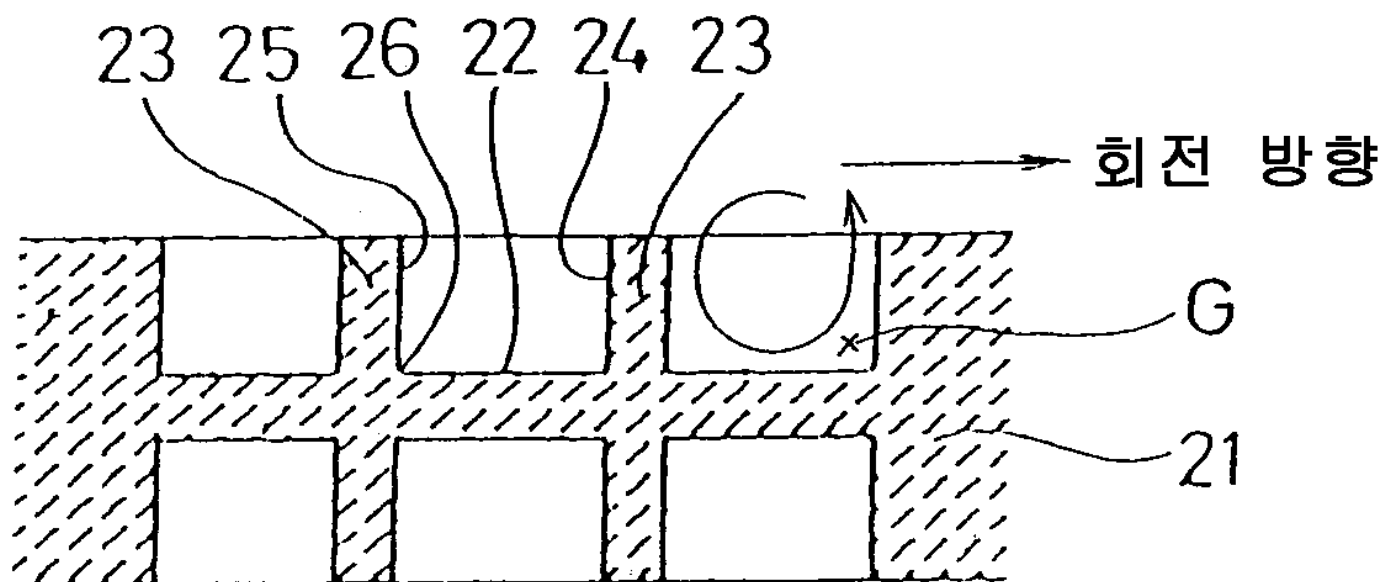
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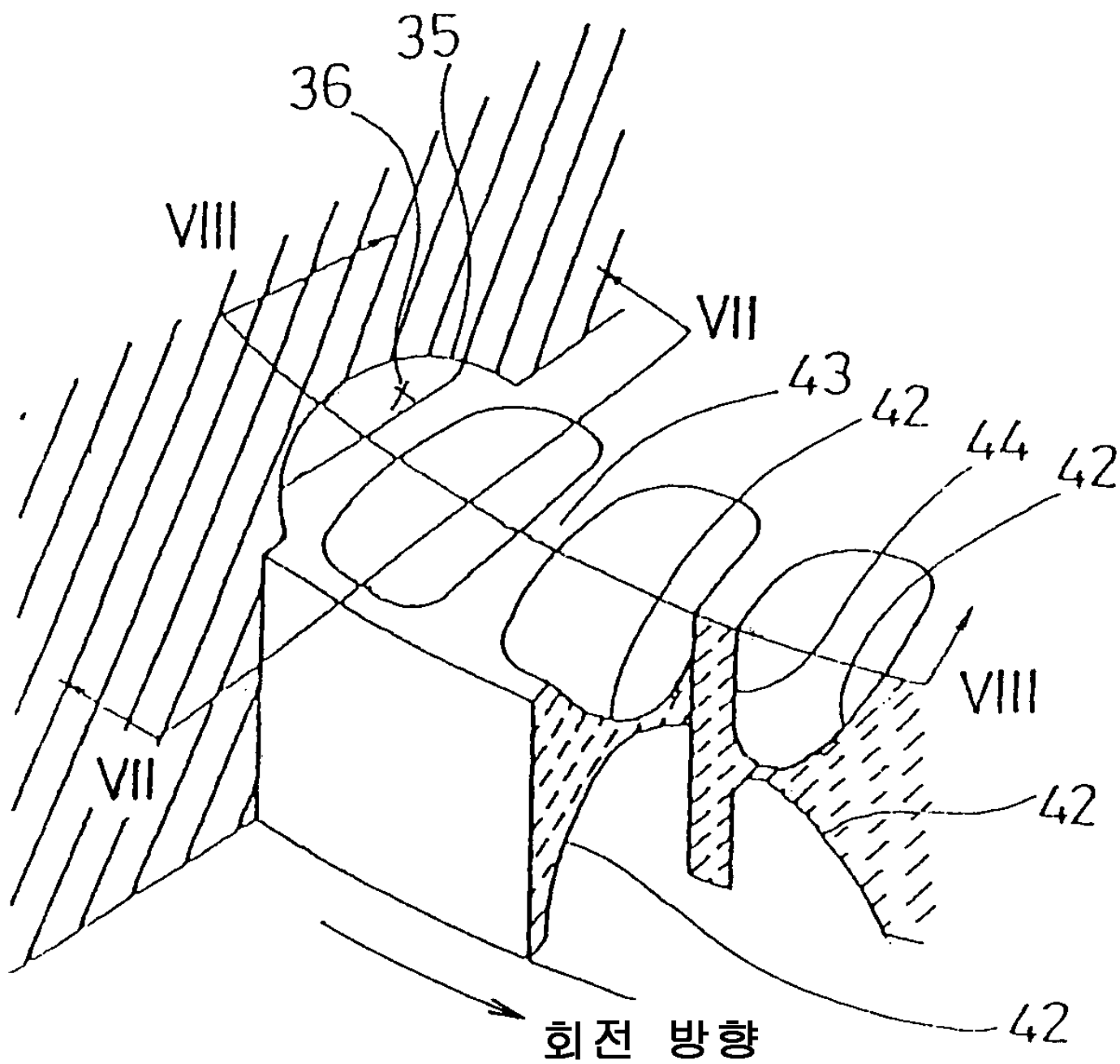
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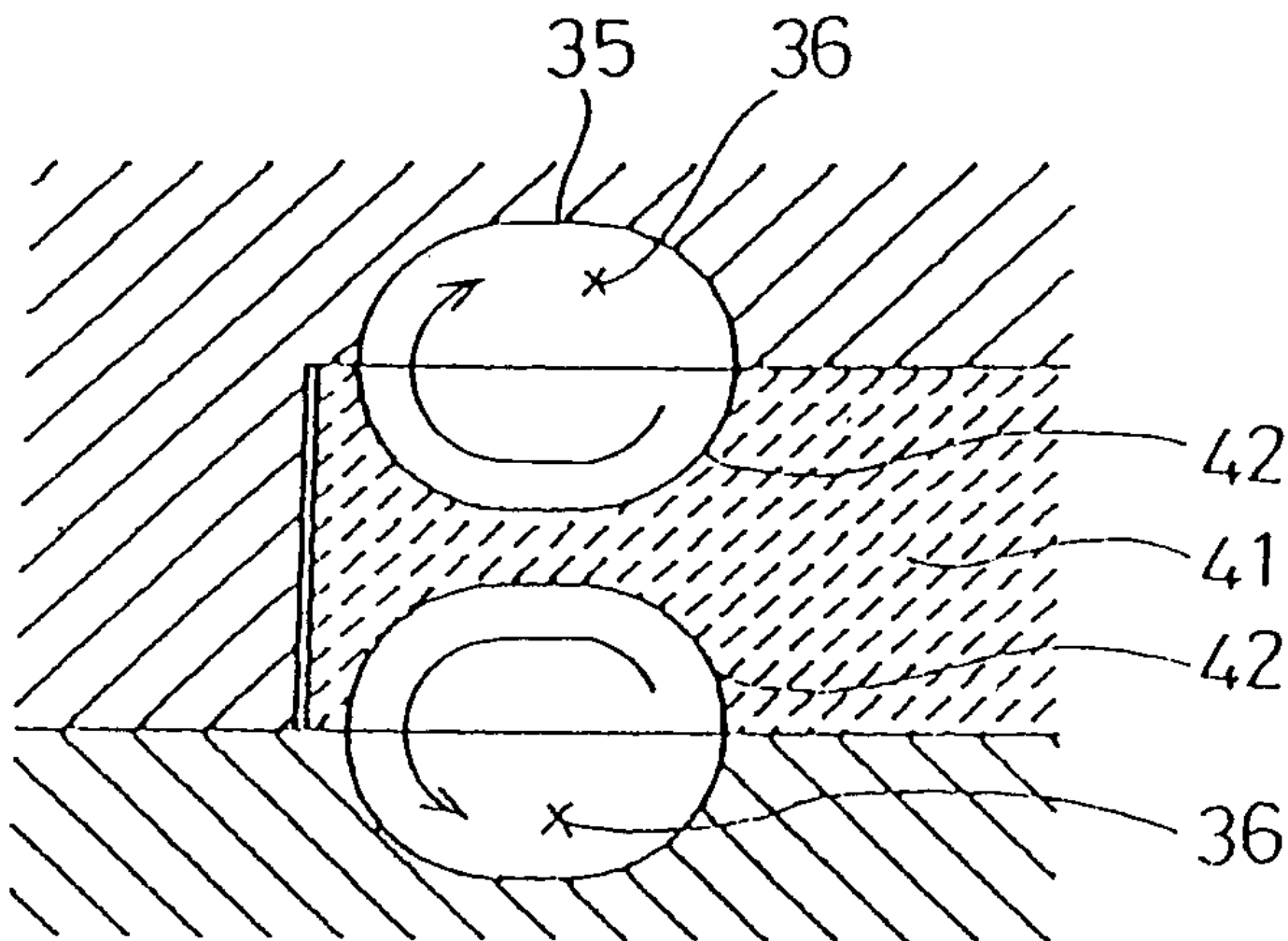
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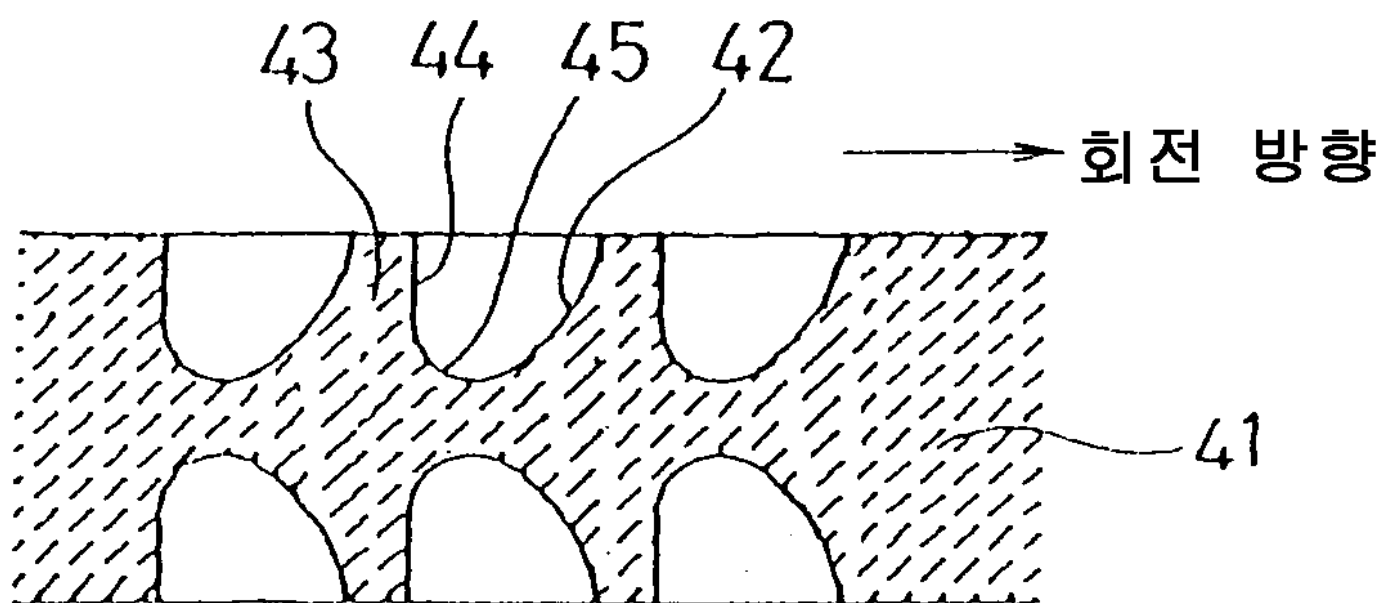
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7

