

(19) (KR)
 (12) (B1)

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 (24) 2001 10 29

(21) 10 - 1999 - 0054136 (65) 2000 - 0047824
 (22) 1999 12 01 (43) 2000 07 25

(30) 98 - 342916 1998 12 02 (JP)

(73) 가 가
 가
 가 4 6

(72) 가 460

가 460

(74)

(54)

가 가

가 . , 가

2

3

4A 4B

, 4B

, 4A

5

6A 6B

6A 6B

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8

9

10A 10B

11A, 11B 11C

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1 : 1A:

1B : 2 :

3 : 4 :

5 : 6 :

10 : 12 :

15 : 16A, 16B :

18 : 19A, 19B :

20 : 22 :

23 : 24 :

26A, 26B, 26C, 26D, 26E : 30 :

31 : 32 :

33, 34 : 40 :

41 : 43 :

45 : 50 :

50A : 51 :

53 : 53A :

54 : 60 :

61 : 62 :

63 : 64 :

65 : 160 :

162 : 262 :

Xq1, Xq2, Xq3, Xq15 ;

Yg1, Yg2, Yg3 : TET :

Q : MUI :

가

가) 가 ,
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FPC)

270

814/1995, 123489/1998, 38430/1999 52409/1999

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(1)

(1A 1B) 가
1A)

(1)

1B

$$, \quad (10) \quad (19A \quad 19B) \quad (16A \\ 16B) \quad , \quad (16A \quad 19B) \quad (19A \quad 19B)$$

() 1 2 . (10B)) 가

10A 10B

$$\begin{array}{ccccccccc}
 & 10B & & & (26A & 26E) \\
 (6) & . & (26A & 26E) & & & \\
 (261) & \text{가} & . & & (262) & & \\
 & & \text{가} & . & & (1A) & & \\
 (1A) & & & & . & & & \text{가} \\
 & (4) & & & & & (26A & 26E) \\
 & (6) & (x_{IC}) & & & & (261) & (262) & (x_L) \\
 & (x_L) & , & (1A) & & & & &
 \end{array}$$

, (1A) (12) (10) (26A 26E)
, (262) (1A) (26A 26E) (29A 29E) 가 .
10B (262) (262) (26A 26E) (29A 29E) 가 .

, (6) 가
· (16A) ((161)) (1)
9A)

(16A) 1

, y (50) (50) 가 .
 , y (50A) (3) 가 (50A) (50) , 50A (50A)
 (2) (2) (3) (1A) (50) (3), (3) (50) (50A)
 TFT) (2) (3) (Cstg) (TFT) 가 .
 Si , (51) (2) (2) (51) (3) (51) (51)
 . y (TFT) x (51) (2) (2A)
 , (TFT) (53) (53A) (53) y , y
 (50) (53) y (50A) (TFT) (53A) (50) , x (53)
 (50) y U (3 U (50) .
 ,
 (50) (53) (50) (Cstg) (50) (Cstg)
 (TFT) 가 .
 N (TFT) (2A) (P) (51) (2A) (53A) (53A) (51)
 . (2A 53A) (2A 53A) (2A) (2A) (53A) (53A) 가
 ,
 (Cstg) 가 (TFT), (2), (53)
 1A) (1) (1)
 ,
 (, 가 (3 54) 가
) (1B)
 , x (54) 가 , (54)
 .
 가

(54) 가

<

4A 4B (5) 4A 4A b - b 4A 1

(P)

4A 4B , (3) ()
 . (3)
 (5)

(5) () ,

(5) (IC) , 가 (1A)
 ()
 (5) () (1A),
 (1A)

(15),

가

, (10) (12) (15)
 (5) , (5) (3)

5 (15)(12) (5)) (5)

(30) (G1) () 5 (G1) (30) 가 (30) (G1) (Yg1)
 (G1)

(31) (G1,G2) (Yg2) (31)

(32) (33 34), (35)
 , (G1,G2)
 1 (3) (TFT) 12 가
 Xg1, Xg2, Xg3 Xg12 (36) (31)

(G1) 가 (G1) (G1) (Yg8)
 (G2) (Yg1) (G1) (Yg8)
 5 (37) 가 (G2) (G2) (Xg1)
 (G2)

<

6A 6B

(6) 가 x

7

(6) 가 y

<

8 (15), (16A)
 (15, 16A 16B) (Cu) (16B)
 (60) (61) (8)
 2) 가 (63) (61)) (6)

8 (64)
 (8 (8 (60))

, (1) (Cu) (61)
 (65) 8 (Cu) (61) 가 ,

< <

(12) (6) (16A, 16B)

, (16A, 16B)
 (16B) (12) (16A) (16A)

, (16A, 16B) , (16A, 16B)
 가 .

1 (10) (19A) (16B) (16A)
 (19B) , (19B) (16B) (10) (16A)
 (16A, 16B) (19A), (16A) , (16B) (1)
 6B) (6)

1 , (16A, 16B) (16A, 16B) (10)
 (16A, 16B) (19A, 19B) (19A, 19B) 가 (16A, 16B) (16A, 16B)

, , (16A, 16B) 9 (19A, 19B)
 (16A, 16B))

B) , (12) (19A,19B)
 (16A, 16B) , (12) (12) (12) 가 (19A,19
 (4) .

가 (12) (4) 가 (4) .
 .

11A, 11B 11C .

