

(19) (KR)
(12) (Y1)

(51) 。 Int. Cl. ⁶ (45) 2001 10 25
H05K 3/32 (11) 20 - 0235764
(24) 2001 06 14

(21) 20 - 1998 - 0019575 (65) 2000 - 0008006
(22) 1998 10 13 (43) 2000 05 06

(73) 45 - 1 512 - 2102

623 - 16

(72) 2 727

4 833 - 6

(74)
:

(54)

(flux) BGA (solder ball)
(定置)
가 (10) (15) (14) ,
(3) (11)가 (16) , (12) ,

1

2

3

4

5 1 가

6

* *

1 2

3

10, 20, 30, 50

12, 22, 32

14, 24, 34

16, 26, 36

100 110

120

BGA

(template)
(solder ball)

(flux)
(定置)

가 가

'BGA')
(solder ball)

가
, BGA

(pin)

(ball grid array;

가

0.3mm

가

183 Pb - 63Sn
가

BGA

(2) 5mm 4 8 (template) (50) BGA (3) (54) (55) (3) 48 (50) 가 6 7mm, (1)

(shot) 가 (missing) (reflow) 가

BGA
가

가

가

BGA

가

가

가

nt and loading plate) (14), 1a (shutter plate) (16) (10) (12), (alignme

1 A - A' 1b (12) (11)가 BGA 가

(14)

(15)
(14)

(3)
(1)

(16)

(14)

(15)

(1a) (1)

(12)

(15) 가

1c , 가
(14)

(pad)

2
23)

(20)
(24)

(26) . 2

(24) 가 (

3
가 (33)
2 3
1
가

(30)
(34)
(26)(36)
가 가

(36) 3

(34) 2
가 (23)(33)

4

(27),
(27)
(26)

4
(26) , 4
(26)

2 (26)
(24) 가 (23)
(28)가 가

(3) (1) 가

가

5

(100) 가
(5) ()
(10)

(3) (1) (110) (10)
(120)

가 (3)

BGA

(57)

1.

(24)(34)	(15)(25)(35) 가	(15)(25)(35) (15)(25)(35)	(14)(24)(34) ,	(14)(24)(34) (16)(26)(36) , (3)	(14) (11)가
	(12)(22)(32)				

2.

1	(15)(25)(35) (14)(24)(34)	(11) 가	(11)
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3.

1 3)가	(24)(34)	(26)(36)	가 (23)(3
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4.

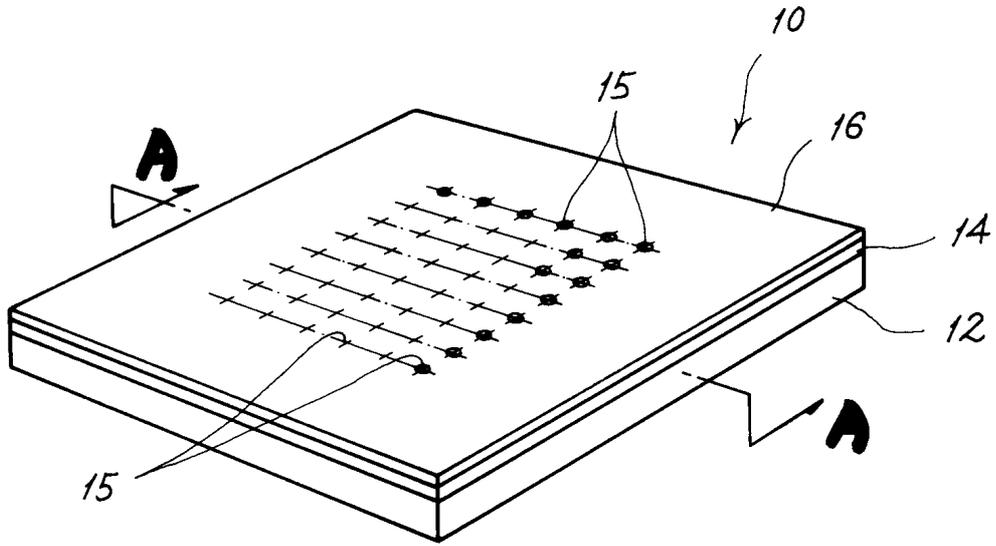
1	(16)(26)(36)	(14)(24)(34)	(12)(22)(32)
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5.