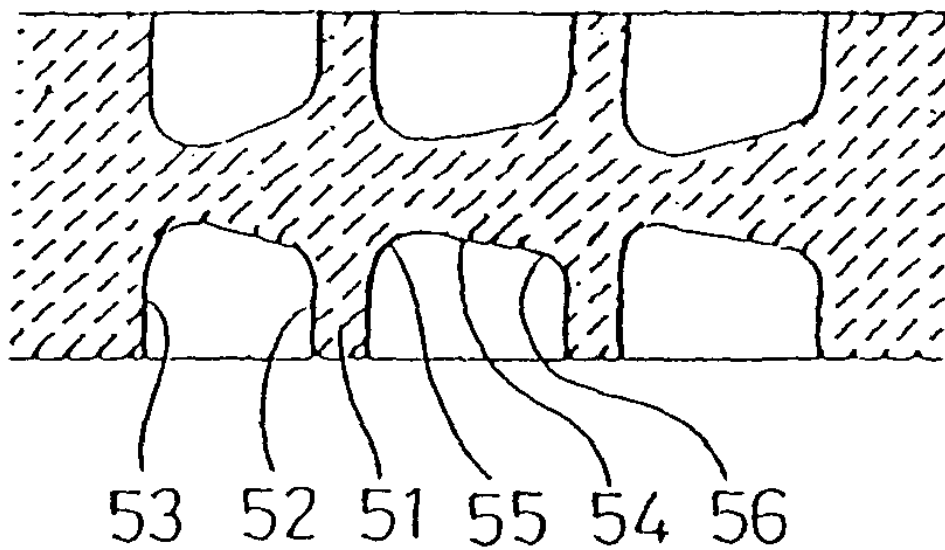


8



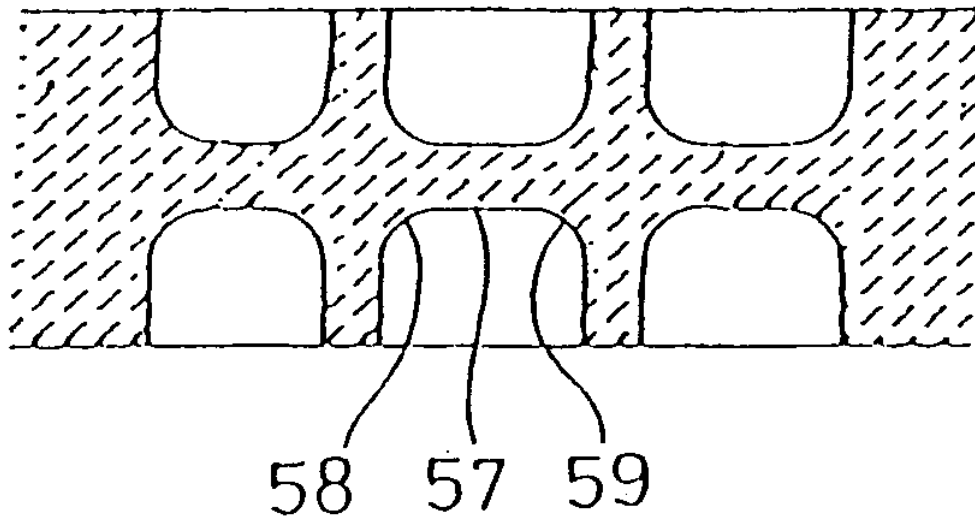
9

→ 회전 방향

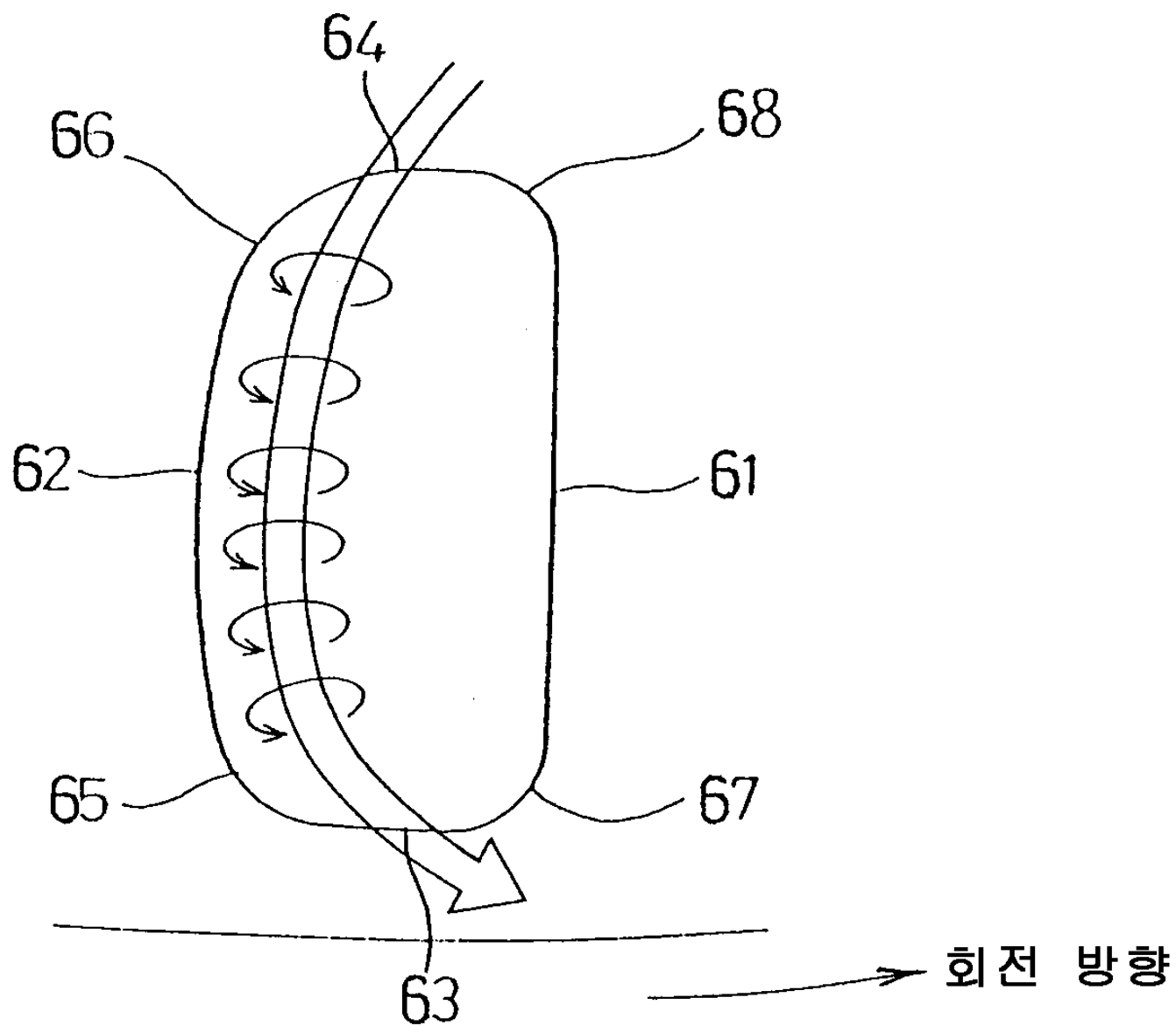


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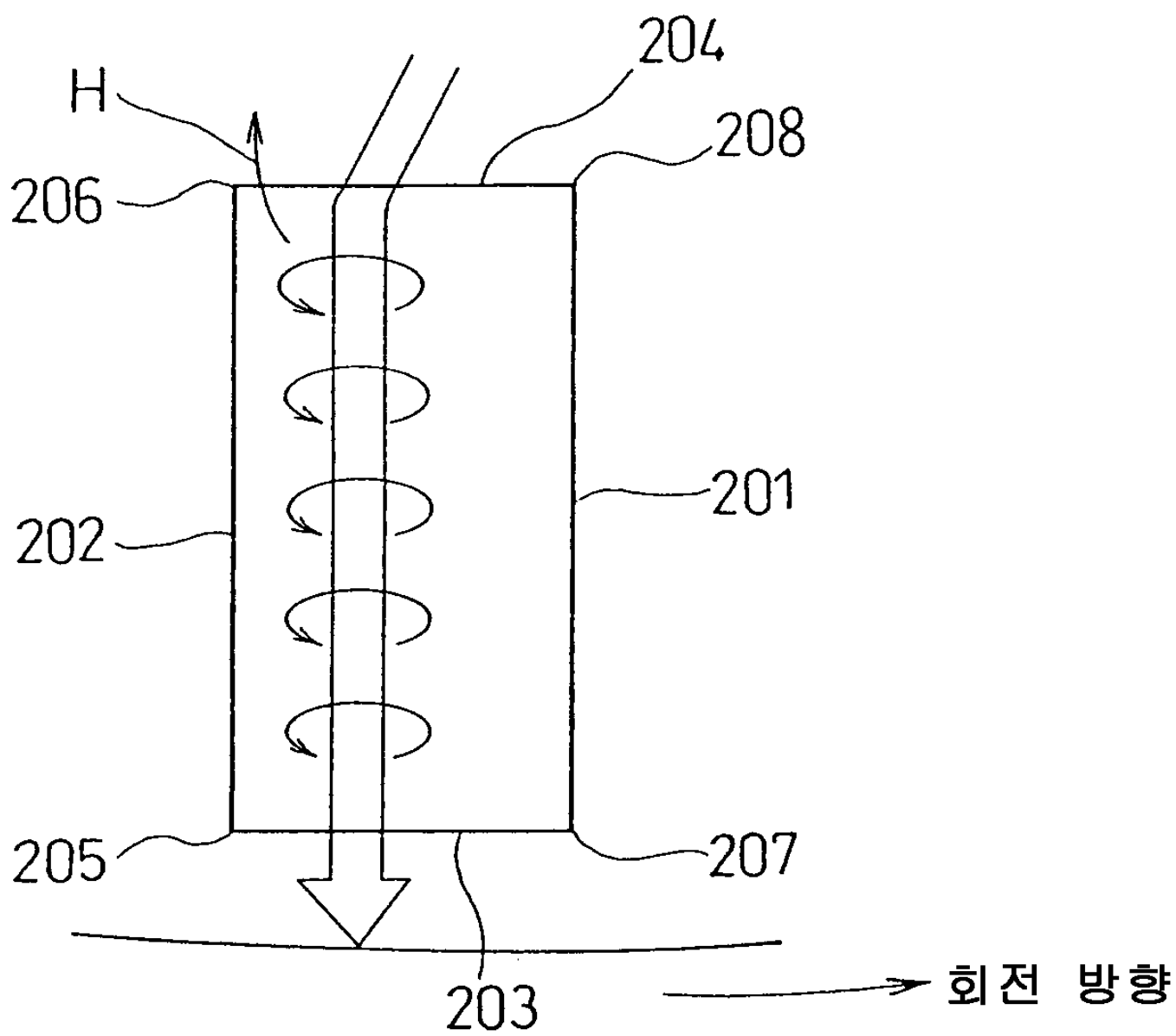
→ 회전 방향



