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(71) 가 가  
가 4 6  
가 가  
3350

(72) 10930 - 5  
가 460

(74)

:

(54)

ED(8) (1) (8A)가 (4) (4A) (8) (5) (8B) (5) (5) (9) (7) L (5)

1 1

2a 2b 1 , 2a  
2b 2a A - A

3 1

4 2

5a 5c LED LED  
, 5b 5c , 5a LED

6a 6c LED , 6  
a , 6b , 6c

7

8a 8c LED ,  
8a , 8b , 8c

9

10a 10b LED ,  
10a 14 , 10b

11

12a 12b LED ,  
12a , 12b 12a A - A

13

14 13

15

< >

1 :  
2 :  
3 :

4 :

4A :

5, 50 :

6 :

7 :

8 : LED

9 :

가

가

PDA )

(LED)

가

( ,

11

2

(2)가

(3),

(4),

(10)가

(LED)가

8

LED

12a

12b

LED

12a

, 12b

12a

A - A

12a

12b

4

4A

(8)

(6)

1

2

), 6

(

),

8

3

LED

LED

LED

(4) LED(8)

(6)

(6) LED(8) , LED(8) [ (4) (4A)  
] (4) (4A) (d)가 (4) (4A)  
(4A) , LED(8) , (4) (4A)  
, LED(8) 가 (4) 가  
가 .

, (6) LED(8) , LED(8)  
( , )  
, 가 .  
, 11 - 133426 .

, . 13  
LED(8) (4) (4)  
4A] LED(8) (5) [ ( ( (5) ( (4)  
4) , (5) 가 (5) ( ( ( , 가  
( , 가 ) , .

LED(8) , (5) , .  
(4) , LED(8) (8A) (4) (5) (5)  
, (4) , 가 (4A) ,

14 13  
LED(8) (5) (4) (1)  
(1) (4) (4A) (1)  
LED(8)가 (5) , 가  
가 .

LED(8) (8A) (4) (4A) (5) . LED(8)  
(8A) (5) . LED(8)  
(8B) , (8B) (5) LED(8)가 (5)  
, (8) (9) LED(8) (5) (9)  
, (8) (9) ,

LED(8) (5) (4) (1) .  
(5) LED(8) (9) , (5)  
(8A)가 LED(8) (1) (1) 14 가 LED(8)  
(4) (4A)

LED(8) (8A) (4) ( ) (4A) (5) (8A)  
(5) LED(8) (8B) , (8B) (5) (4) (4A)  
(9) (8) (5) LED(8) (8)가  
(9) (5)

가 (5) LED , 2000 - 77724

14 LED 가 ,  
(5) LED(8) (9) , 1  
5 (5) 2 , LED(8) (4)  
(4A) (8A) 가 ,  
가 가 ,  
가 가

(8A) LED(8)가 (5) LED(8) LED(8)  
LED(8) (5) 가 LED(8) (8A)  
(4) (8) (8A)  
가

(9) LED (8)  
(4A) 가 (5) (5) (4)

- (1) , ,  
 , 가
- (2), (1) ,
- (3), (1) (2) ,
- (4), (1) (3) , 가  
(1) (4) , ,가
- (5) , 가 ,  
 , 가
- (6), (5) , 가
- (7), (5) (6) ,
- (8), (5) (7) , 가  
(5) (8) 가가
- (9) , ,  
 가 ,
- (10), (9) , 가  
(9) (10) , ,가
- (11) , 가 ,

가 ,

(12), (11) ,

(13), (11) (12) , 가

(11) (13) ,

가

가

1

1

(4) (4A) LED(8) , LED(8)

(4) (1) (4) (1) [ (1) (1) ]

LED(8) (5) (5) (7) LED(8) (5) 가 (1)

(1) LED(8) (1) , LED(8)

LED(8) (8A) (8A) (4) (4) (4A)

(5) IC , (9) , LED(8) (9)

(8B) (5) [LED(8), (9)] (5)

(1) 가 ,

2a 2b 1 , 2a ,  
2b 2a A - A . 9A (9) . (

9A) , LED (8) (9) (5)  
(8) (8) (8A) (4) (4A)  
, 가 (5) (1)

3 1 .  
(1) 2 (2), (3)가 , (4)가 .  
(4) LED(8) (9) (5)

, (1), (2), (3), (4) (5)  
(6) (1)  
AR) , (4) . (

4 2 . 1  
가 (50) , 1 (5) 가  
(50A) (50) (1)

