

(19) (KR)
 (12) (A)

(51) 。 Int. Cl. ⁷
 G03F 7/20 (11) 2001 - 0089158
 (43) 2001 09 29

(21) 10 - 2001 - 0005929
 (22) 2001 02 07

(30) 00200432.3 2000 02 10 EP(EP)
 00304336.1 2000 05 23 EP(EP)

(71) . .
 5503 1110

(72) - 5951 186
 - 5628 18
 - 81369 4
 - 5591 39

(74)

:

(54)

;

1 ;

2 ;

,

, 1 2

, ,

2

1 1

2 2 가

3 1

4 2

5 3

6 4

7 2 가

8a 8b

9a 9b

, ,

, ,

, ,

, ,

가 ; " " 가

()

, () (

) 가

1 가

, ()

5,296,891 5,523,193

1 가 LCD

5,229,872

가 , 가

5,969,441 1998 2 27 09/180,011(WO98/40791)

· , (IC) . , () ()
(1) .
· , (wafer stepper)
· - - (step - and - scan apparatus)
(" ")
(magnification factor:M) ($M < 1$) 가 ()
M 가 .
6,046,7

92

, () -)가

1

가

350 W

0.5 W

1

1

1

가

가

가

가 Al_2O_3 AlN (); (); (); ();

가 가

가

가

가

가

가

()

(priming),

,

,

()

가

가

11

Microchip Fabrication: A Practical Guide to Semiconductor Processing (3rd ed., Peter van Zant, McGraw Hill, 1997, ISBN 0-07-067250-4)"

, (PB) (MT) (W) (C) (PB) (MA) (PB) (MA)
 (IF) 2 , (PB) (PL) (C) (MA)
 (WTa, WTb) (MA)
 1 (PB) (MA)
 , 1 (long stroke module) ()
 (short stroke module) () (MT, WT) (MA)

가 (WT) (MT) (C) (PB) 가 (C)

$$2, \quad , \quad - \quad (100) \quad . \quad (3), \quad (1)$$

$$(2a, 2b) \quad (4) \quad . \quad (1)$$

$$,$$

$$\uparrow$$

(2a)

가

(3a)

(2b)

(1)

1

-

2

(2b)

(1)

,

2

(3b)

(3b)

2

(2b)

1

(3)

1

(2a)

(3)

1

(3a)

2

(3b)

1

(2a)

1

(3a)

,

가

(2b)

2

(3b)

1

(2a)

1

(3a)

)

2

(

, 가 (3) . . . , (4)

$$g \quad , \quad (4)$$

$$(6)$$

가 7 (41, 43) (4)
 1) (40) (42) (43)
 (42) (44) (44)
 (40, 42, 44) (10) (10) (4)
 5) (5) (6)

(100)

2

4 mm 가

1.5 mm

3
(10) 가

1

(4)
(9)

(3

(9a)

, 9a
(9a)

9b

(

).

,

(9b)

(10)

(9b)

(4)

(9)

가

(9a)

(4)

가

가

(4)

(100)

(4) Al₂O₃ AlN3
(13) (10)

(11)

(12)

(4)

(

가

가

가

2

(15)
(10a) 가

(4)

2

가 4

(14)

(10b)

, 가

(14)

(15)

(10a)
(10a) 가

가

(10a, 10b)

(14, 15)

,

(14)

(15)

(16)

,

(10a, 10b)

(14)

(10b)

(15)

,

4

(14)

(15)

,

가

3

5 3 (4) 2 . . ,
(17) (18) (10a 10b) (10) (19)
(가) () (가)

4

(3) 4 가 6 . , 3 (20), (22), (21))
 (25) 가 (21) .
 가 3 (23)

3 4 가 . , 가 4
3 가 . .

$$\begin{array}{ccccccc}
 9a & 9b & & (60, 61) & (55, 57) & (56, 58) & \\
 & & (54) & & (59) & . & \\
 9a & 9b & & & (56) & & (58)
 \end{array}$$

가

(57)

1.