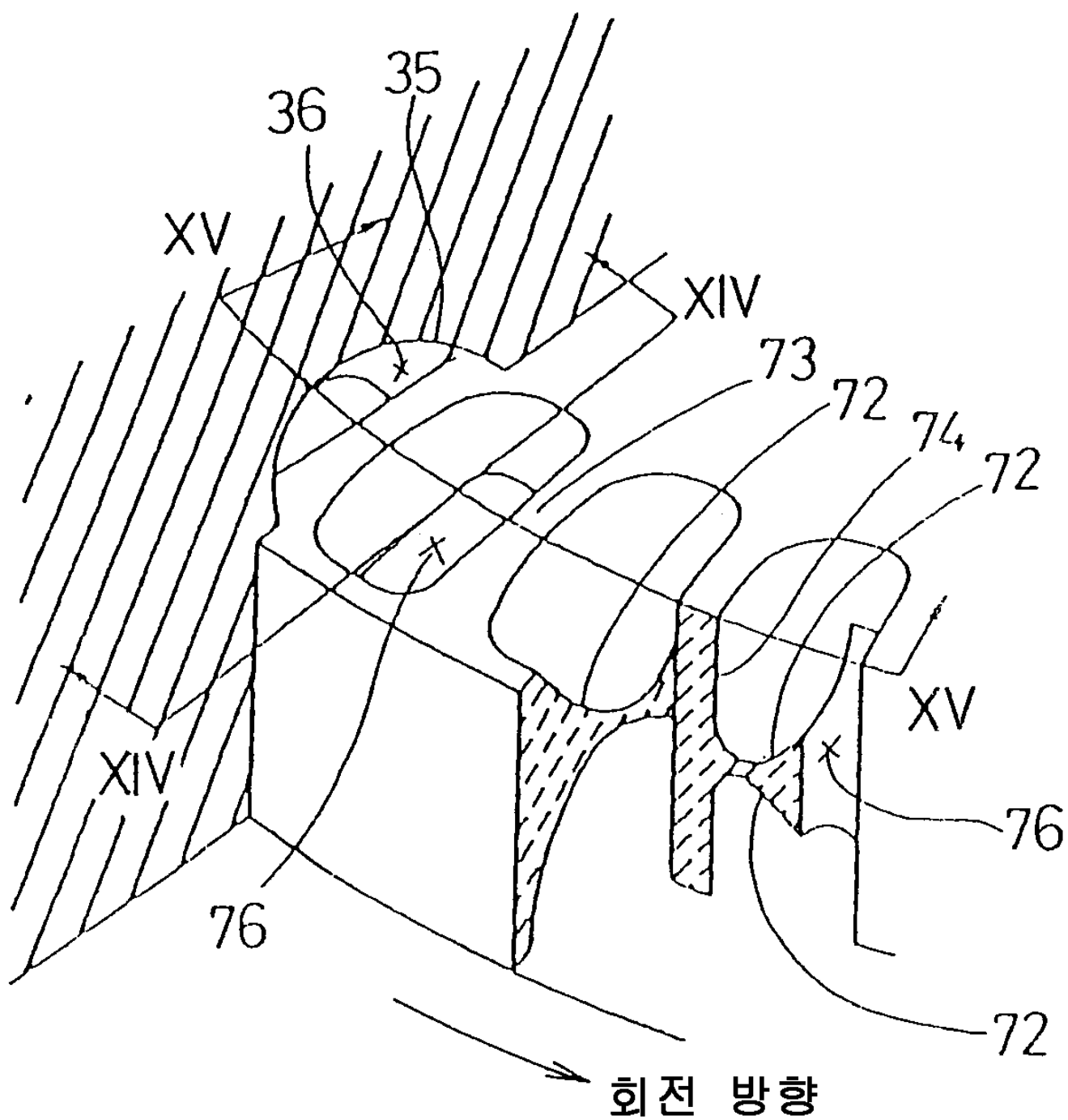
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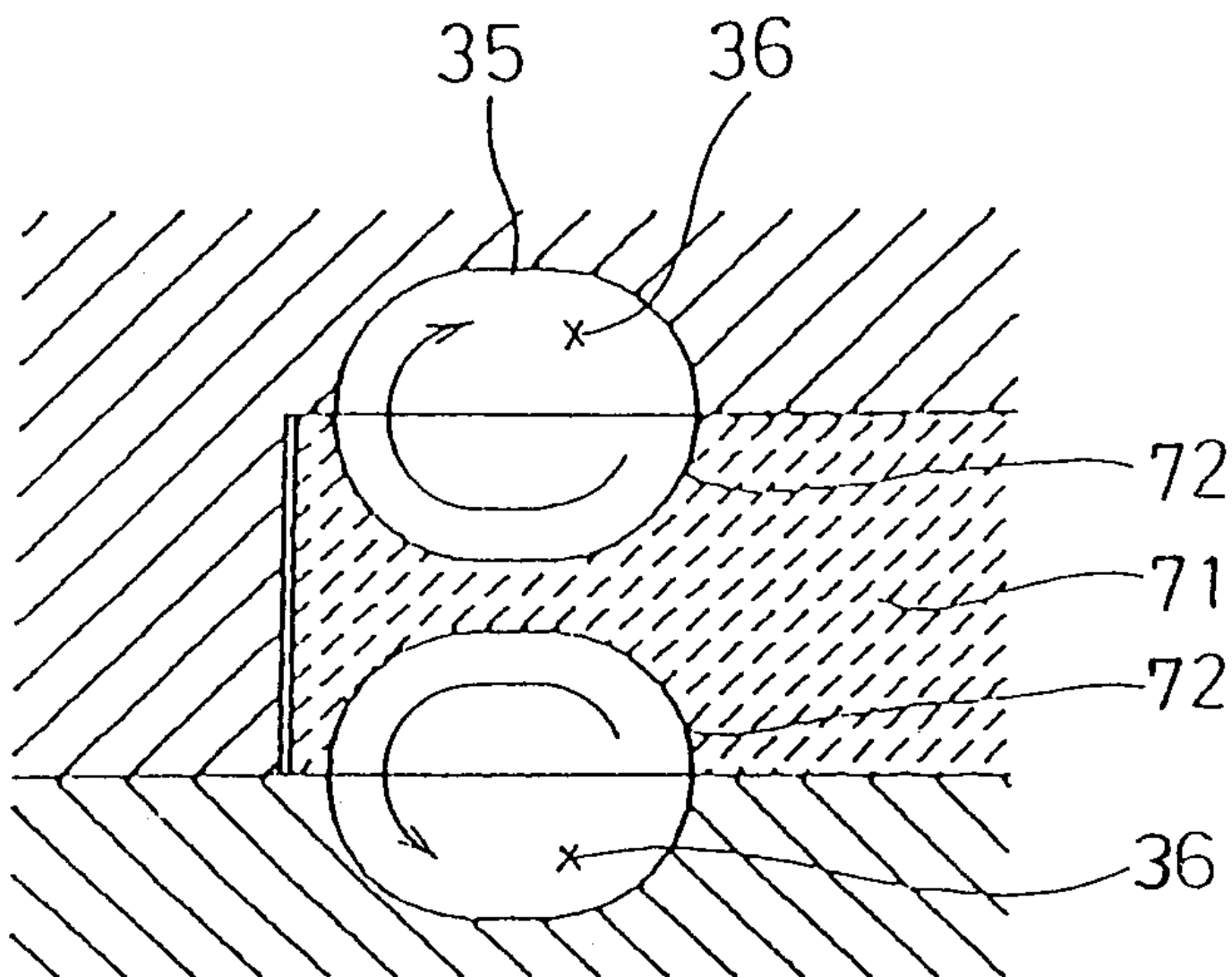
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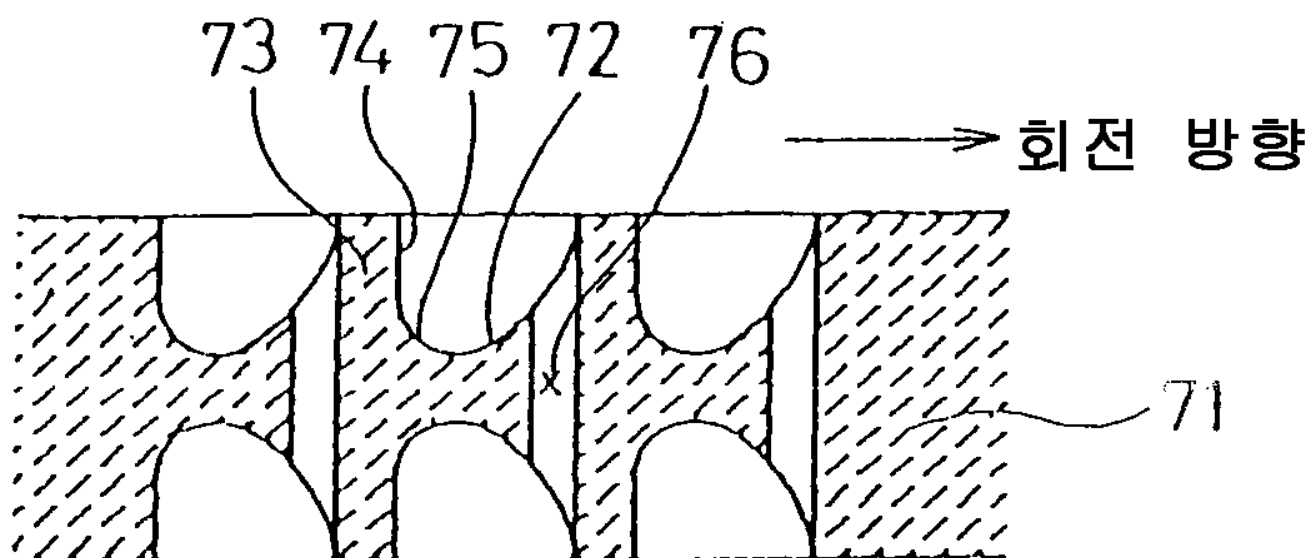
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14

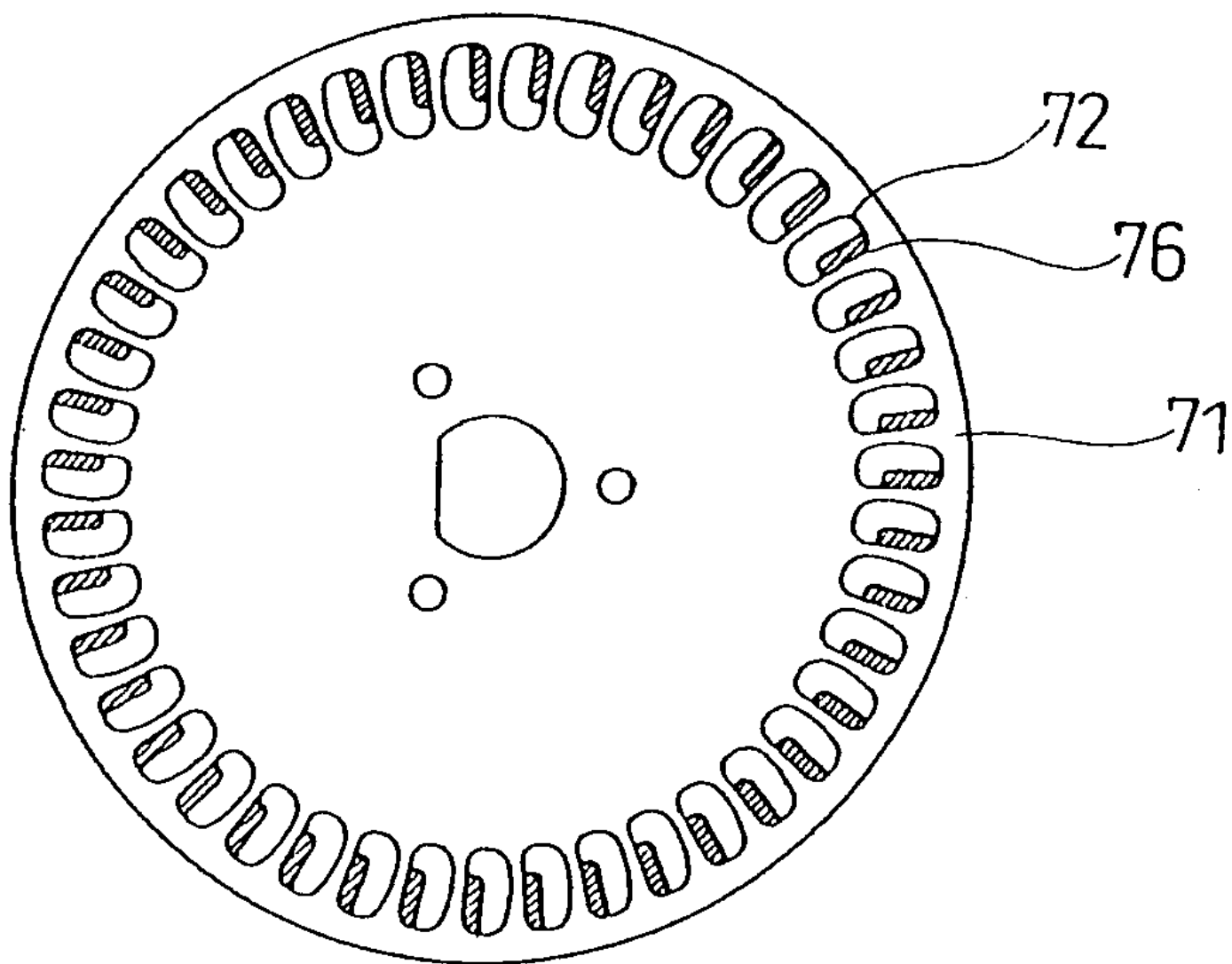
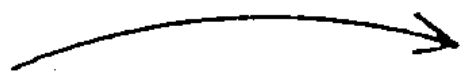


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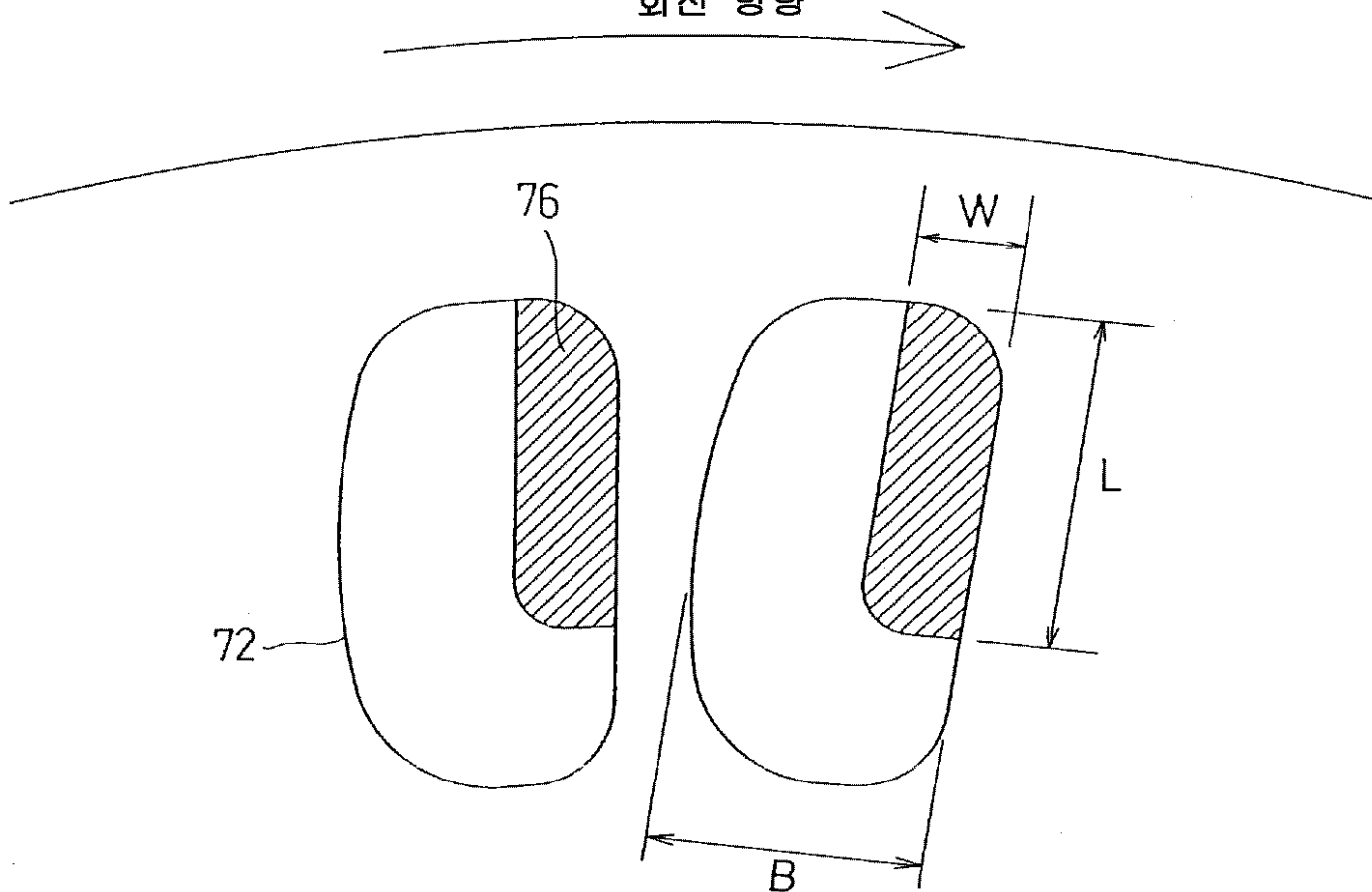
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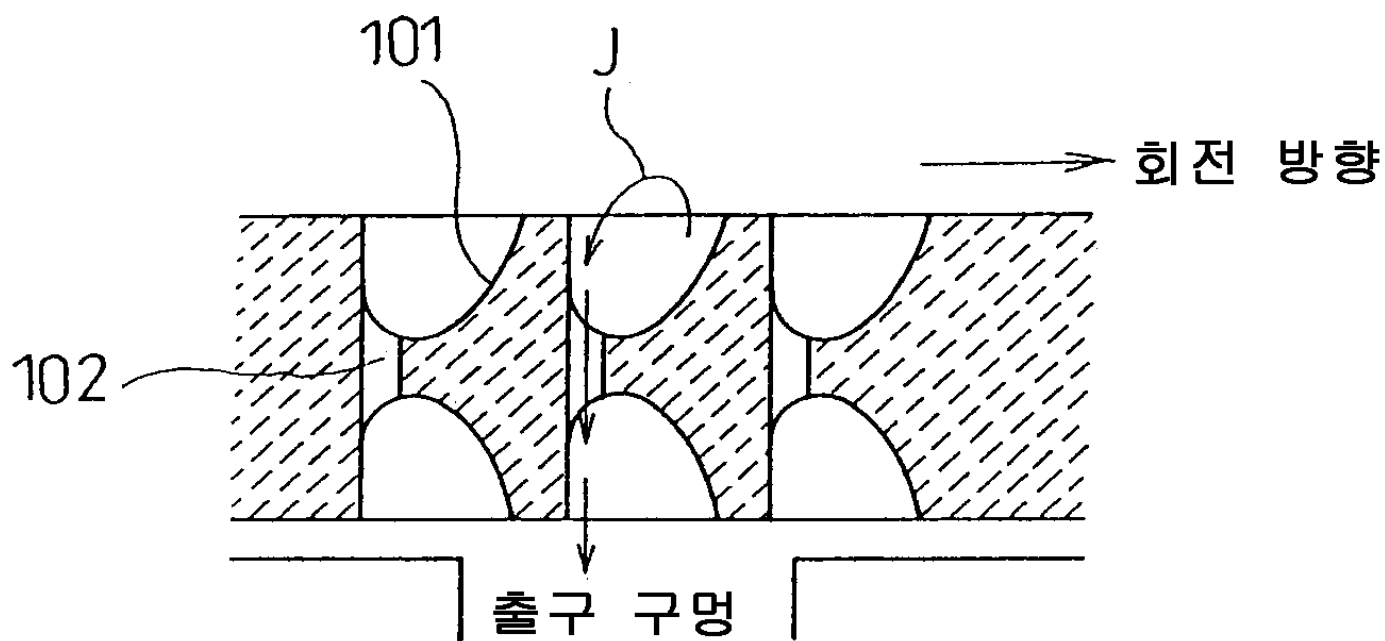