, LED(8) (50) (50) ( ) 1  
가 (8B) . , (50) LED .  
, LED(8) (9) (50) LED(8)  
LED(8) (8A) (4) (4A)

5a 5c LED  
, 5b 5c , 5a LED  
c (7) LED(8) . , 5b 5

5a (5) (7) , LED(8) (8A)가  
(4) (4A) . , LED(8) (1)  
4) (4) (1) , AR ( )

, 5b (4) 가 (5) LED(8)  
(7) , LED(8) (4) (7)  
, (4) (4A) LED(8) (D1, D2) , 5c (7)  
(4) (4) (4) 가 (4)

6a 6c LED , 6  
 a , 6b , 6c . LED(8) (8A) ( ) (8C)  
 (5) ( ) (8B) (8B) (5)  
 (8A)가 (4) (4A) . ,  
 (8B) , (5)

7 , 6a 6c LED(8) (7) (7)  
 6a LED(8) (8C) (8C) (7A) , 6a 6c L  
 ED(8) (4) (4A) .

8a 8c LED (7)  
 8a , 8B , 8c . LED(8) (4) (4A) ,  
 ( ) (8D) , (5) ( ) (8B) (8  
 B) (5) , (8A)가 (4) (4A)  
 (8B) (5)

9 , 8a 8c LED(8) (7)  
 (7) 8a LED(8) (8D) (7B) , 8a 8c LE  
 D(8) , (4) (4A) .

6a 6c 7 8a 8c 9 LED(8)  
 (5) (7) , LED(8) (4) (4A) LED(8)  
 (1) , (4) 가 . ,

10a 10b LED ,  
 10a , 14 , 10b .

, (5 50) 0.2 mm, LED(8) 1.0 mm, LED(8) (8A)  
 , 0.6 mm, (8A) LED 0.2mm . 10a ,  
 (5)(50) LED(8) , (4) ( )  
 ) , (4) 1.0 mm가 . , LED  
 0.2 mm (4) 0.8 mm가 .

, 10b LED (5)(50)  
 LED(8) (8A) [ (5)(50) ] (5)(50)

가 , (5)(50) (4) (4) 0.6 mm ,  
 LED(8) (4) O.8 mm ,  
 가 , (8A)  
 (5)(50) (7) LED(8)

(8) (4) ( ) (4A)  
 (8)

(4) 가 (1)

(57)

1.

, , , 가

2.

1 ,

3.

1 2 ,

4.

1 2 , 가

5.

, 가 ,

가

6.

5 , 가

7.

5 6 ,

8.

5 6 , 가

9.

, ,

가 ,

10.

9 , 가

11.

, 가 ,

가

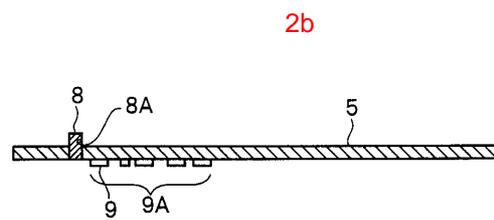
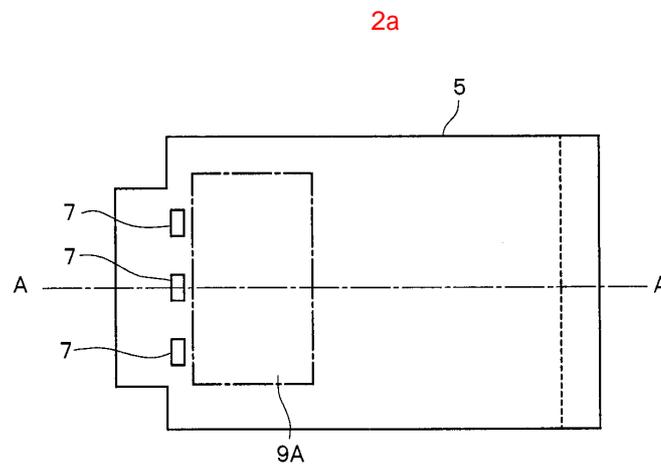
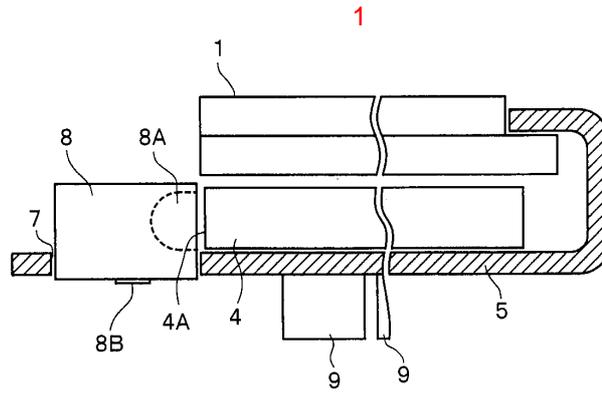
가 ,

12.