11A, 11B 11C (5) (6) , (16A, 16B 16C) (30,40)
 . 가 . (16A, 16B 16C)
 . (MUL)

C) , 11A (1A) (16A) (16A, 16B 16
 6) (40) 가 (19A) (6)(6) (10) , (16B)
 . . (160) (16A,16B) (40) .
 . (160) (160) .

가 (160) (160) , (160)
 . 11B 11A 2 , (160)
 (16A, 16B 16C) () , (40)
 . . . (MON)

11B 가 , 11B
 . .

11C 11A 11B 11C (16A,16B 16C)
 , (19A) (19A') 가 (16A) (16A)
 (10) (6) (16B) (19B) (16A) (19A'),
 (40) (6)(6) (11A) 11B 11C 11A 11B

 . 11C 11C (43) (11) (19A)

 . (19A') (16A) . .
 (43)

(5)	(6)	(16A,16B)
(5)	(15)	(15)
(5)	(1)	(16A,16B)
		가

가

가

가 가

가

가

가

(57)

1.

가

가

가

가

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가	,
가	,

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가 ,

가

2.

1 , IC

3.

1 , 가

4.

1 ,

5.

1 , 가

6.

5 , 가

7.

1 ,

8.

1 ,

9.

8 , 가 ,

10.

9 ,

11.

1 , 가

12.

1 , 가 ,

13.

12 , ,

14.

, , ,

가 , ,

가 , , ,
가 , , ,

가 ,

15.

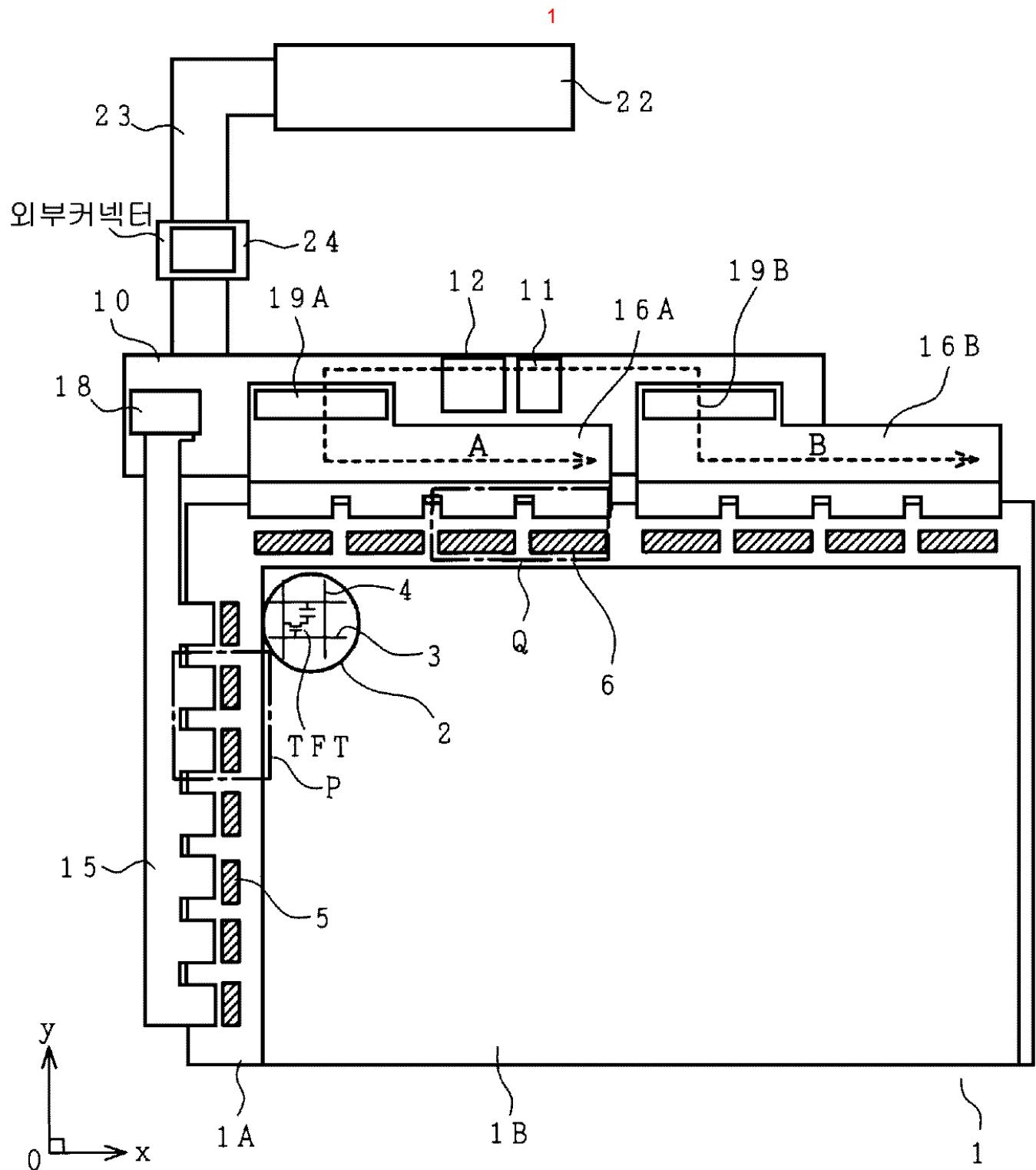
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16.