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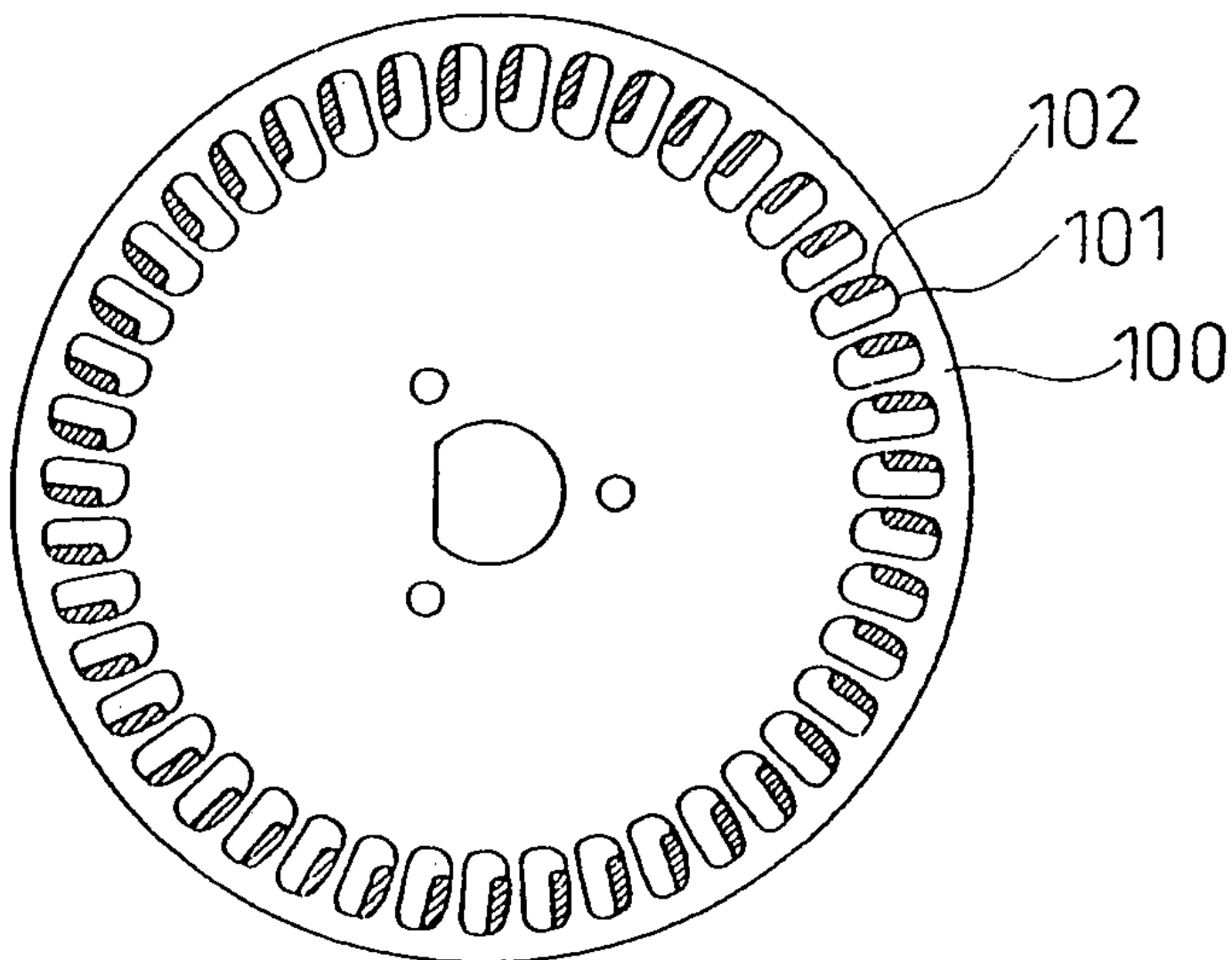
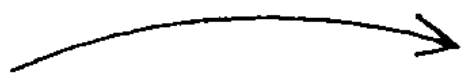


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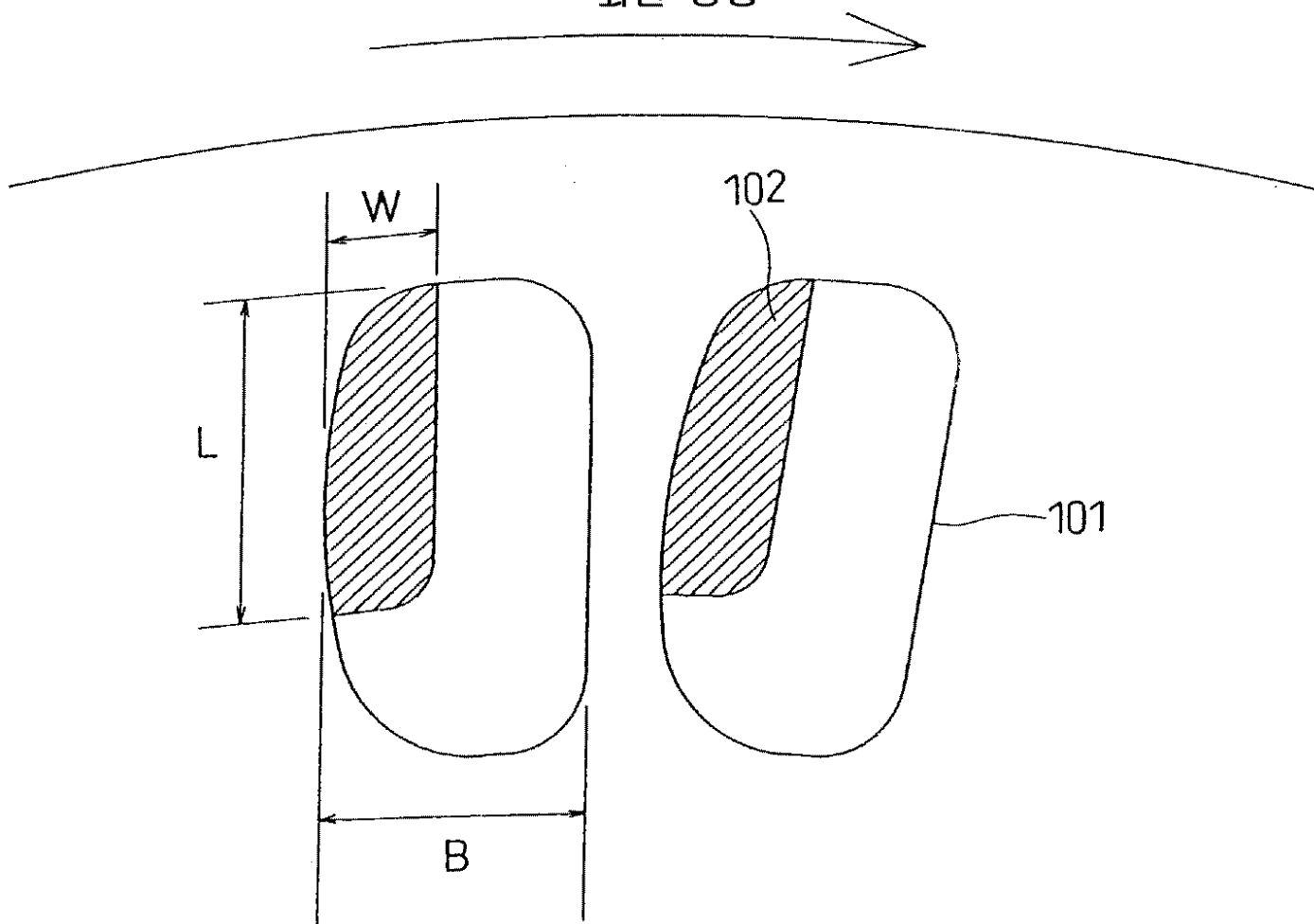
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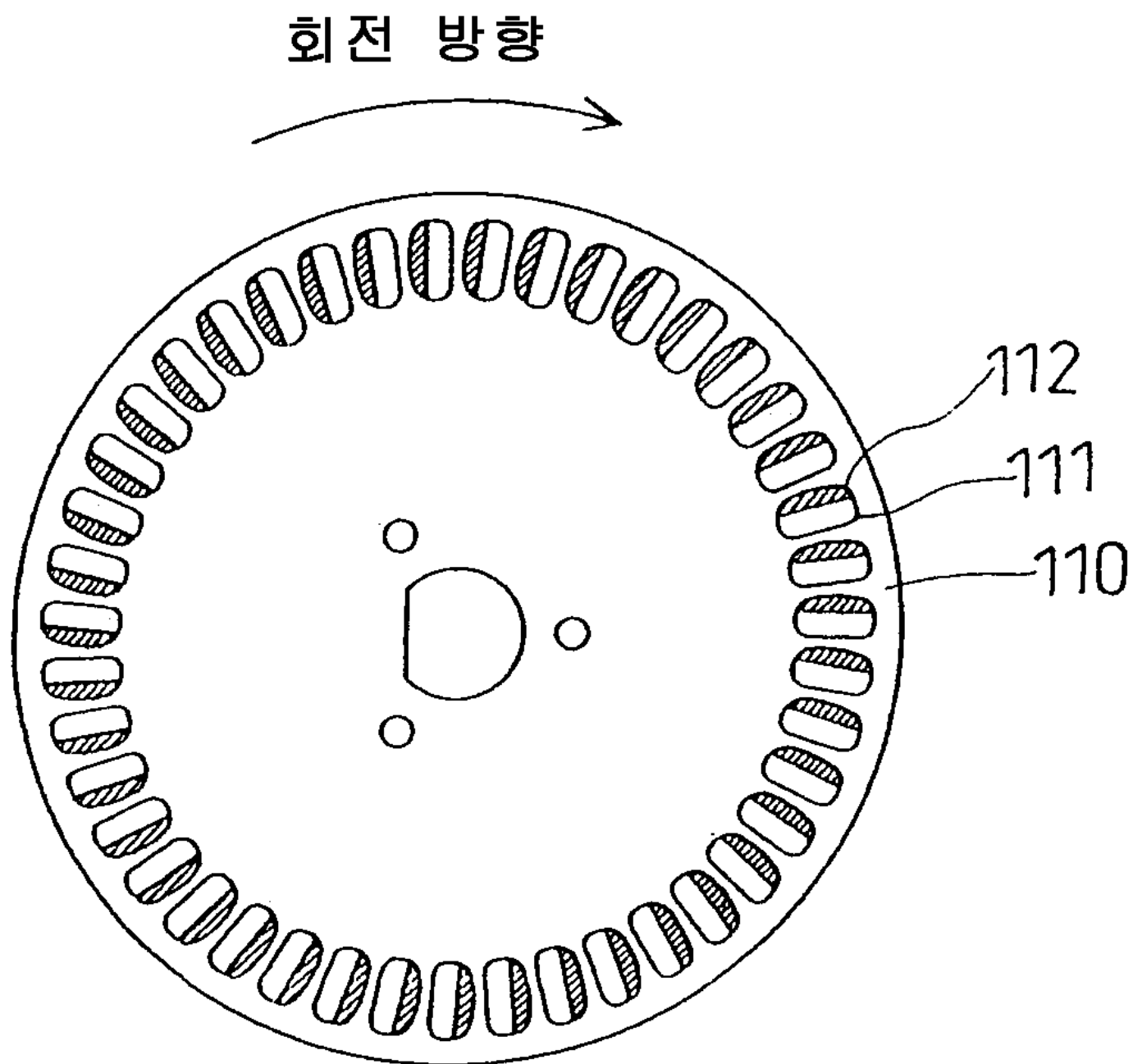