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, 가

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1 6 ,

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1 7 ,

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1 8 ,

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1 9 ,

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11 ,

Al₂O₃ AlN

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11 12 ,

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11 13 ,

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14 15 ,

17.

14 15 ,

가 ,

18.

; ;

; ;

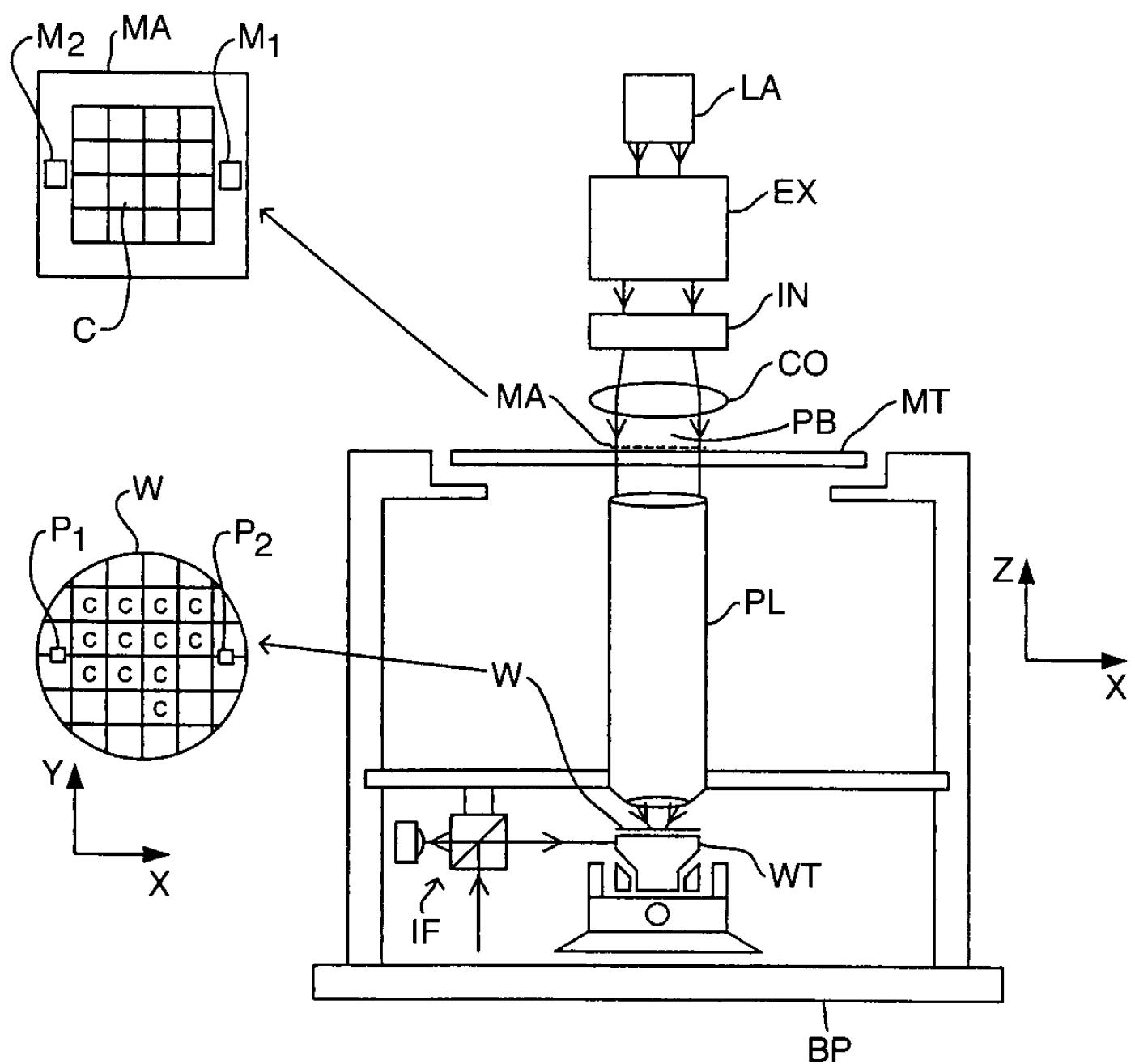
가, 가 ,

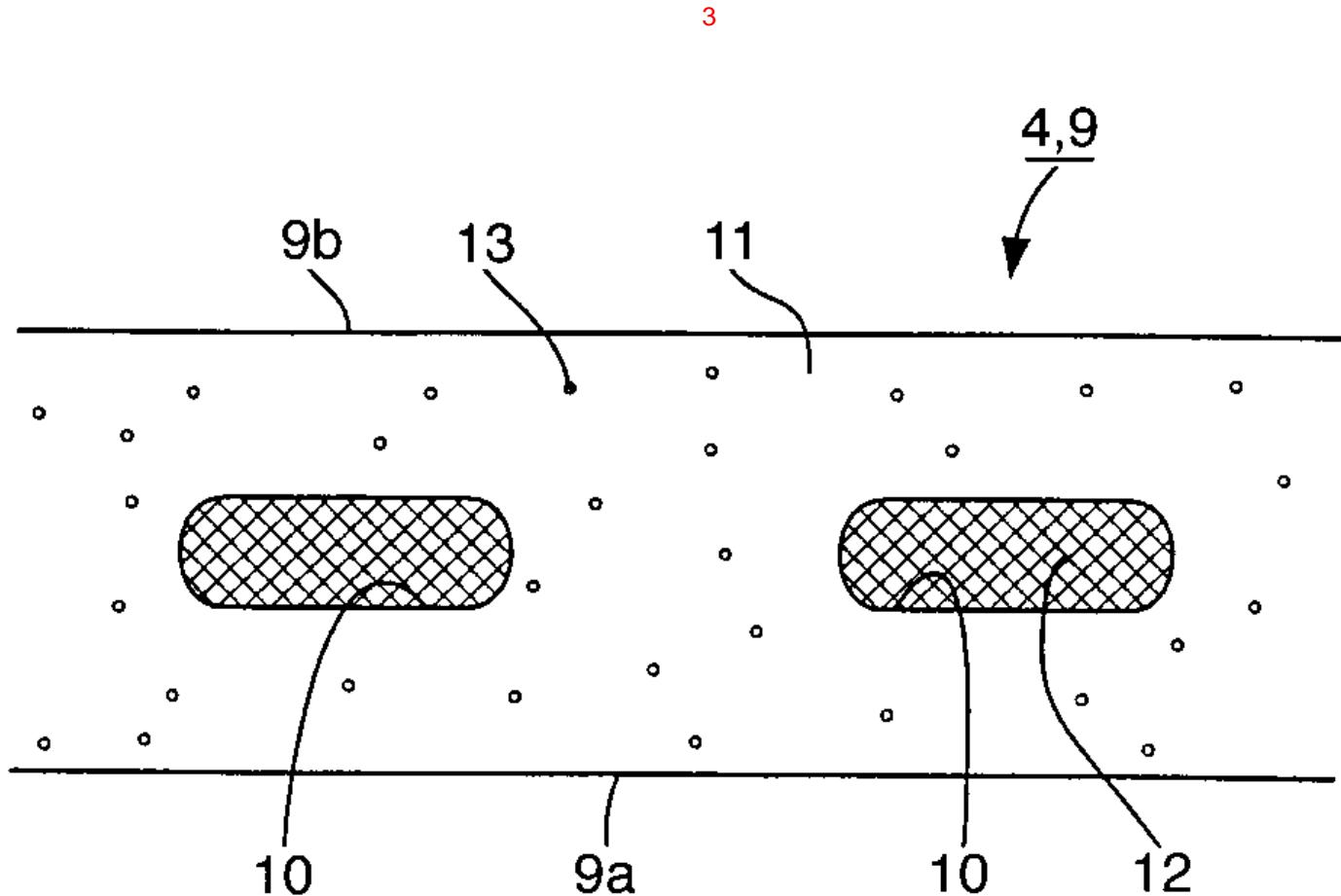
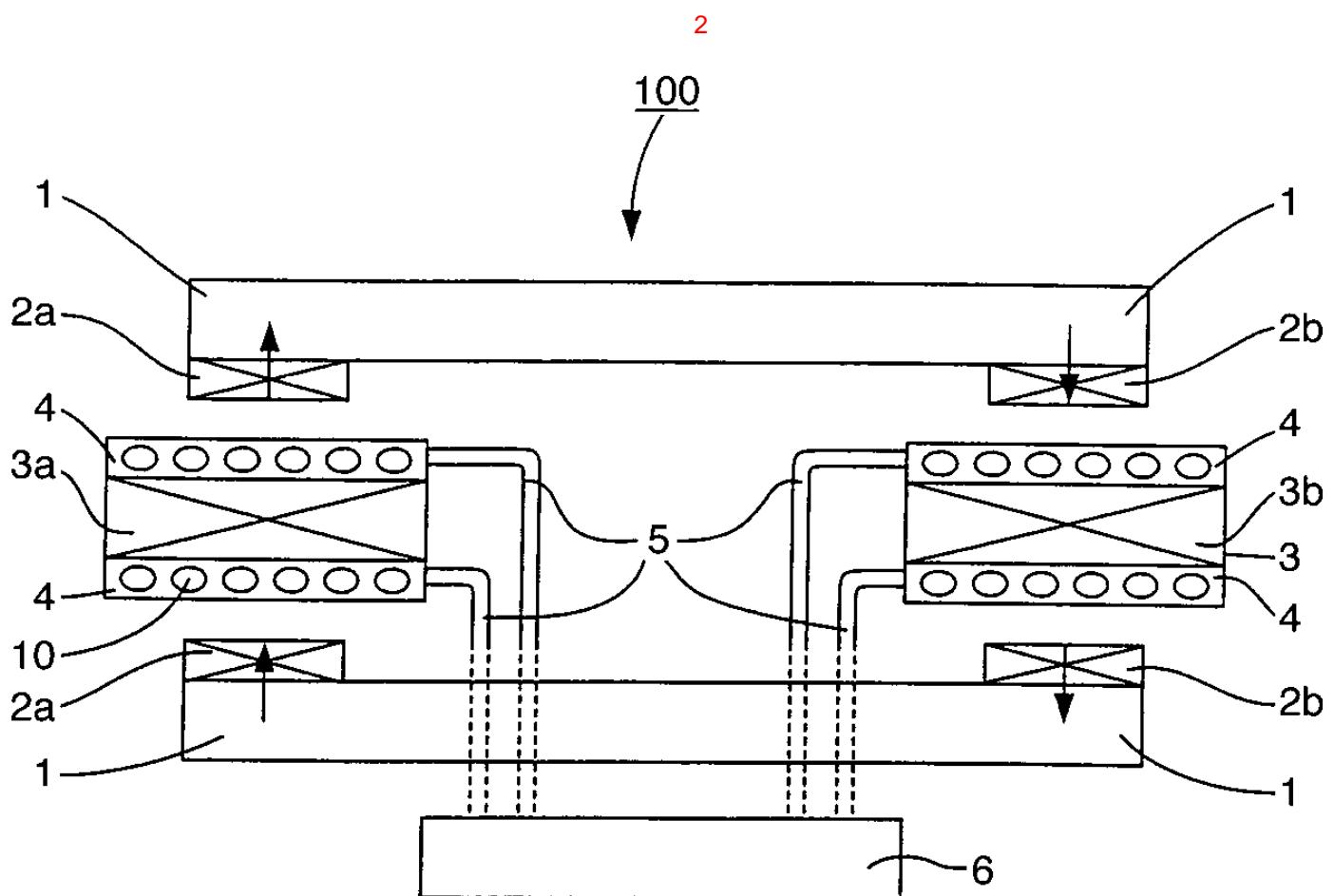
,