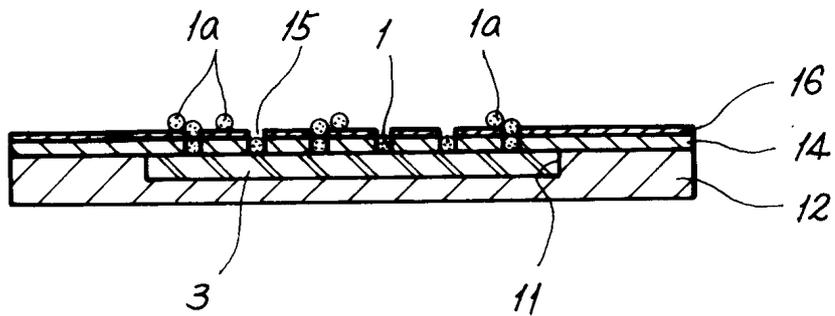
1	(16)(26)(36) 가 (120)	(14)(24)(34)	(12)(22)(32)
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1

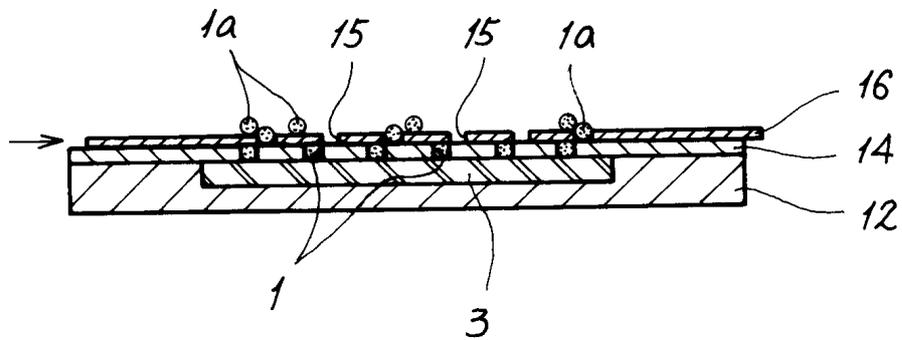
(a)



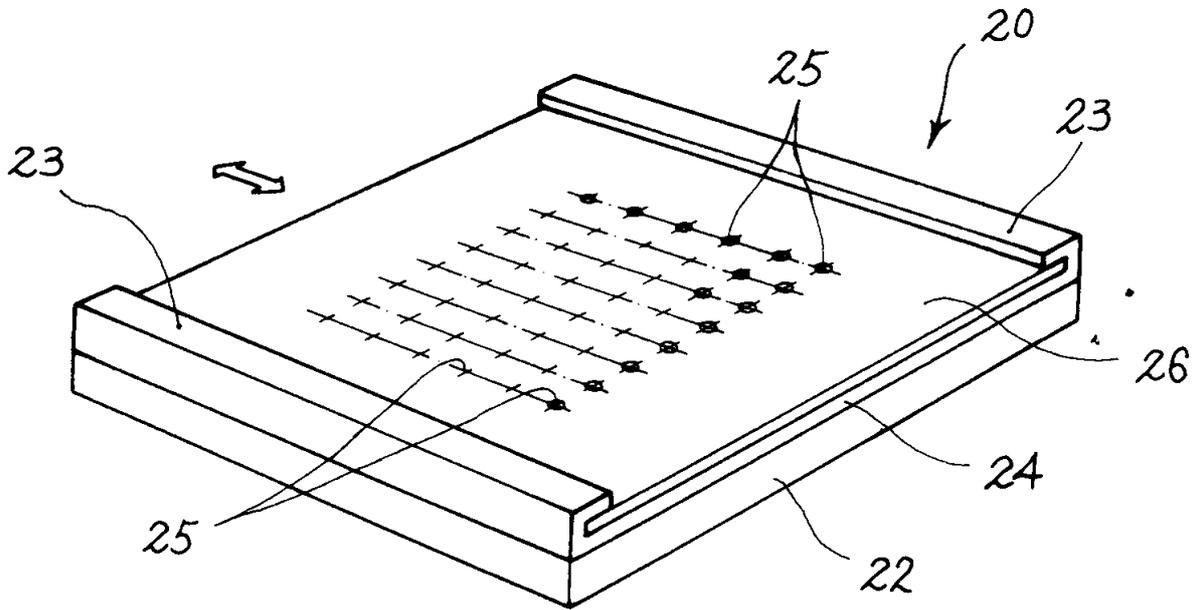
(b)