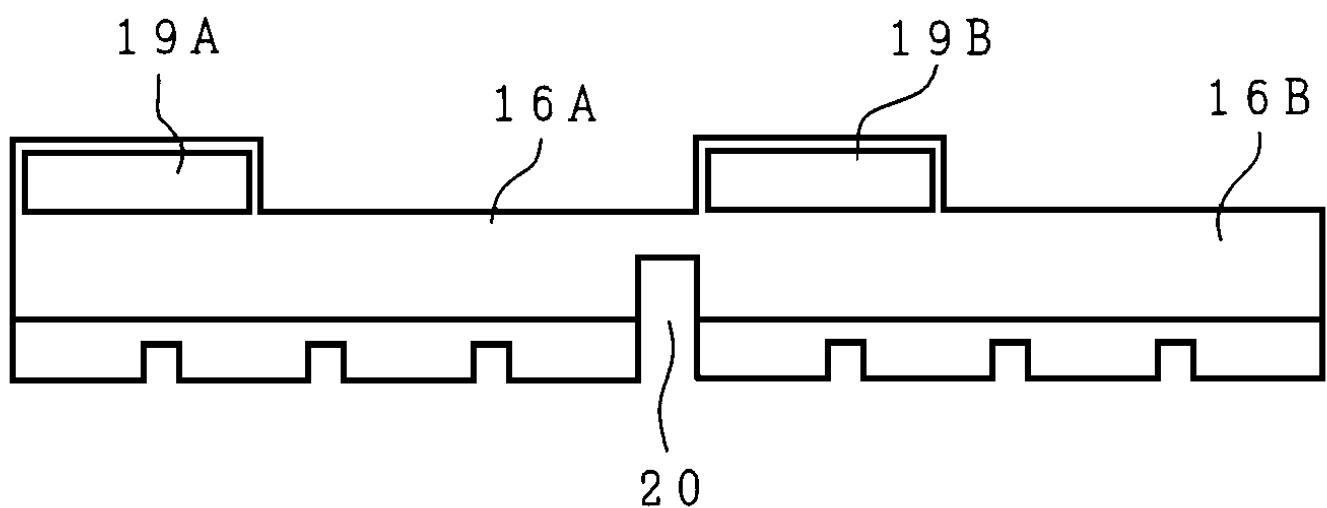
14 , ,
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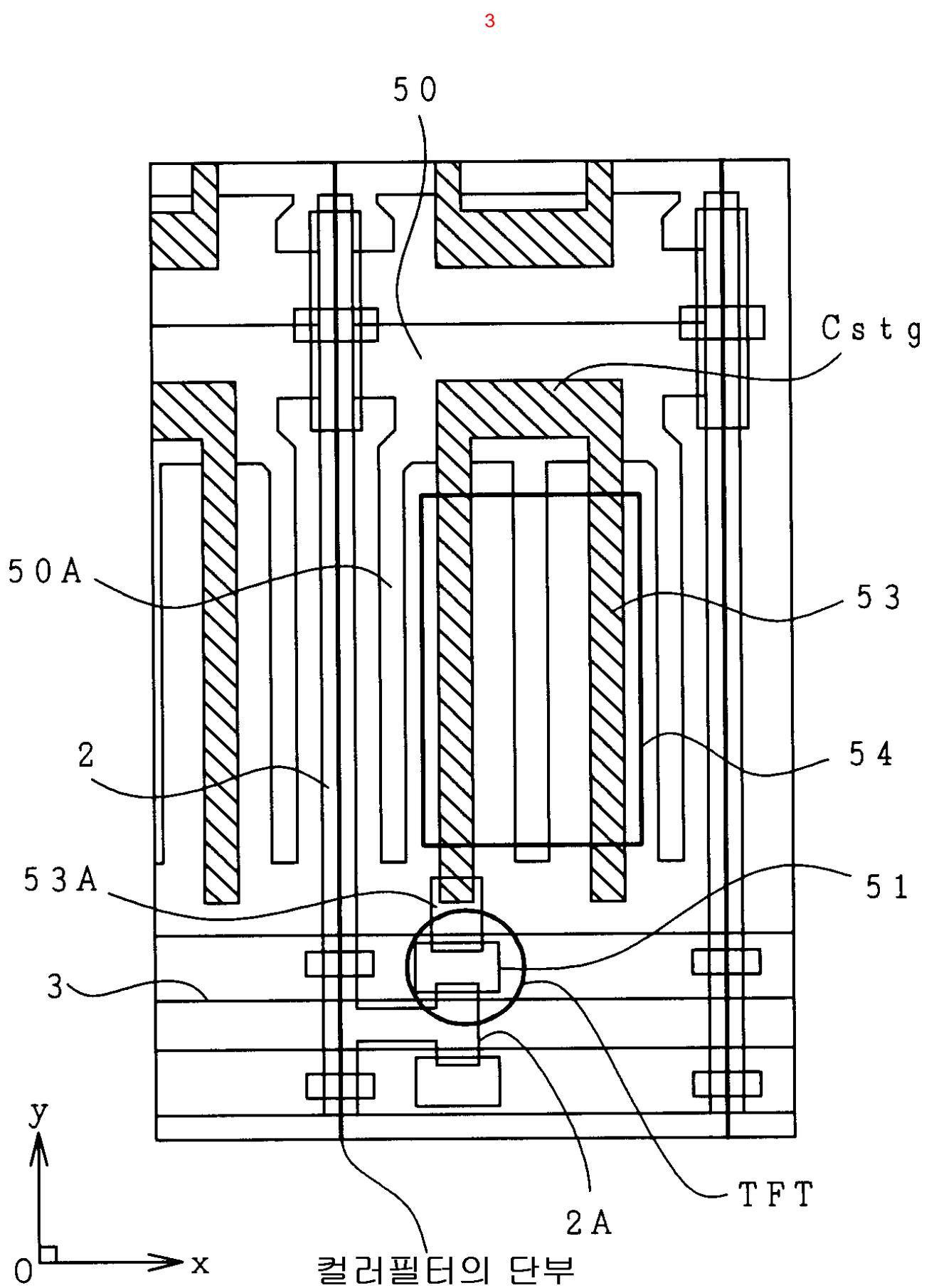
17.