19.

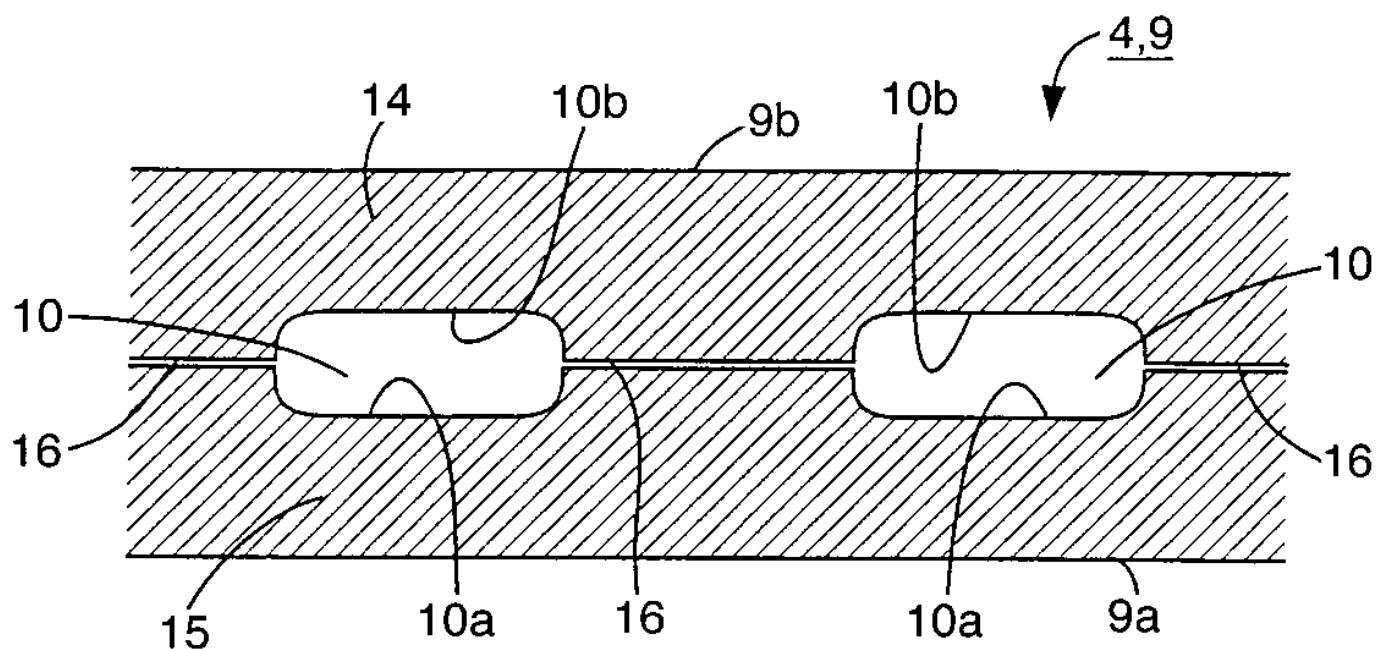
18

1

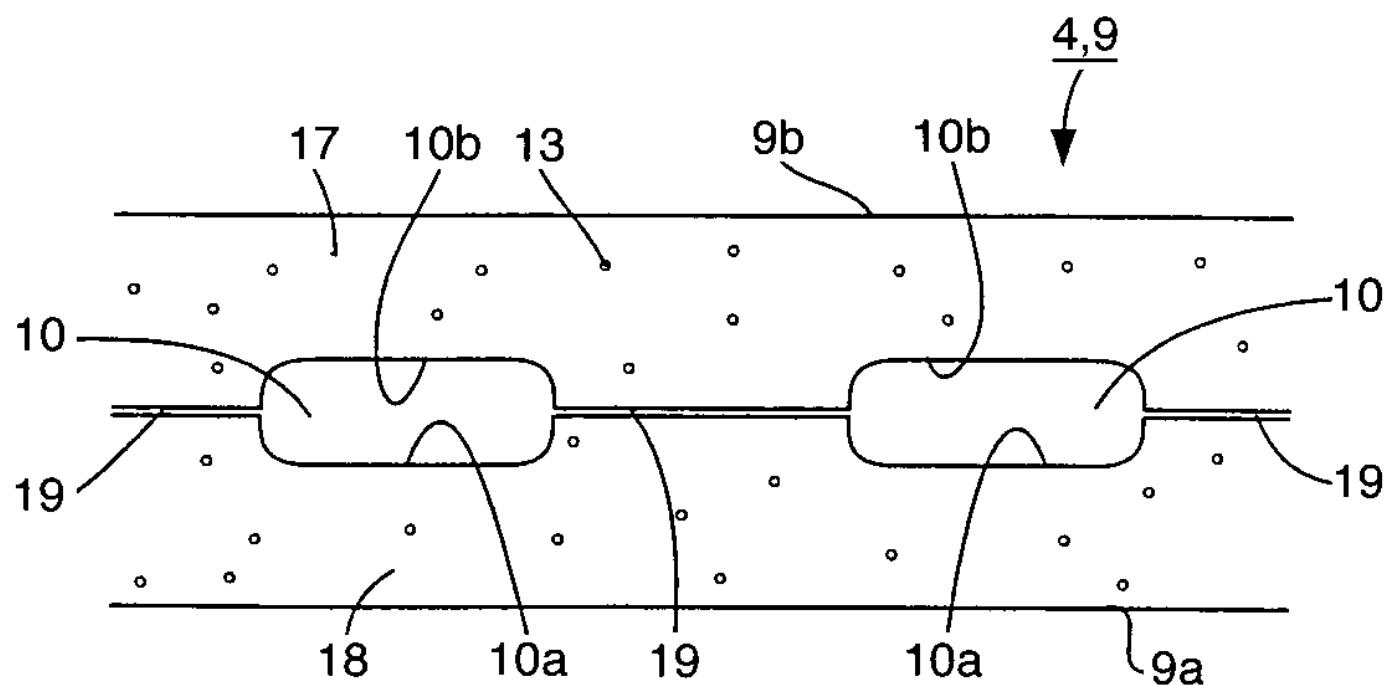