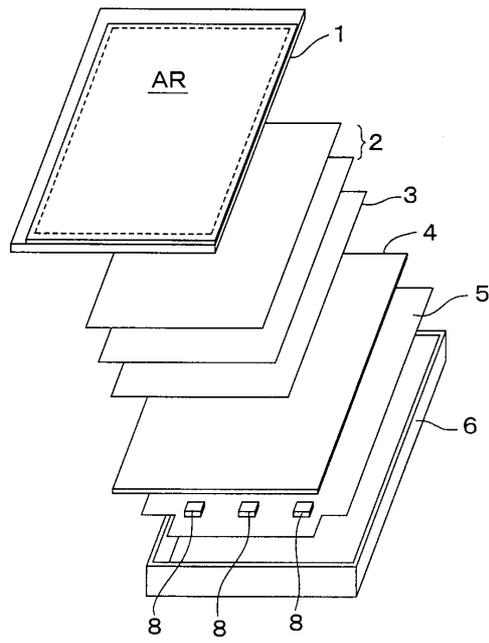
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13.

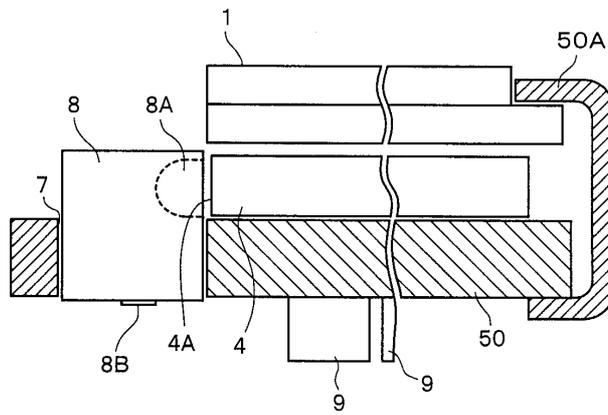
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3

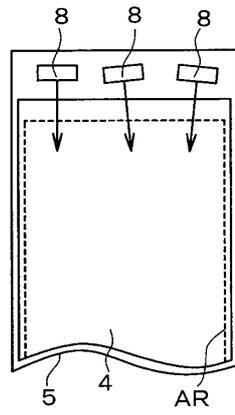


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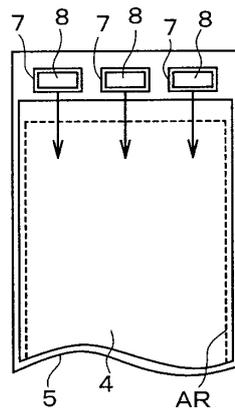


5a

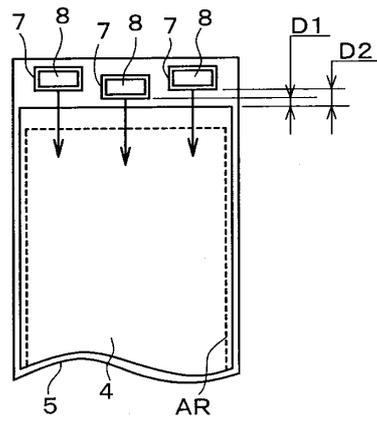
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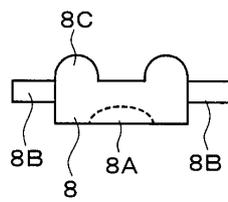
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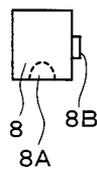
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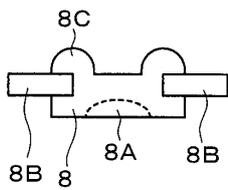
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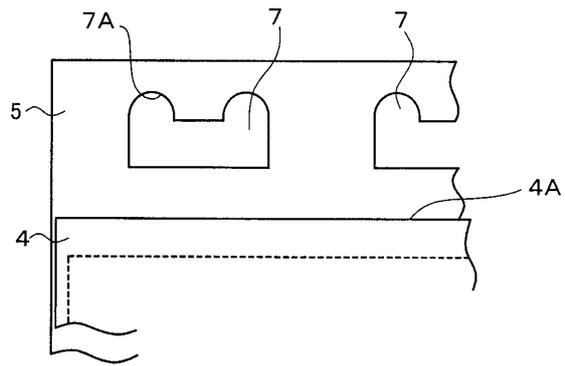
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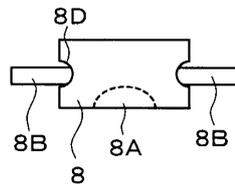
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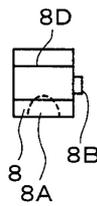
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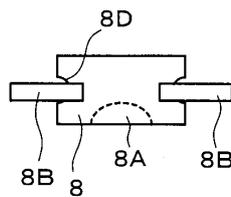
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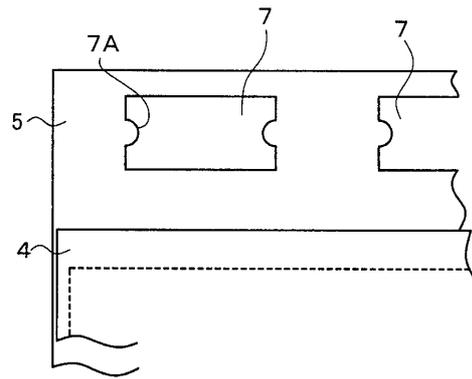
8b