14 , , 가 , ,



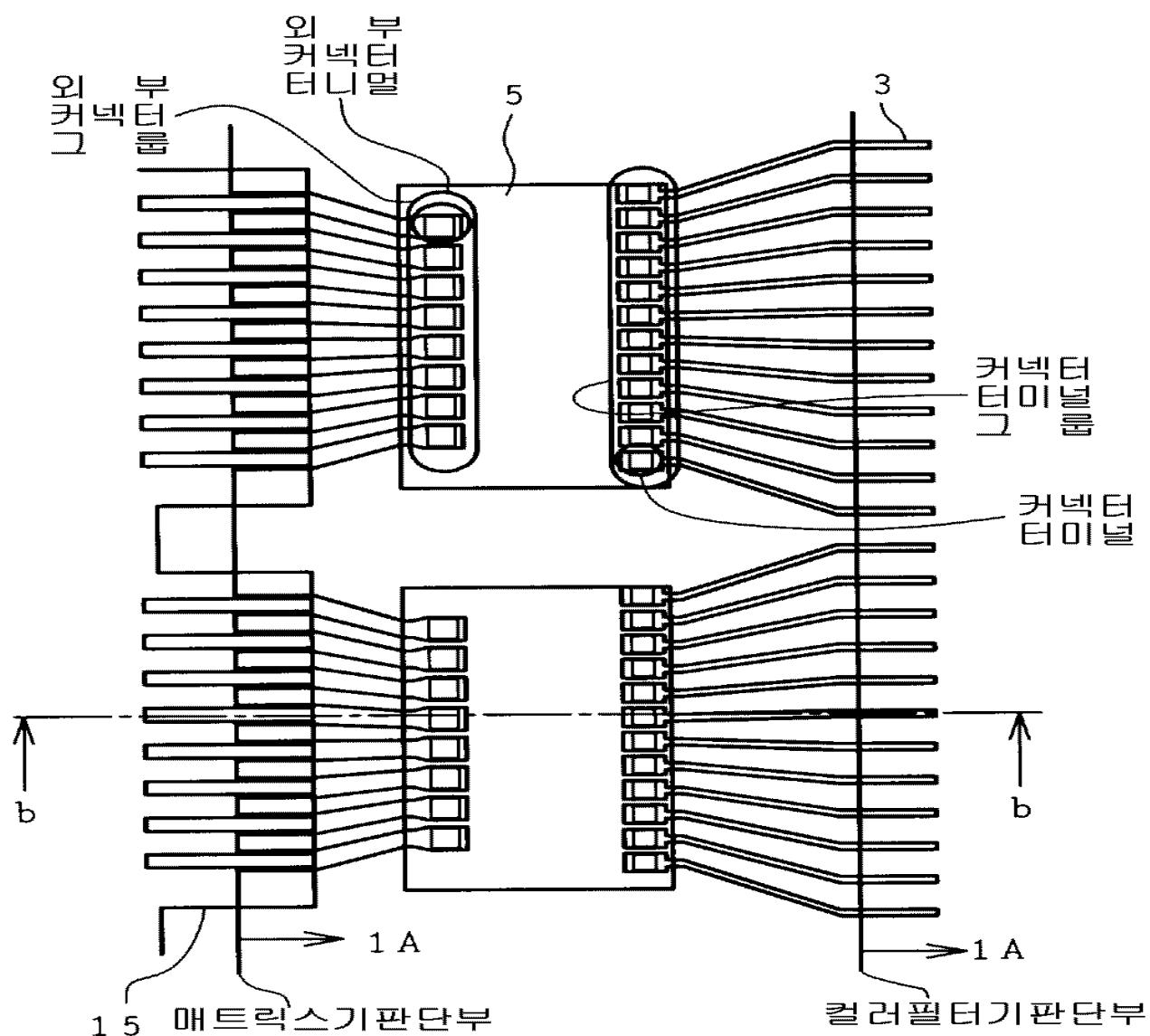
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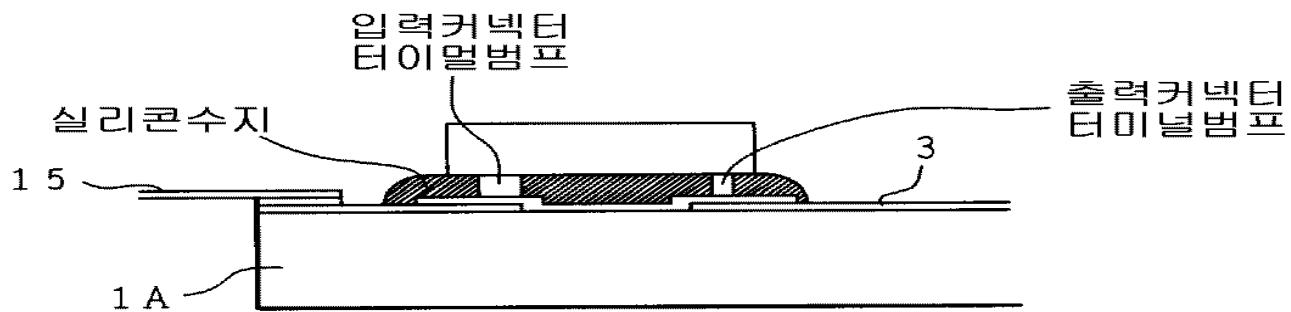