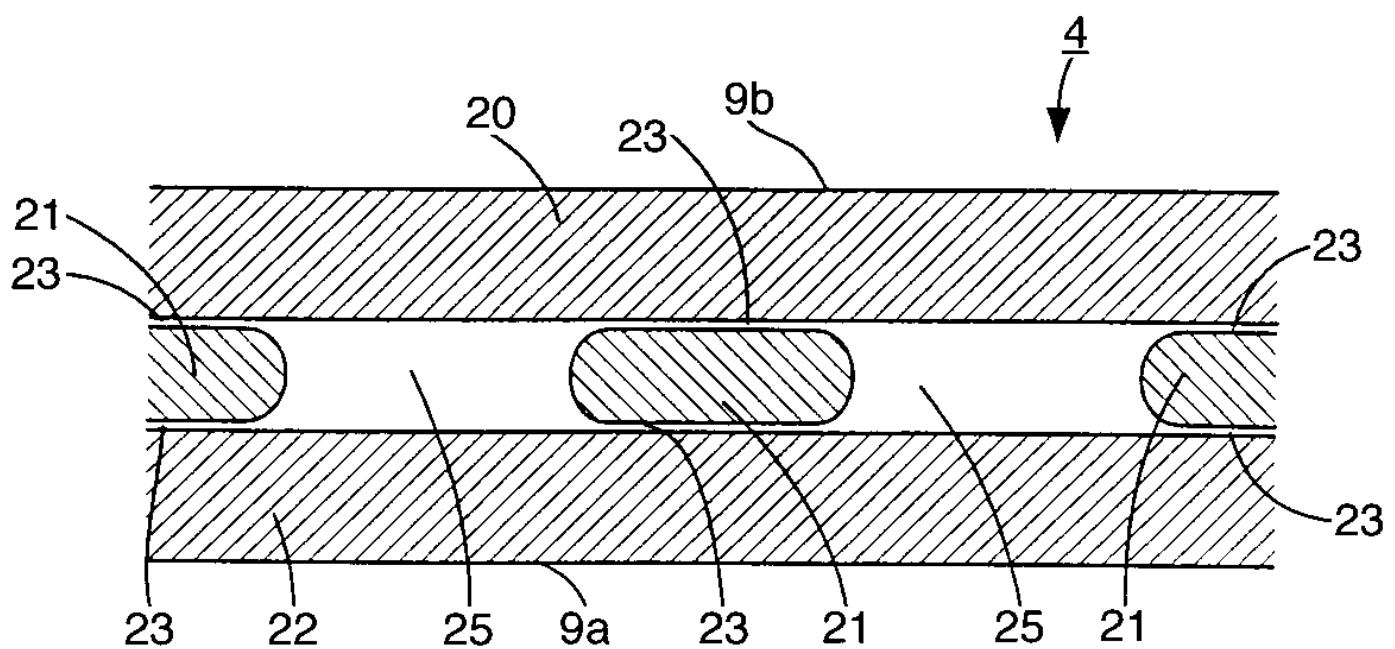
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