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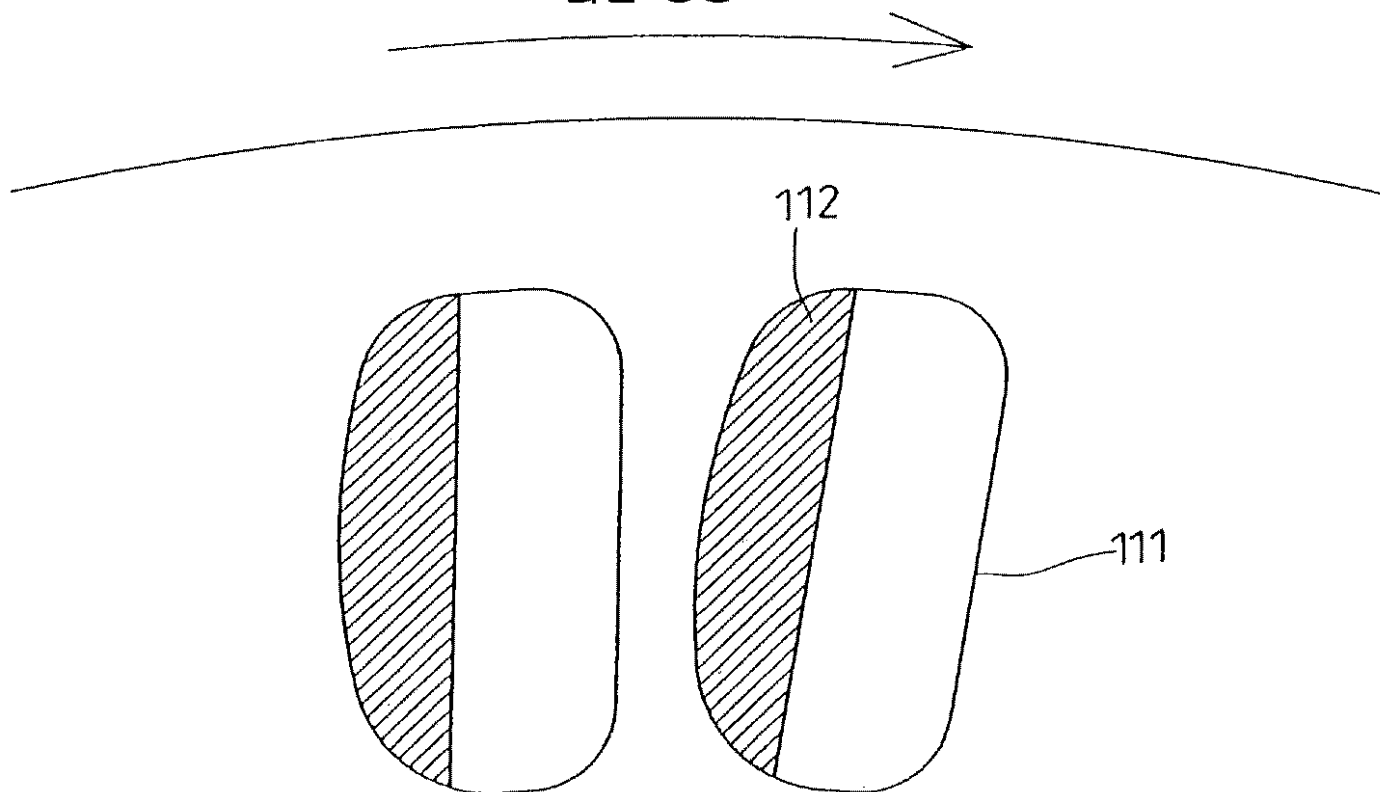


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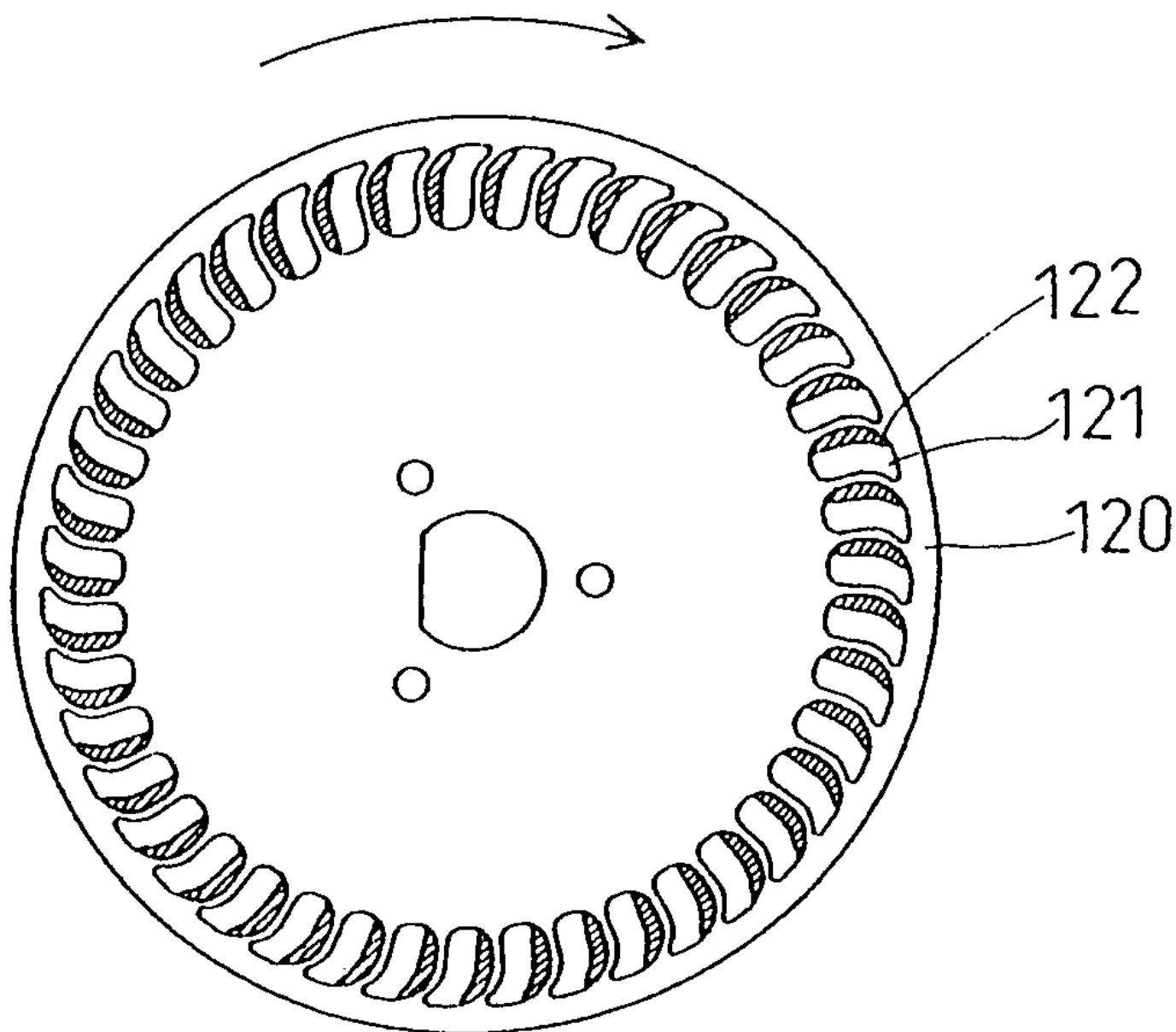
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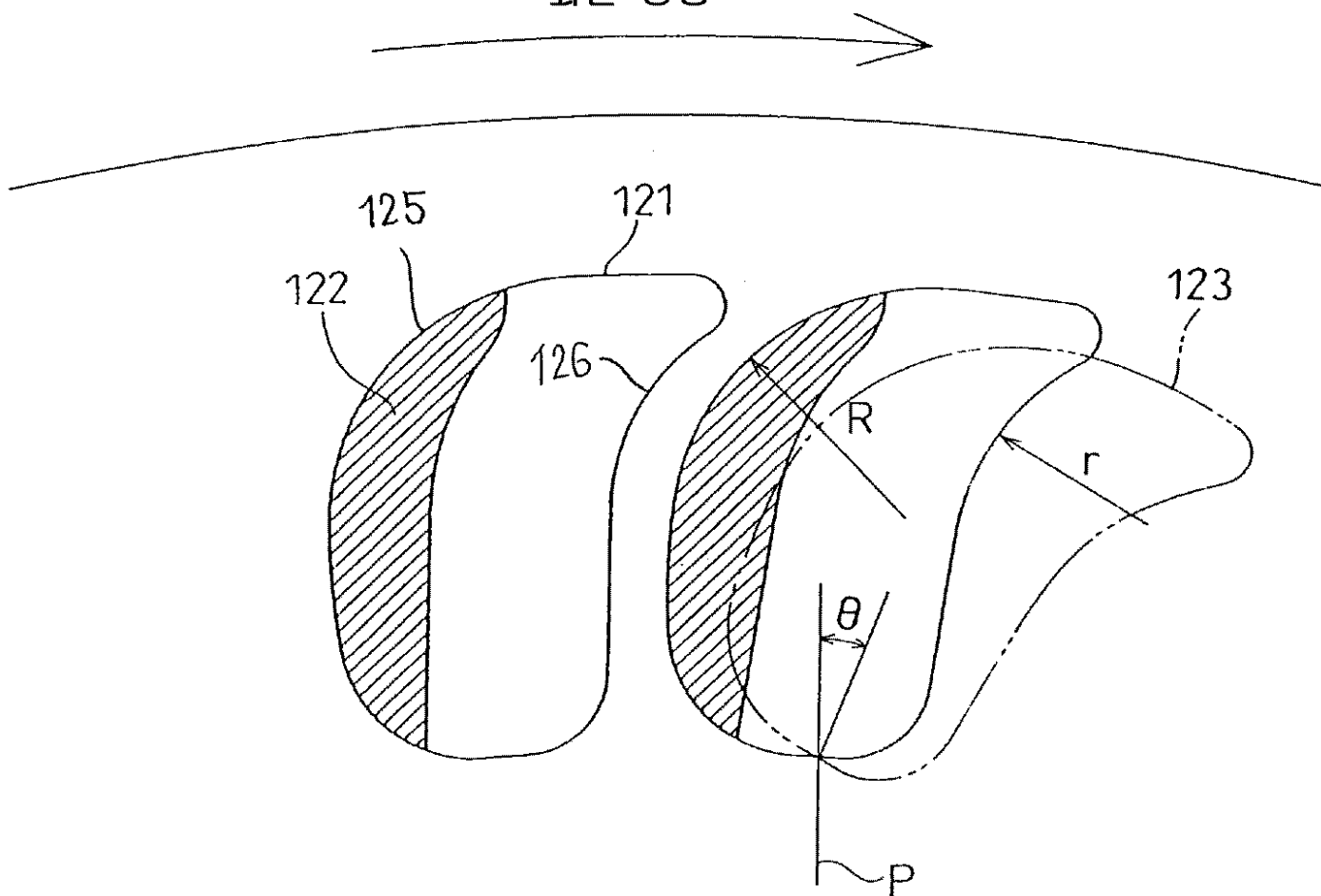
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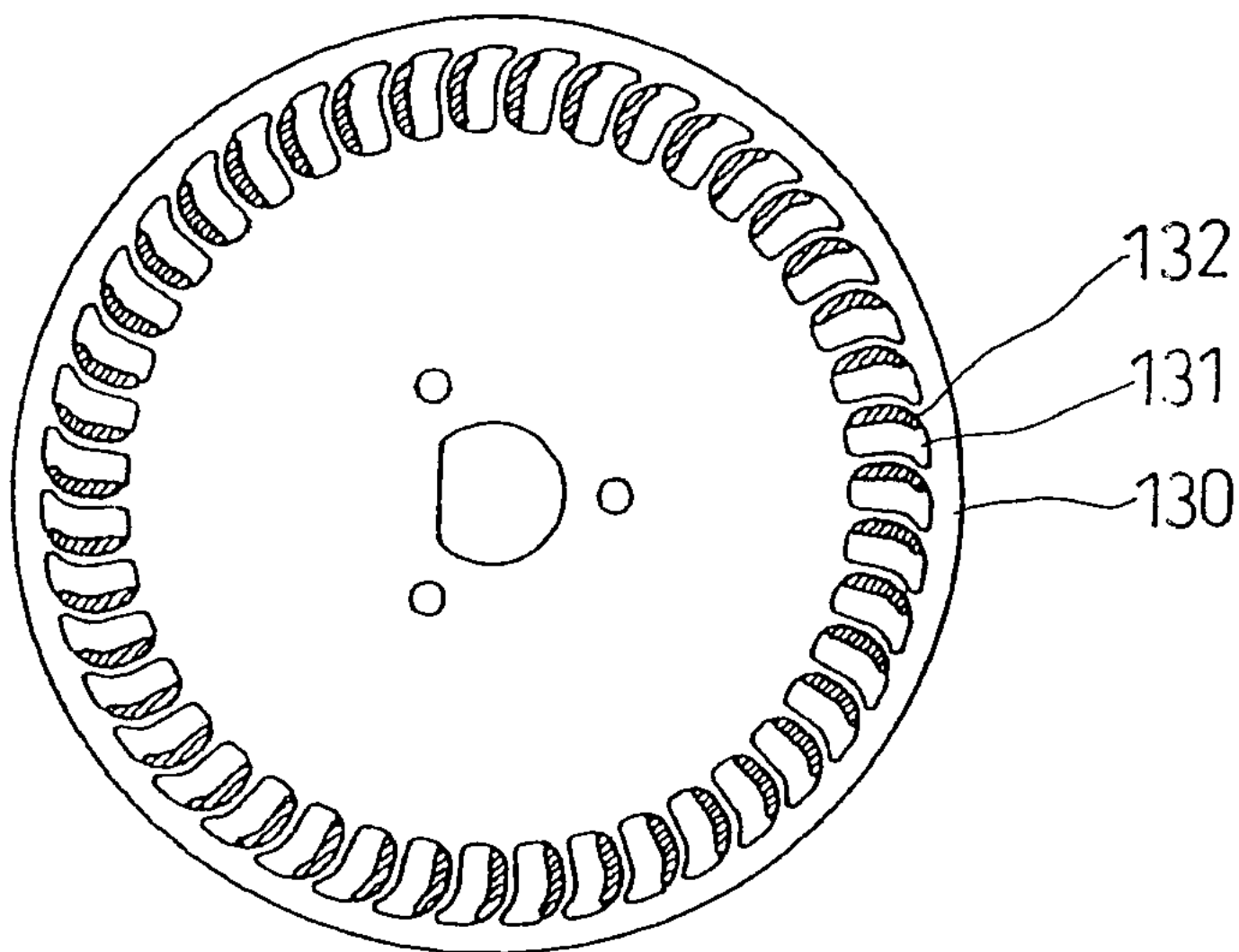
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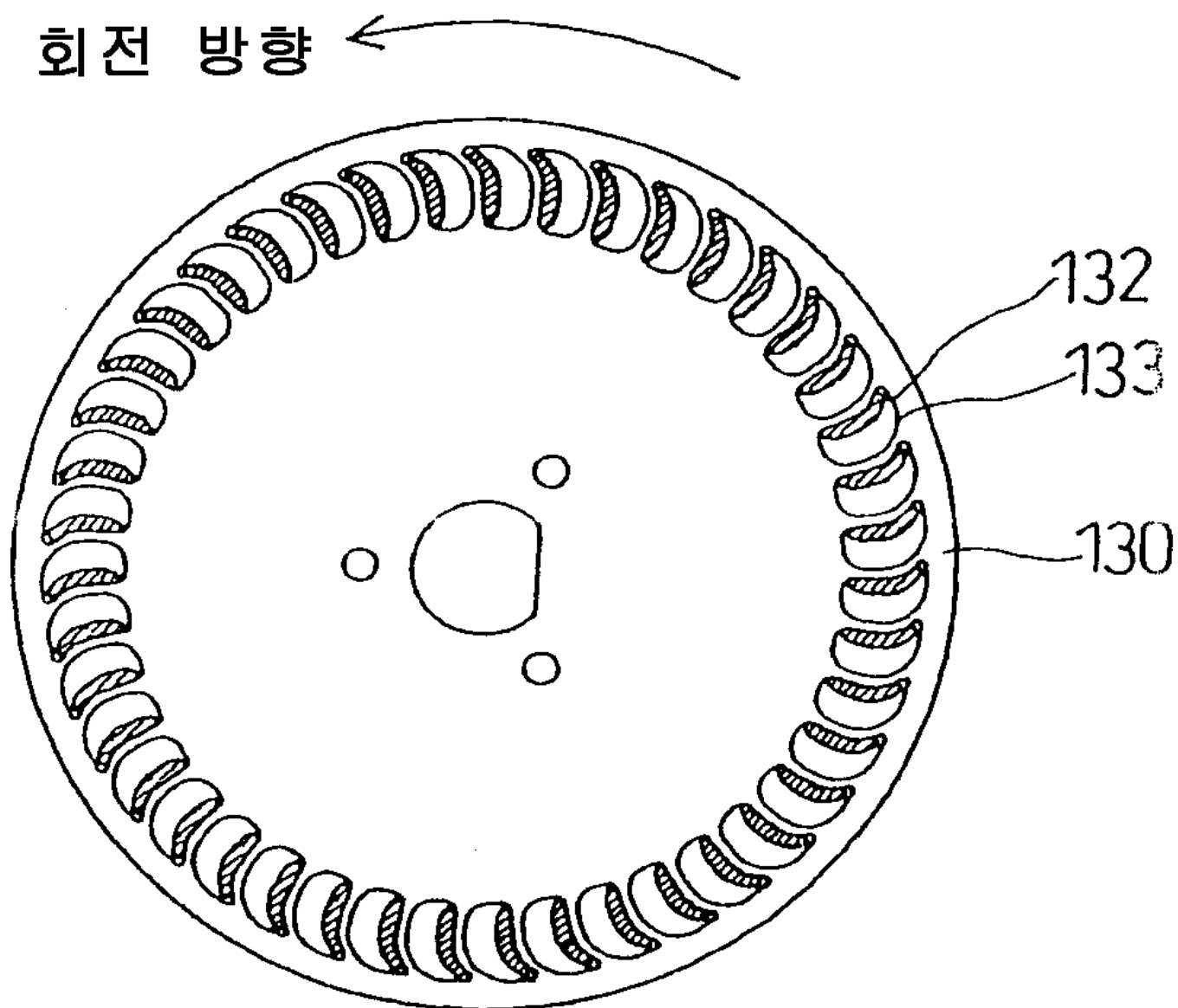
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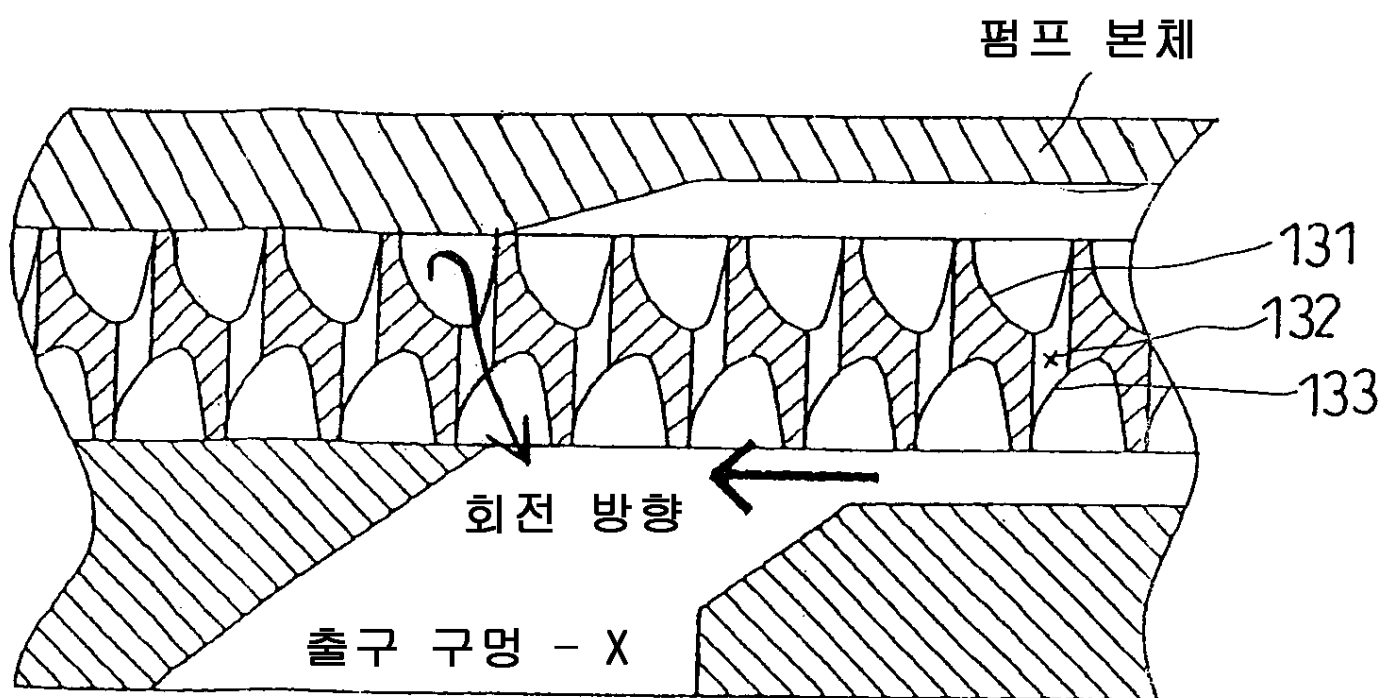