4

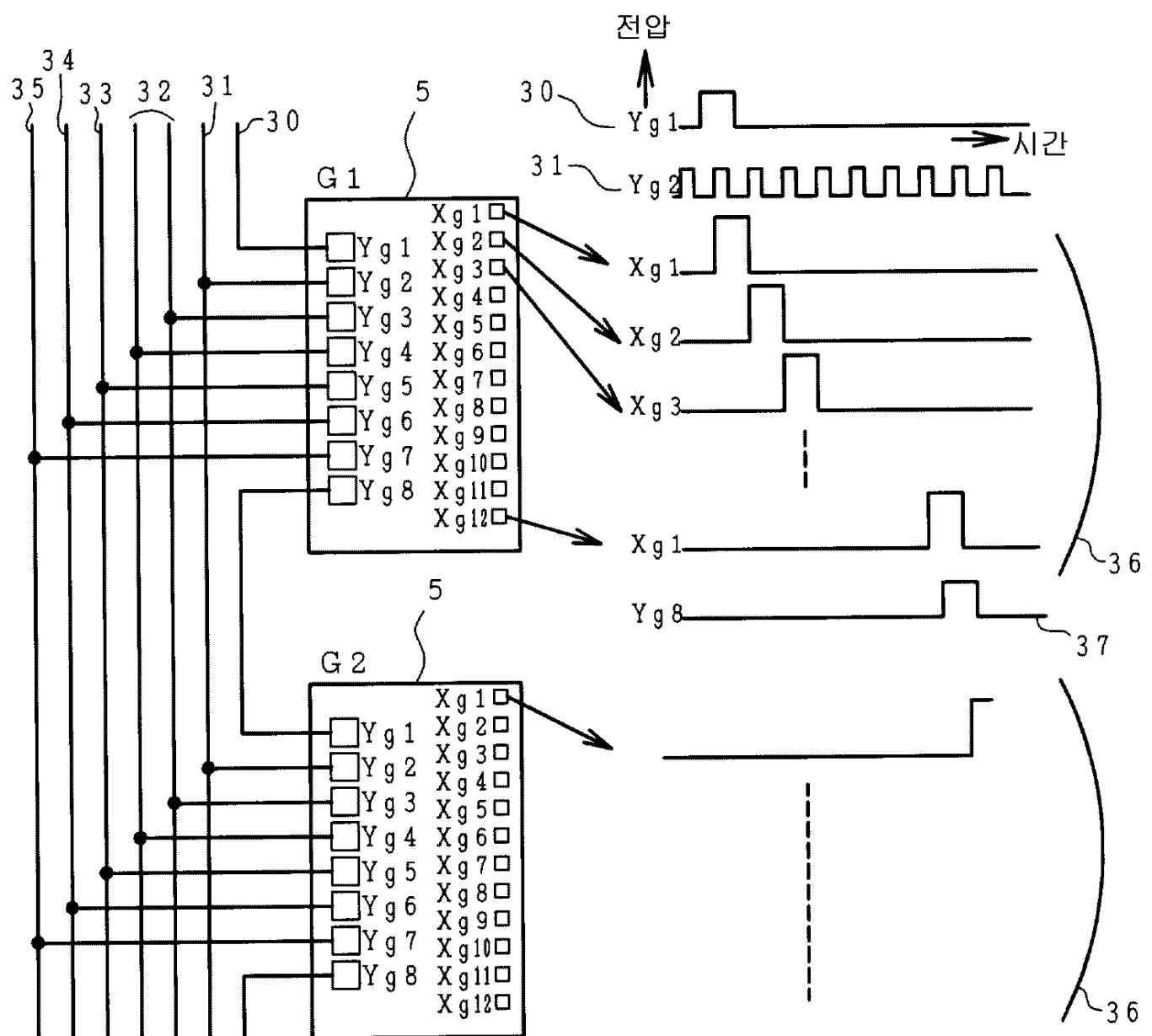
A



B

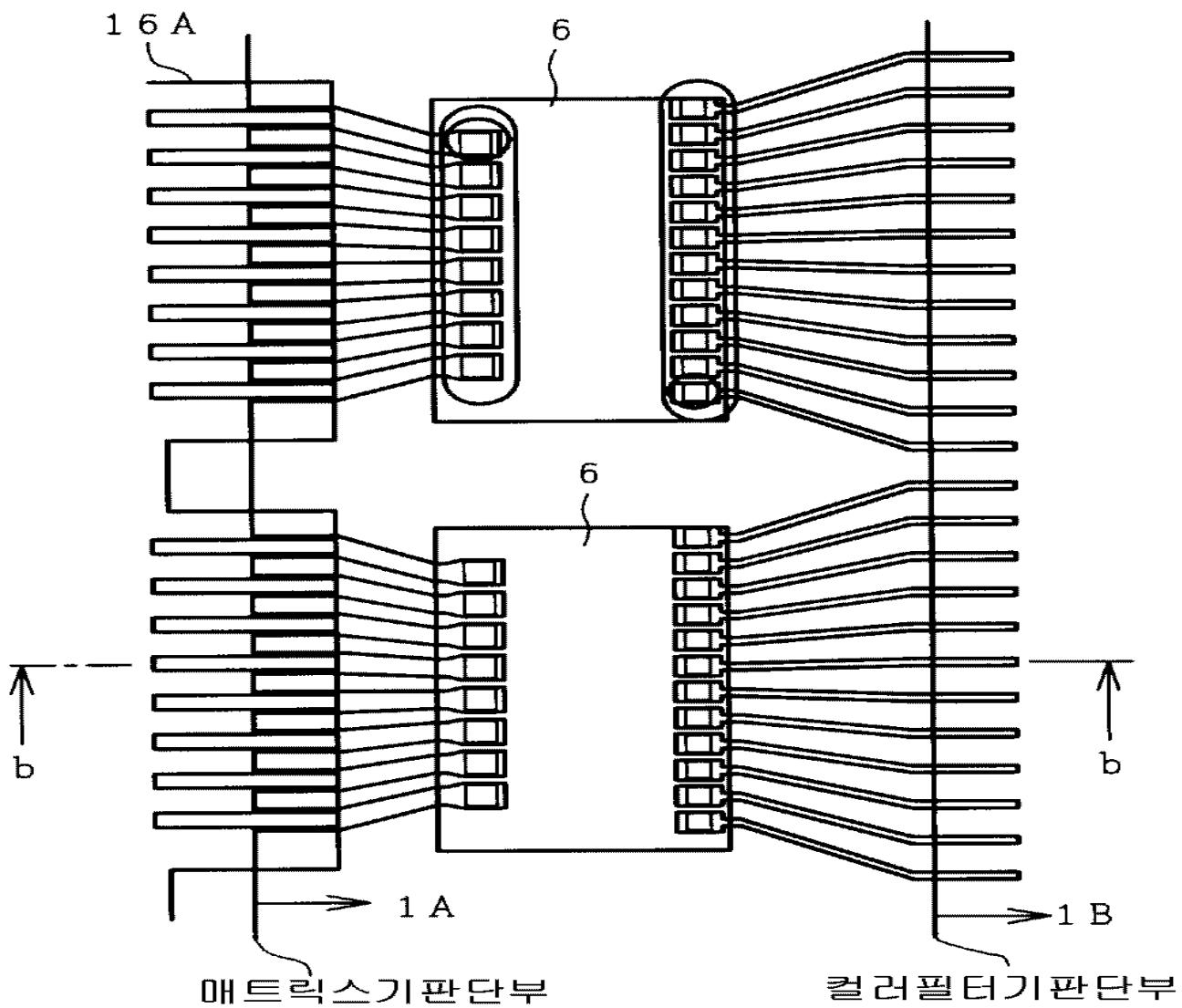