8c

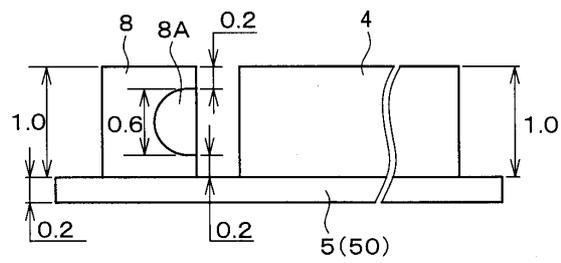


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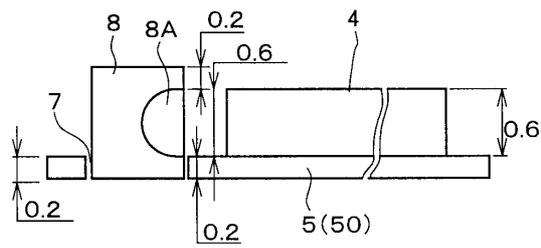


10a

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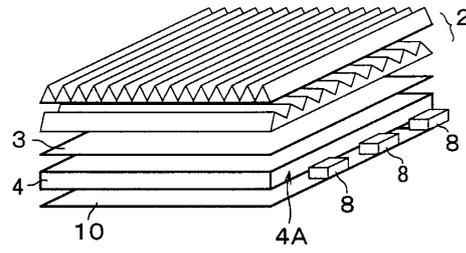


10b



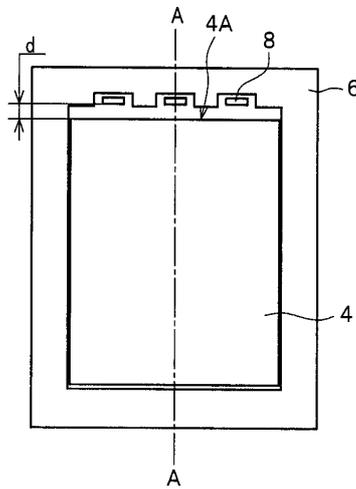
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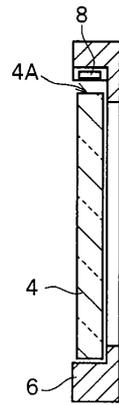
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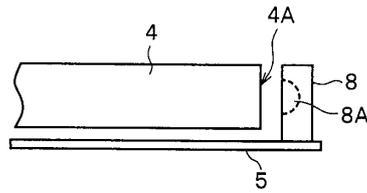
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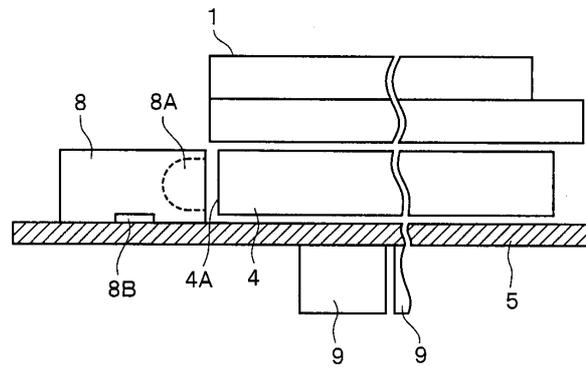
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(종래 기술)



14

(종래 기술)



15

(종래 기술)

