

(19)  
(12)

(KR)  
(B1)

(51) 。 Int. Cl. <sup>6</sup>  
H01L 21/00

(45)  
(11)  
(24)

2002 03 20  
10 - 0317756  
2001 12 04

(21)  
(22)

10 - 1993 - 0024606  
1993 11 18

(65)  
(43)

1994 - 0012484  
1994 06 23

(30)

07/945,185

1992 11 19

(US)

(73)

.

75265

13500

(72)

.

75082

2563

(74)

:

(54)

가

(10)

(12)

(11)

(11)

(12)

(12)가  
(12)

1

1a .

1b A - A 1a .

1c 1b .

2a 2e

3

4a

4b

5

6

[ ]

10, 50 :

12 :

15 :

16, 22, 42, 46 :

18 ;

29 :

31 :

32, 33 :

41 :

45 :

(ball) (passive) ,

, ( 가 )

3

1 5 20 mil ,

2

3

3

가

가

가

가

(heat sink)

1a

(11)

(10)

(12)

가

9

n 1

n x n

1b

1a

A - A

(10)

(15)

(12)

(15)

(16)

(10)

1c

2a

2e

(21)

(10)

(11)

2a

(21)

2b

(23)

(22)

(22)

(13)

( 2c ).

2b

(18)

가 (16 17) (16) / 2e

3 (30) (31)  
 (29) (32) (33)  
 ( ( ) (30) (32) (33)  
 (33) (34) (34a) (35)  
 (38) (36) 3

4a (40) (41)  
 (40) (42) 가 가  
 , 가 가 , 2e

4b (45) 1a  
 (46)가

가 , 5  
 (50) (52) (52)  
 (53) (50) (51) (50)  
 (50)  
 가 (50) (50)

6

가 ,

(57)

1.

(contact) ,

$n \times n$  가 -  $n - 1$  ,  $n \times n$

-,

,

.

2.

1 , 가

.

3.

2 , 가 가 .

4.

2 , 가 .

5.

,

$n \times n$  , 가 가 -  $n - 1$  ,

,

.

6.

5 , 가 가

.

7.

6 , 가 가 .

8.

6 , 가 .

9.

,

$n \times n$  -  $n - 1$  - ,

$n \times n$  ,

$n \times n$

.

10.

9 , 가 .

11.

9 , 가 .

12.

11 , 가 가 .

13.

11 , 가 .

14.

9 ,  
가 .

15.

,

$n \times n$  -  $n - 1$  - ,

,

$n \times n$

,

$n \times n$

.

16.

15 , 가 가 .

17.

16 , 가 가 .

18.

16 , 가 .

19.

,

$n \times n$  ,

,

$n \times n$  ,

가 가

,

$n \times n$

.

20.

$n \times n$  , (vacuum pick - up tip),

,  $n \times n$  - 가 -

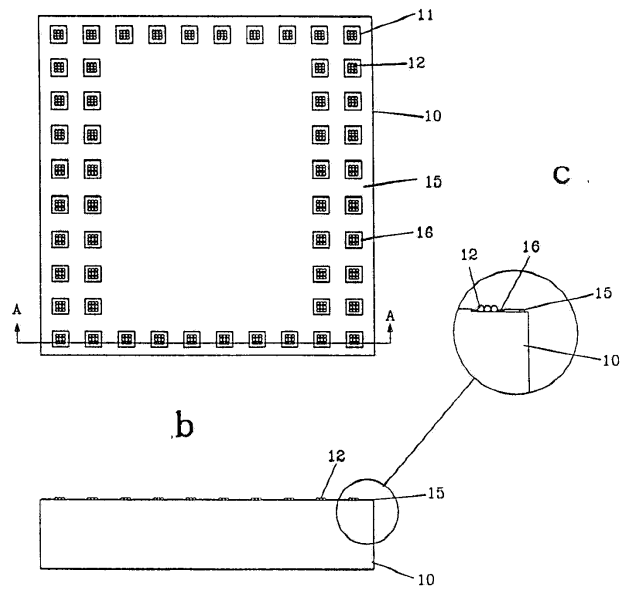
.

21.

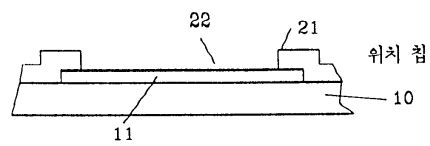
20 ,  $n \times m$  ( ,  $n \times m$  1 ) .

1

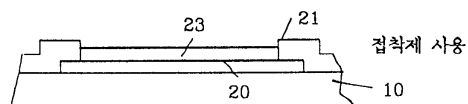
a



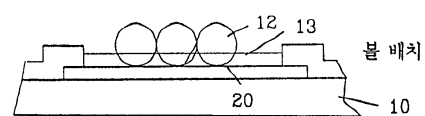
2a



2b

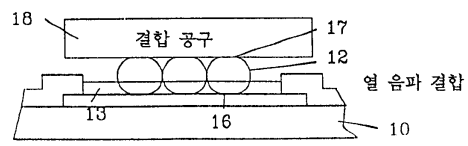


2c

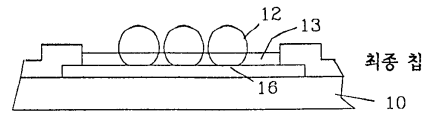




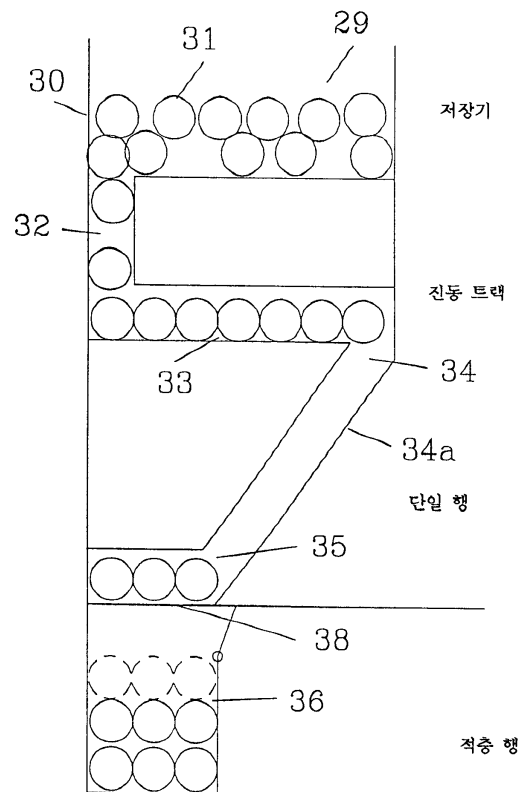
2d



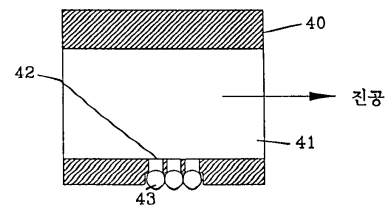
2e



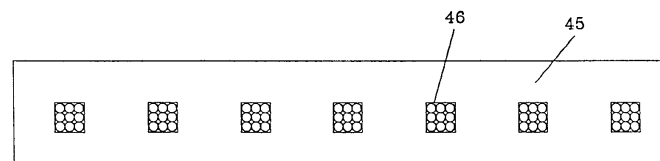
3



4a



4b



5