5

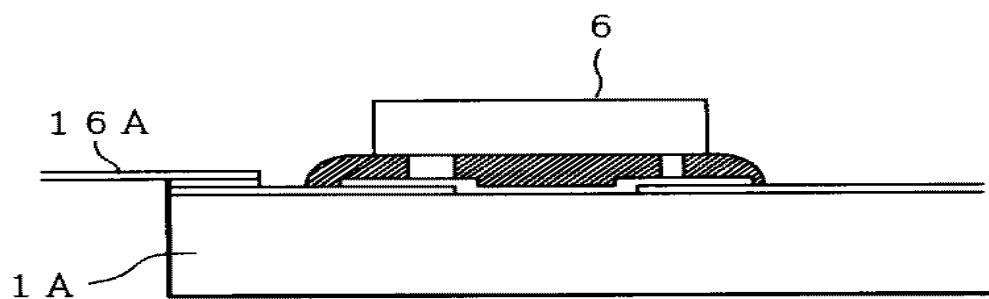


6

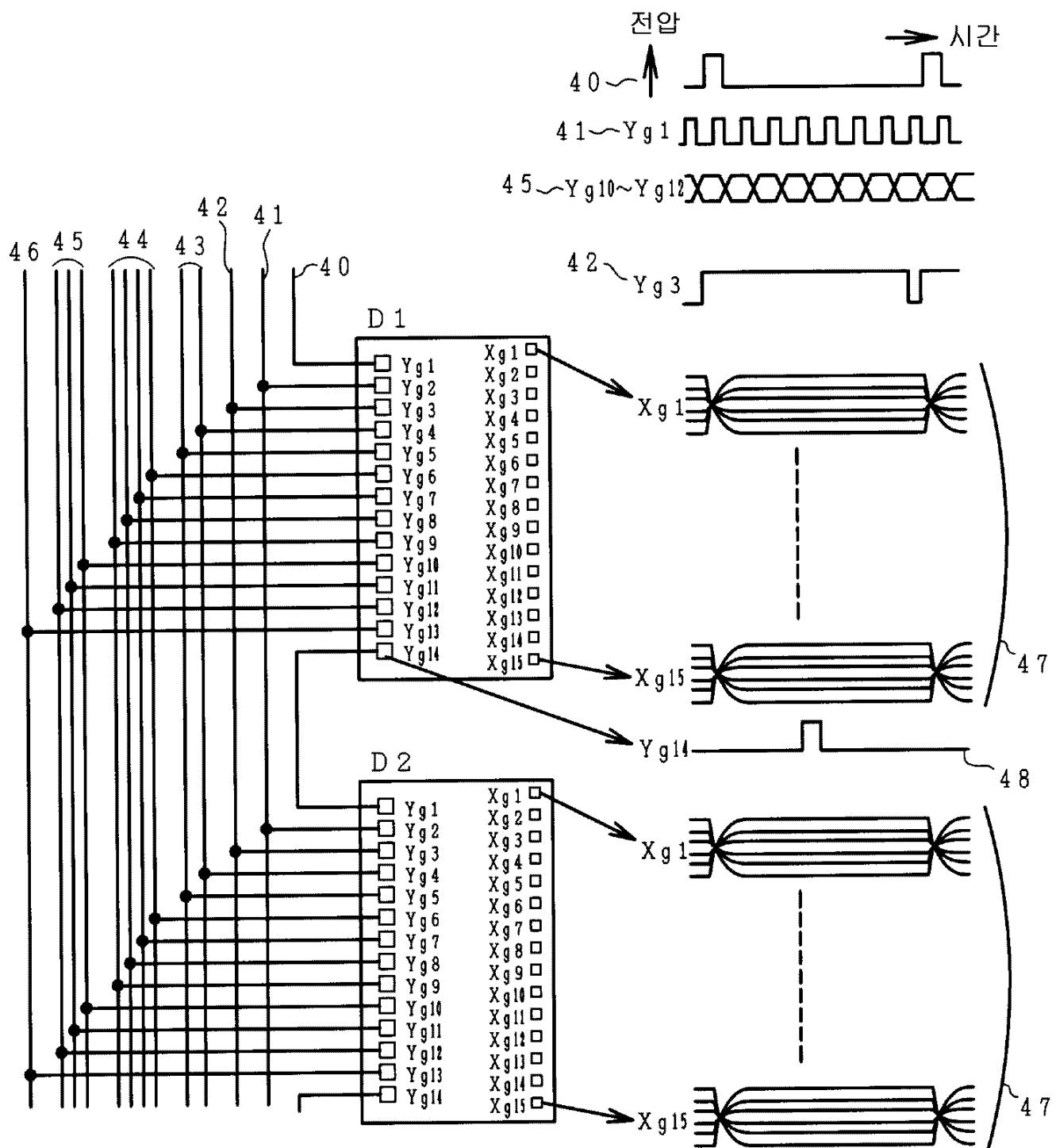