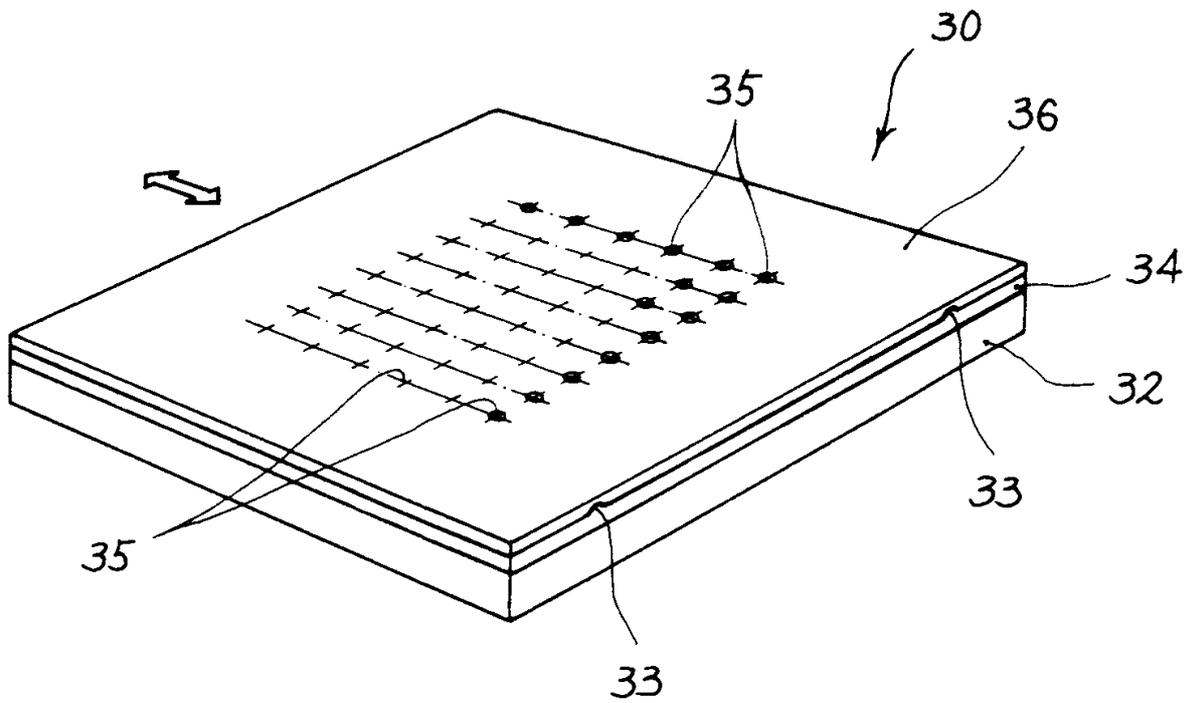
(c)