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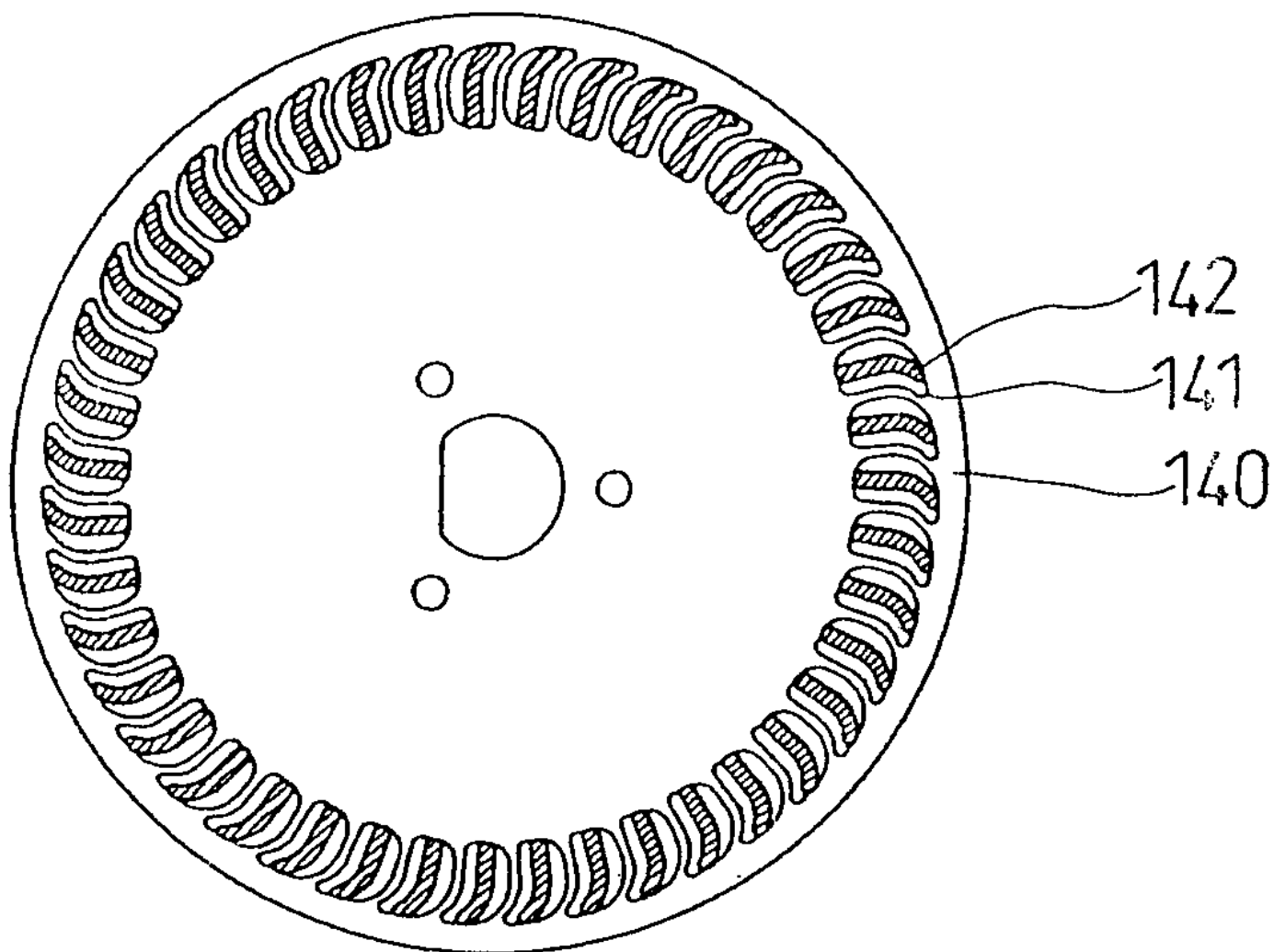


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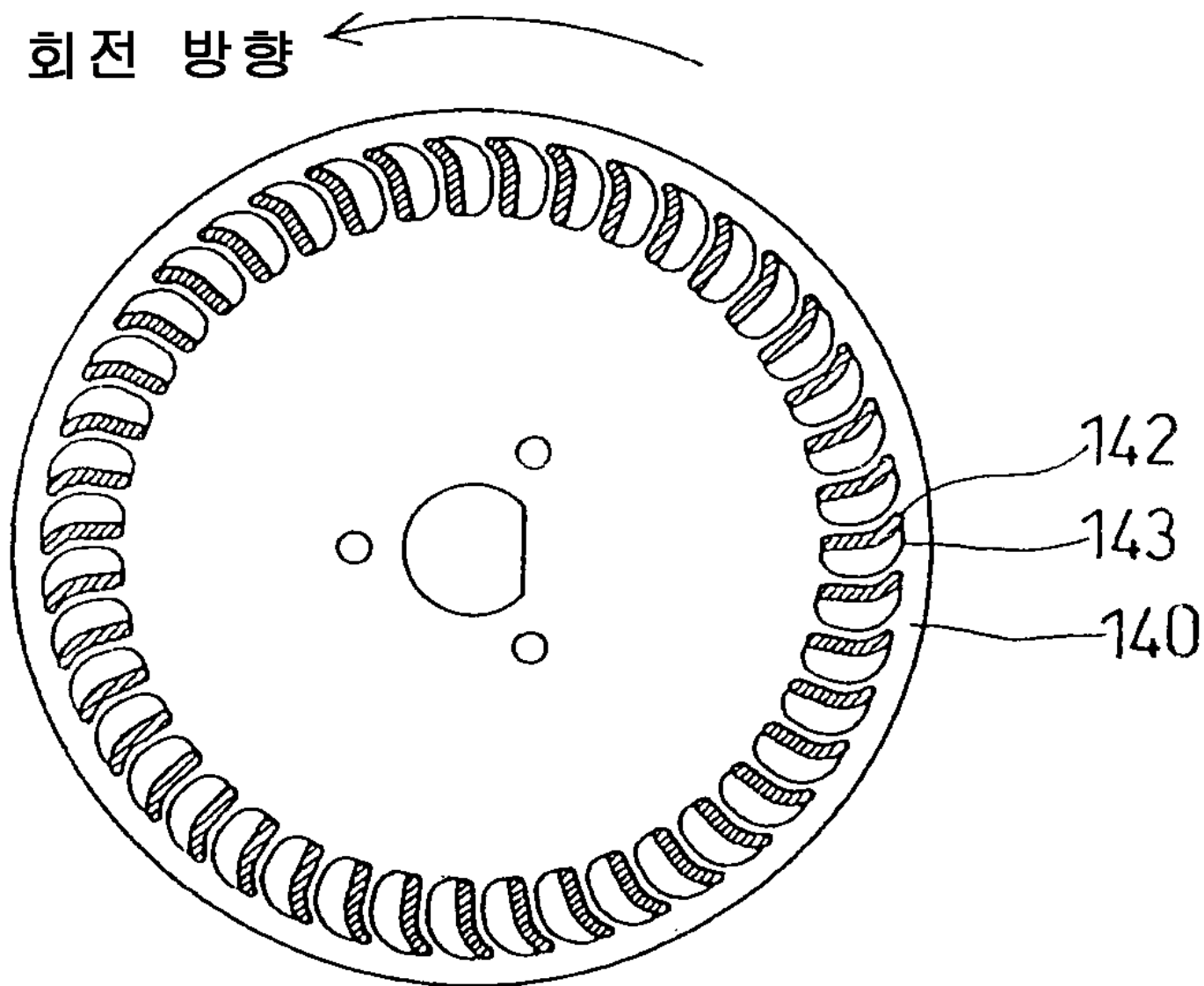
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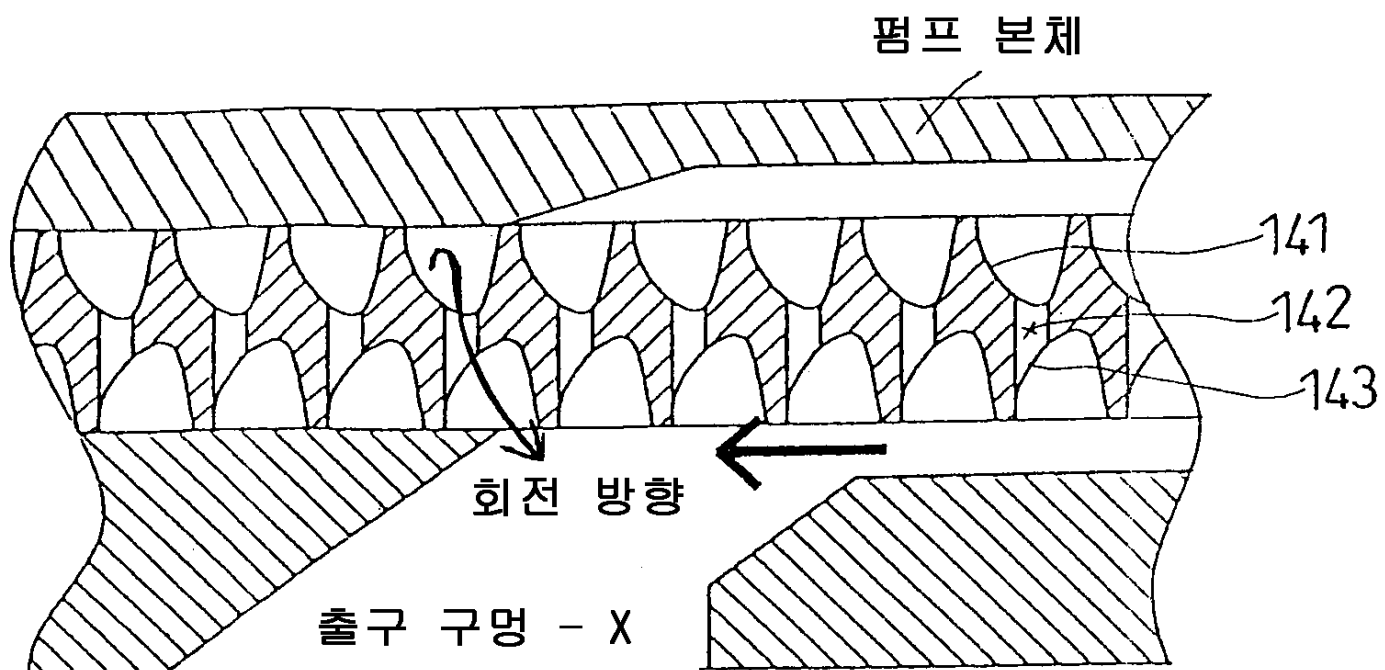