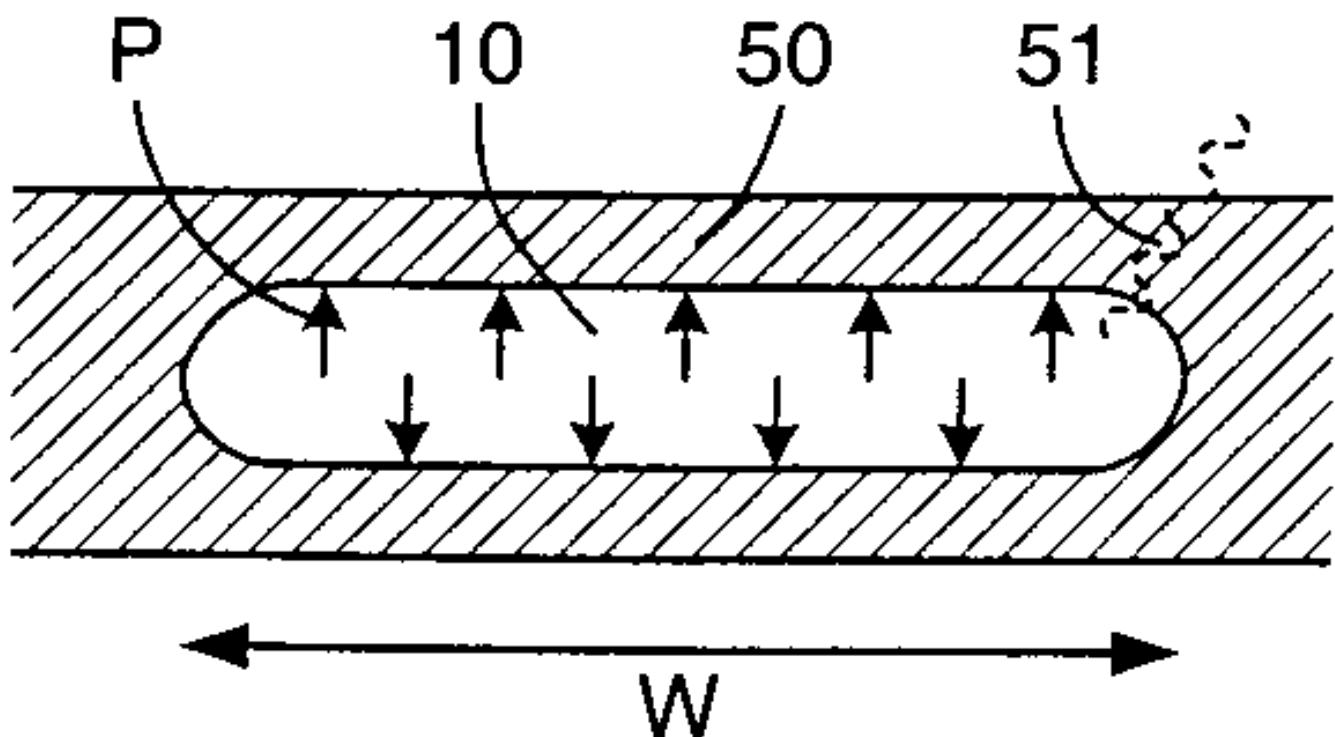
337

338

339

340

8a



8b