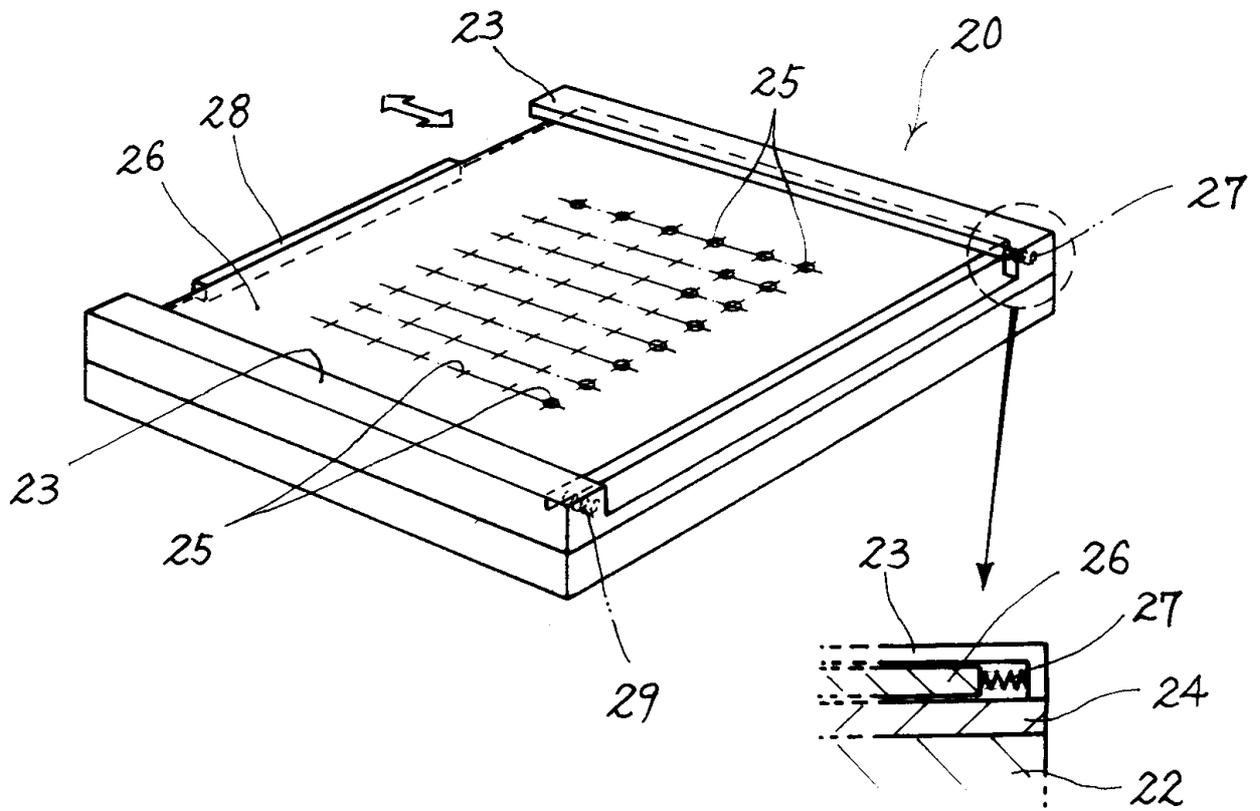
2



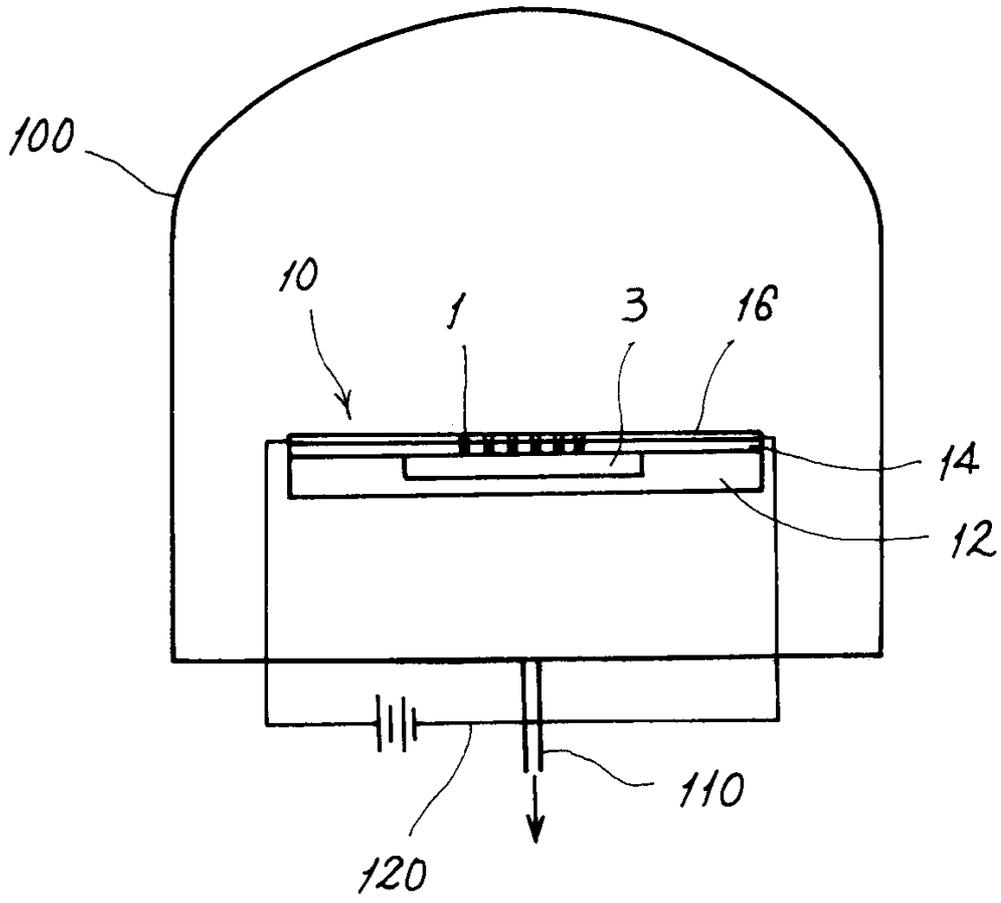