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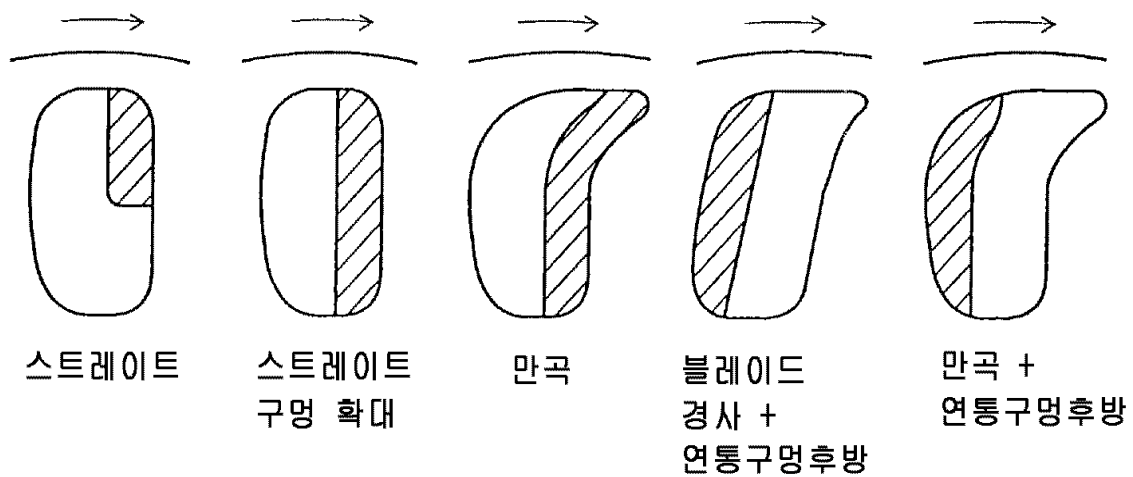
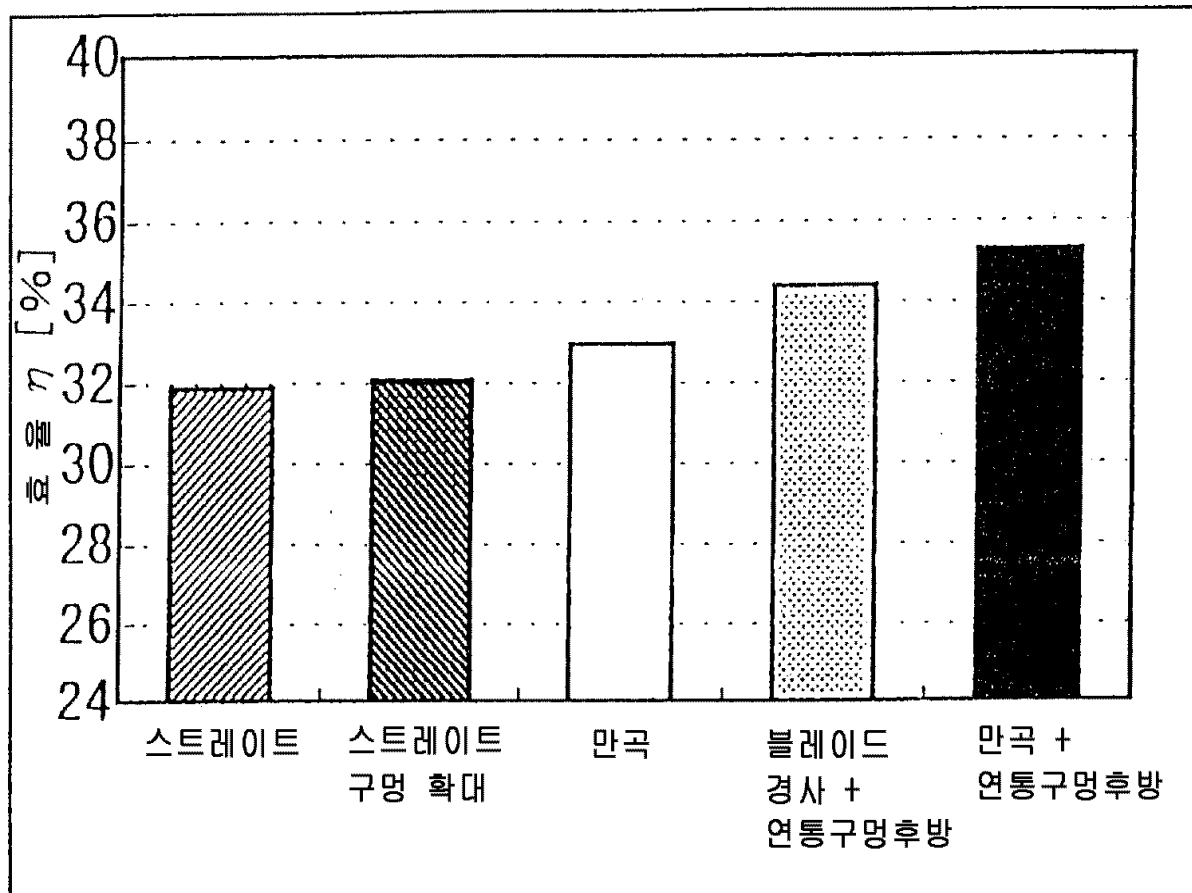
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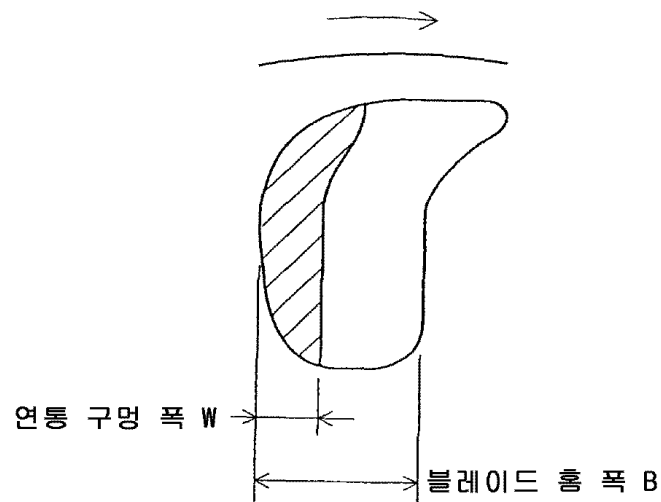
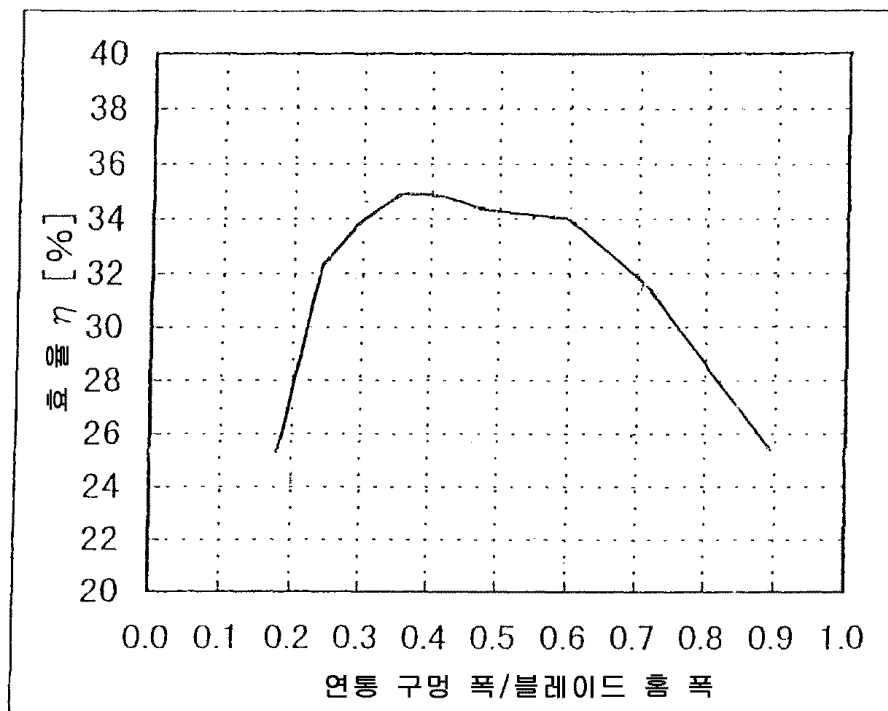
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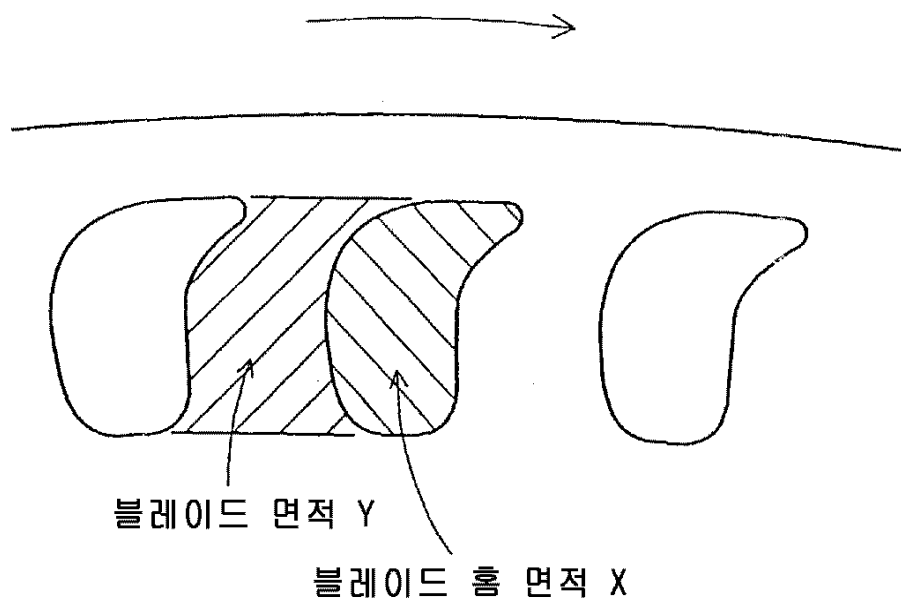
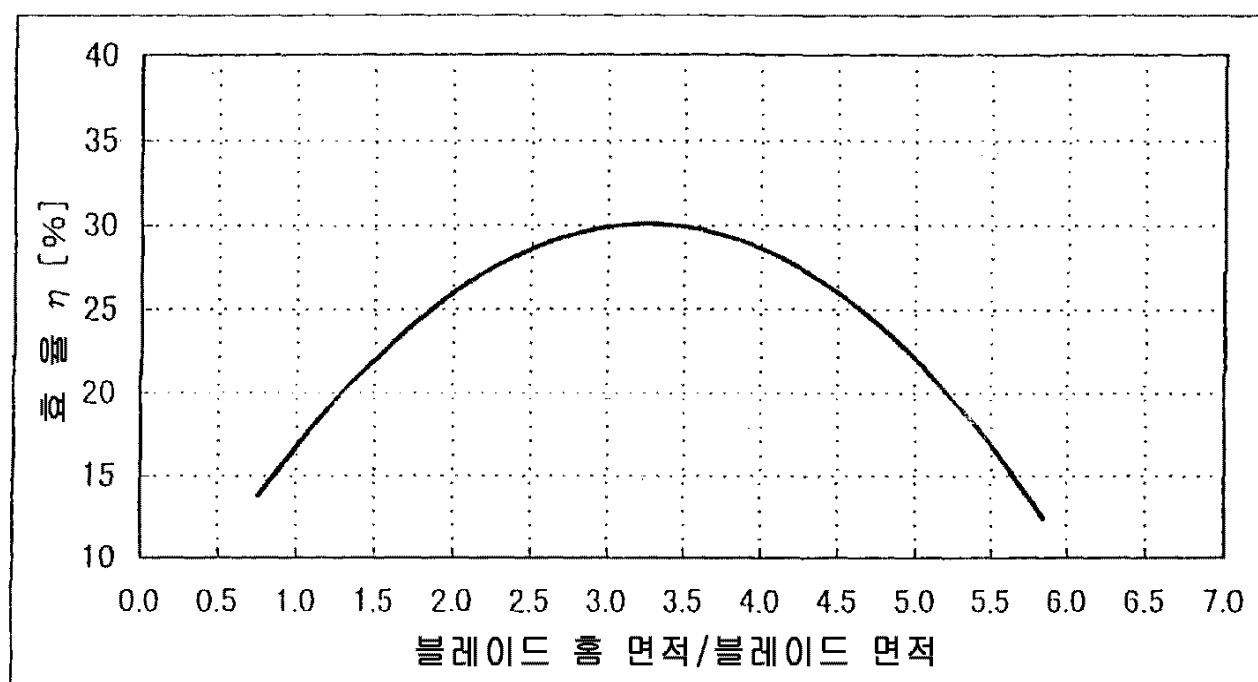