A

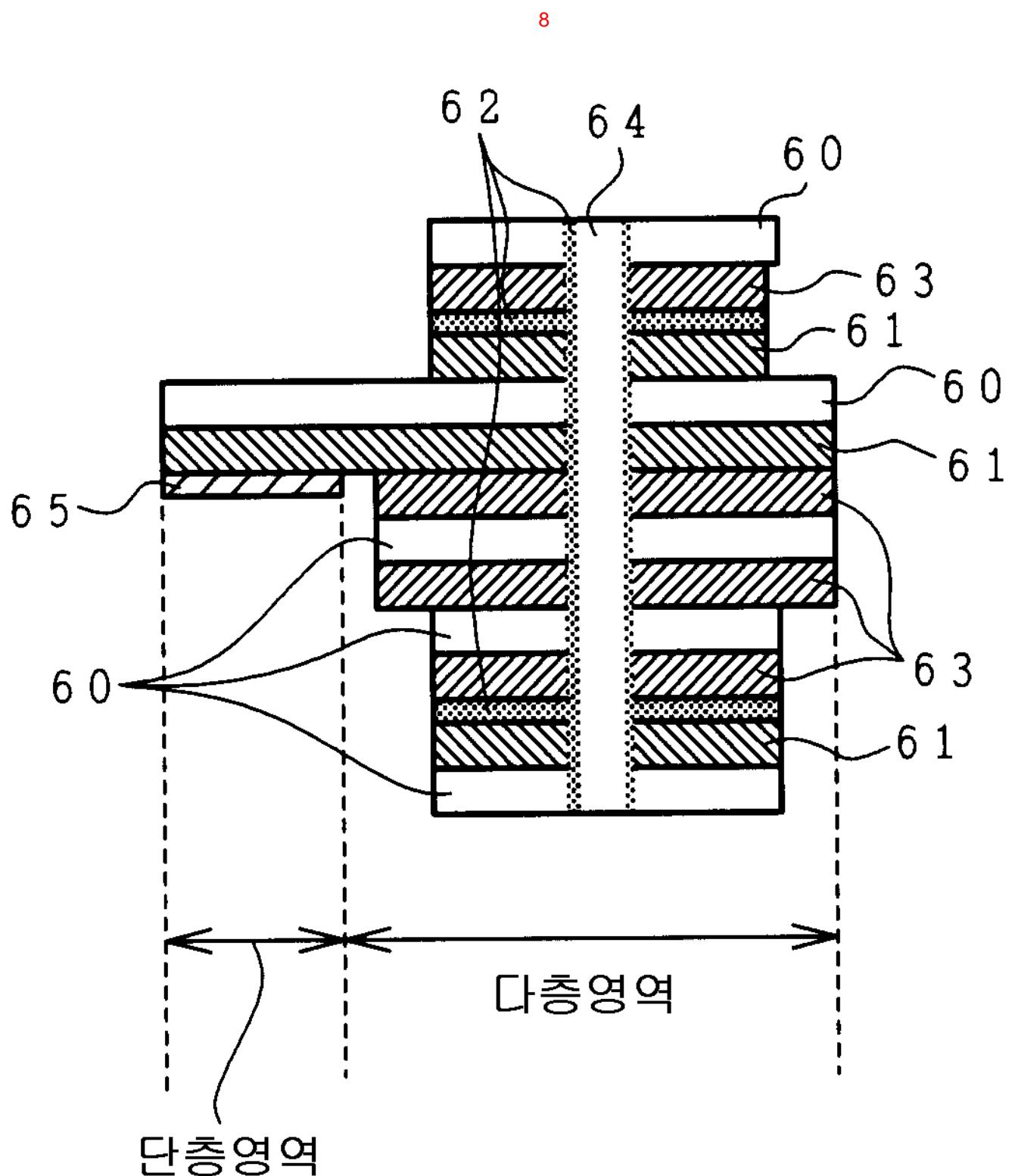


B