3



4

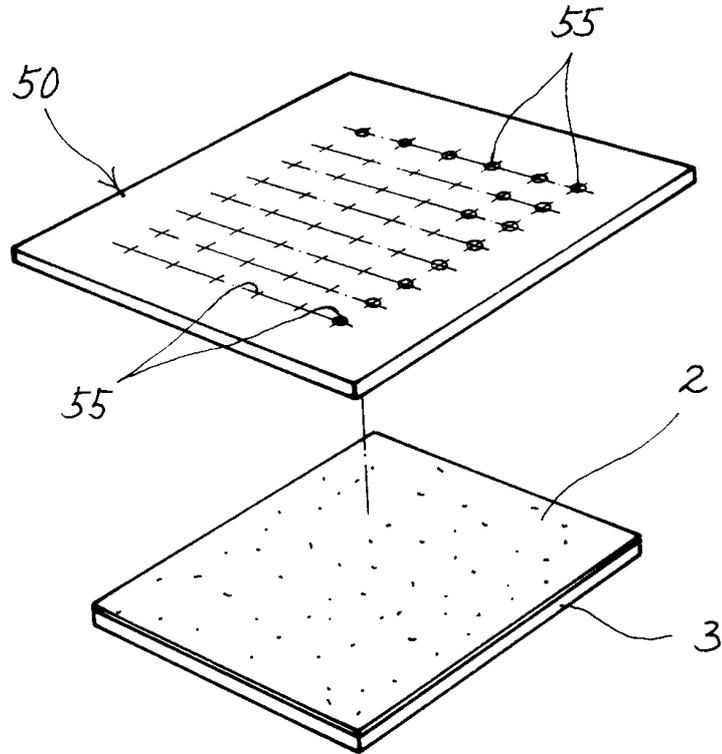


5



6

(a)



(b)