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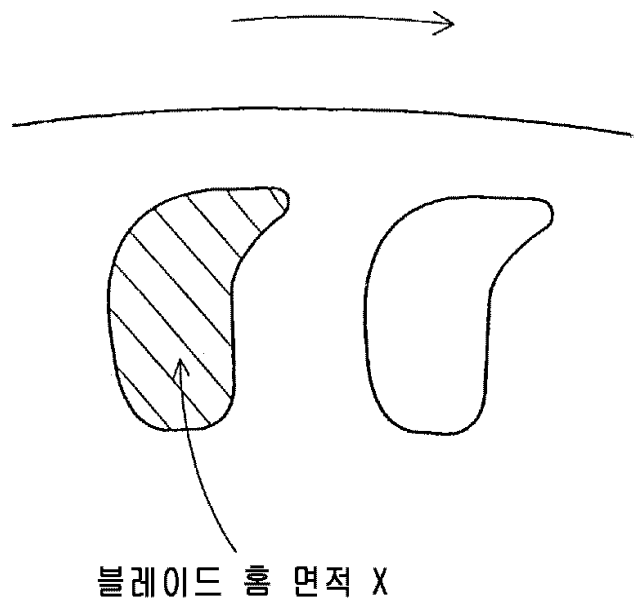
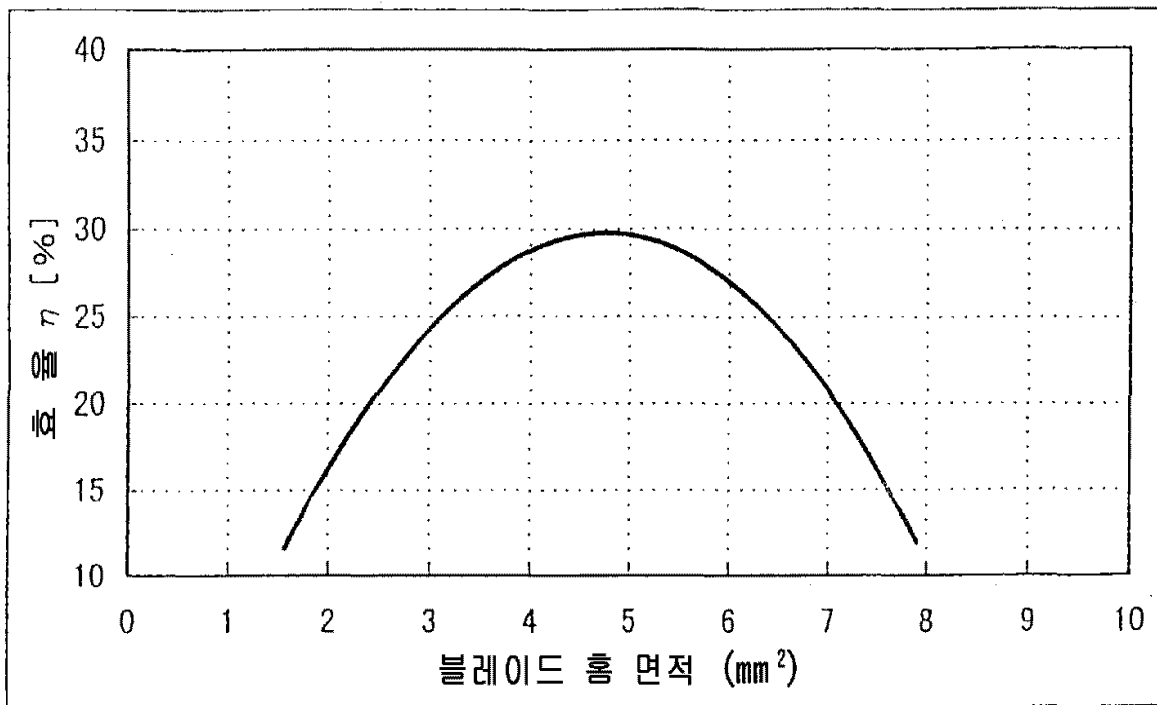


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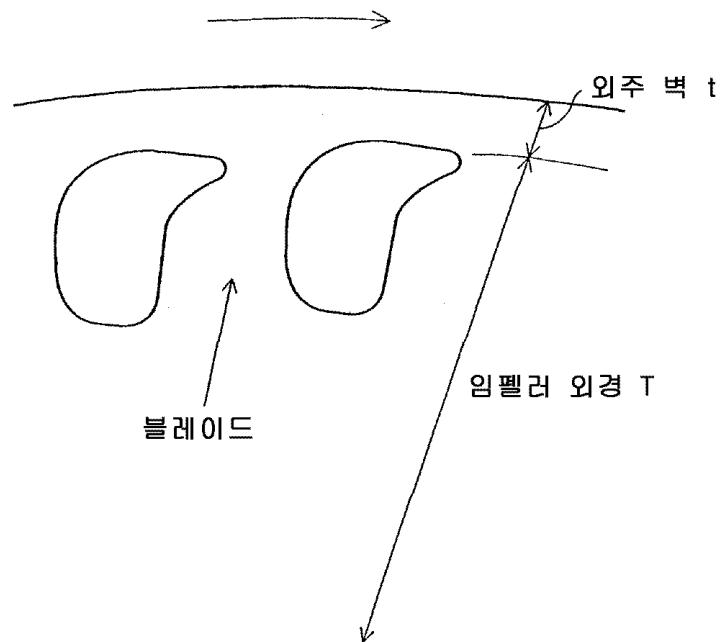
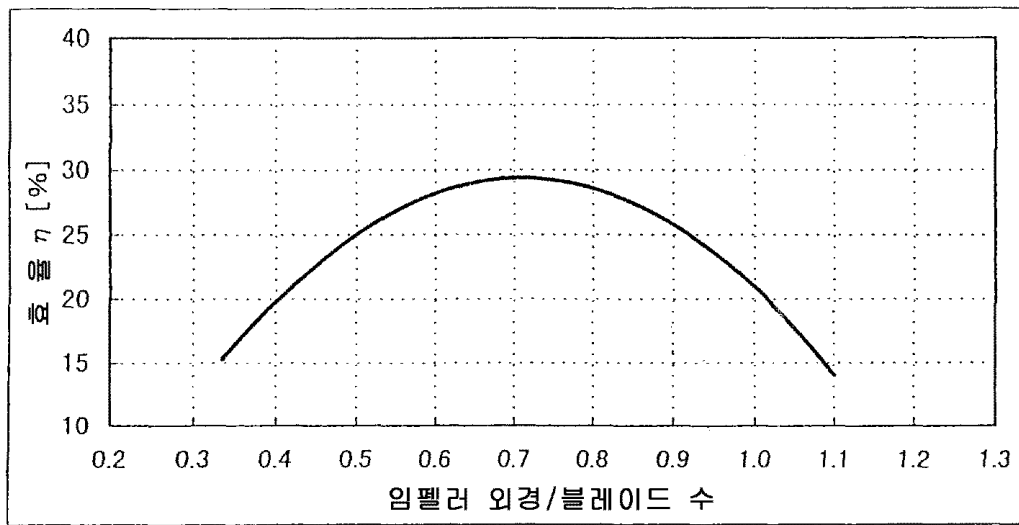




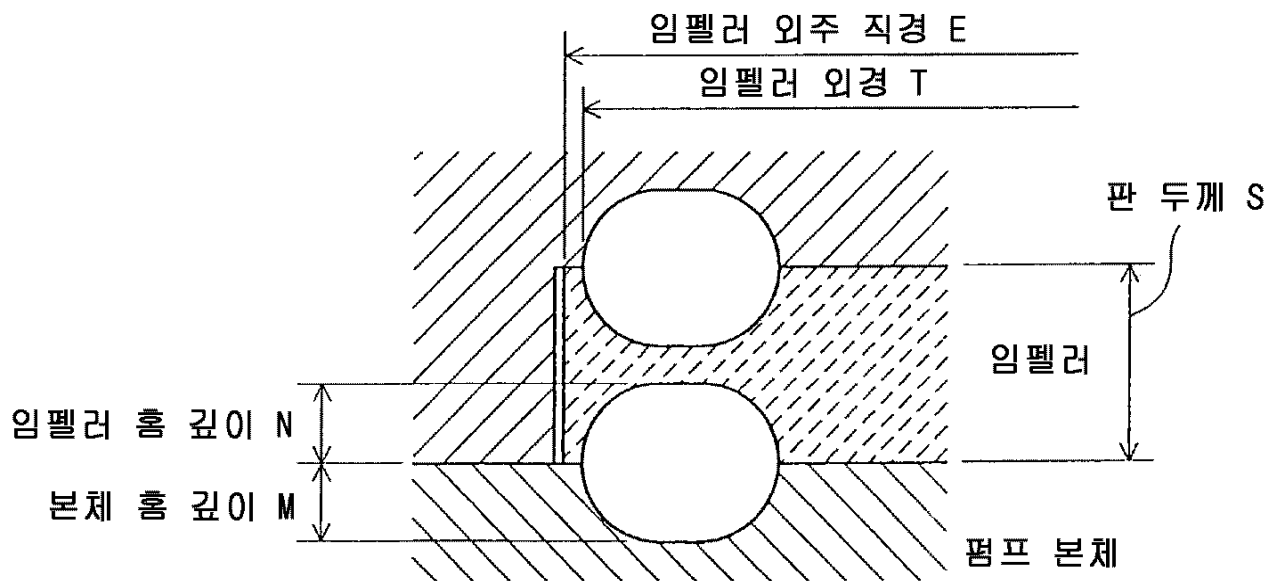
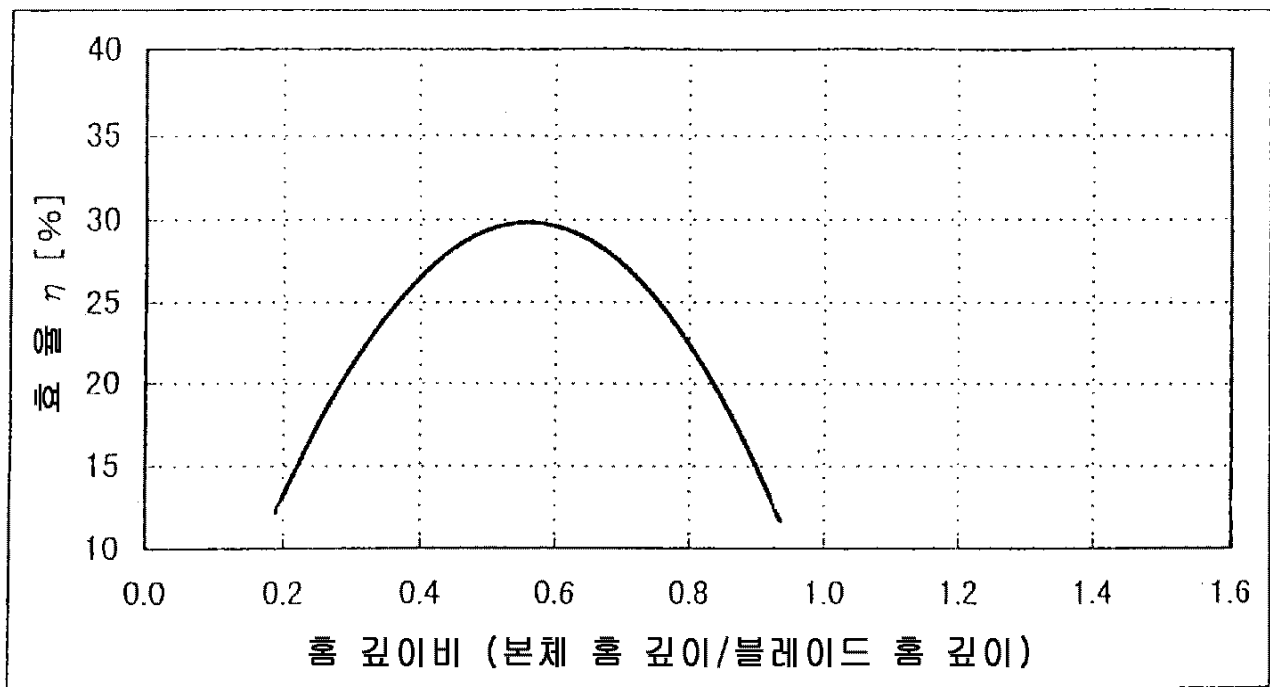
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37