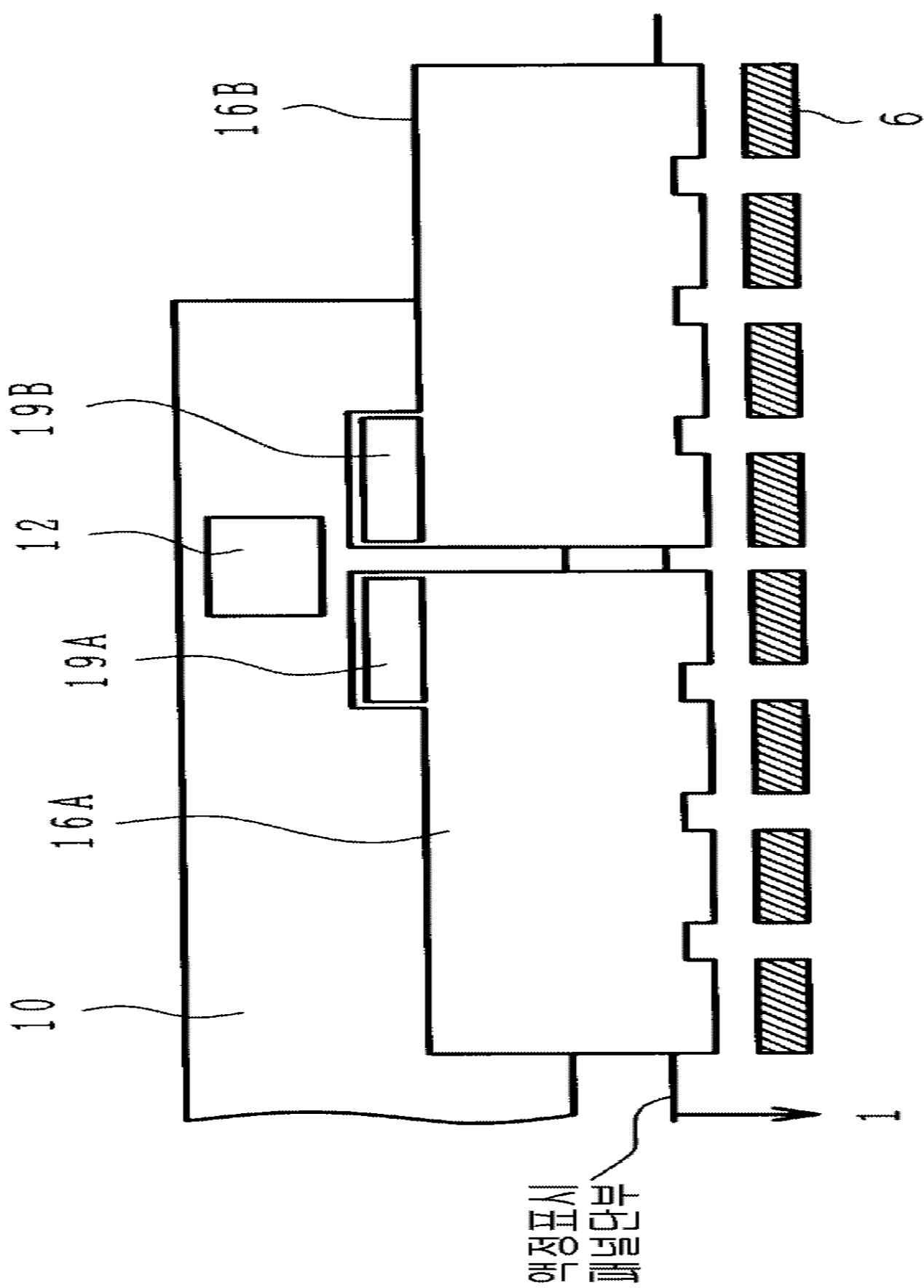


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