

(19)
(12)

(KR)
(A)

(51) 。 Int. Cl. ⁷
G02F 1/136

(11)
(43)

2001 - 0069132
2001 07 23

(21) 10 - 2000 - 0001403
(22) 2000 01 12

(71) .
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20

(72) 3 108 - 1210
107 - 1702

(74)
:

(54)

, 1 1 2 , 1 2 ,
, 2 , ,
2 가 , , 1
2 .

9c

1	.
2a 2b	1 .
3a, 3b, 3c, 3d, 3e, 3f	2a I - I' .
4a 4b	2 .
5a, 5b, 5c, 5d, 5e, 5f	3a II - II' .
6a 6b	3 .
7a, 7b, 7c, 7d, 7e, 7f	6a III - III' .
8a 8b	4 .
9a, 9b, 9c, 9d, 9e, 9f	8a IV - IV' .
10a 10b	.
*	*
1 :	3 :
5 :	7 :
9 :	11 :
13 :	15 :
17 :	21 :
23 :	25 :
27 :	29 :
31 : 1	33 : 2
35 :	37 :
39 :	43 :
51 :	()53 :

(multi - domain liquid crystal display device)

가

1

(Ohmic contact layer)

2 / 1

(Thin Film Transistor ; TFT)

(13)

(37)

(37)

(21)

(25) 2 / 1

(25) 2

(23) /

(23)

(17) /

(13)

(21)

(17)

(27)

가
가

가

(17)

(27)

(17)

가

(director)가

(texture)가

가

(27)

(13)

(21)

가

가 가

가 가

1999 - 05587

1 2

1

1 2

2 가 1

2 가

2a 2b 1 3a, 3b, 3c, 3d, 3e, 3f
 2a I - I' 4a 4b 2
 5a, 5b, 5c, 5d, 5e, 5f 3a II - II'

7b, 7c, 7d, 7e, 7f 6a 6b 3 7a,
 6a III - III' 8a 8b
 9a, 9b, 9c, 9d, 9e, 9f 8a IV - IV'

3) (11), (35), (5), (31) 2 (33) 1
 1 (3) (1) ,
 (15) , 1
 / (7, 9)
 (9) (1)

15) (13) (51) (

on) .(4, 5, 8, 9) (disclinati

(25) 2 (33) (1), (3),
 (25) (23) , (17) ,
 , 1 2 .

(17) (53) 가 (53) .
 가 , .(3c,
 3d, 5c, 5d, 7c, 7d, 9c, 9d)

(single point) (53) (53)

(35), (5), / (7, 9) (1) (3) (11),
 (11), (1) Al, Mo, Cr, Ta Al (sputtering)
 (patterning) (15)
 (35) SiN_x SiO_x PECVD(Plasma Enhancement Chemical Vapor Deposition)
 (5) a - Si n + a - Si PECVD
 SiN_x SiO_x, a - Si n + a - Si (35) , a - S
 (5) (6) (35) (35)
 i n + a - Si BCB(BenzoCycloButene), (acrylic resin), (polyimide)
 , Al, Mo, Cr, Ta Al (3)
 / (7, 9) (1) / (15) (15)
 (31) BCB(BenzoCycloButene), (acrylic resin), (polyimide)
 SiN_x SiO_x (37) , ITO(indium tin oxide)
 (9) (13) , (13) (51)
 (15) , (1) (17) , 가
 (1) (13) 가
 2 (33) (25) , R, G, B(Red, Green, Blue) 가 ((ho
 23) (17) , (17) (13) 가 ITO (island)
 (slit) (53) , (17) , 가 (ho
 le) (51) .
 , 1 (31) 2 (33) 가 , 가
 (53) 가 (dielectric con
 stant) 가 , 3 가 , (photoacrylate) BCB(Benz
 oCycloButene)
 (15) (V_{com}) 가 , 1 (31)
 Ag - Dotting , 2 (33) 가
 Ag - Dotting (15) (V_{com}) 가 ,
 (15)

가 , 1 (31) 2 (33) (29)

(29) (negative uniaxial film) , (gray

inversion) , (contrast ratio) , (n

egative biaxial film) , (n

(viewing angle) .

(polarizer)() , ,

2a 2b , (13) (51)

(15) (53)

(13) (15) , (25)

3a 3b , 3c 3d , 3a 3c (

37) SiN_x SiO_x 2 , 3b 3d BCB(BenzoCycloButene), (ac

rylic resin) (polyimide) . 3e 3f

(53) (13)

4a 4b , (13) (51)

(15) (53)

(13) (15) , (

25) ,

5a 5b , 5c 5d , 5a 5c (

37) SiN_x SiO_x 2 , 5b 5d BCB(BenzoCycloButene), (ac

rylic resin) (polyimide) . 5e 5f

(53) (13)

6a 6b , (13) (51)

(53) (15)

(13) (15) , (25)

7a 7b , 7c 7d
 37) SiN_x SiO_x 2 , 7b 7d BCB(BenzoCycloButene), (ac
 rylic resin) (polyimide) , 7a 7c
 (53) (13) . 7e 7f

8a 8b , (13) (51)
 (53) (15)
 (13) (15) , (

25) , .

9a 9b , 9c 9d
 37) SiN_x SiO_x 2 , 9b 9d BCB(BenzoCycloButene), (ac
 rylic resin) (polyimide) , 9a 9c
 (53) (13) . 9e 9f

10a 10b .

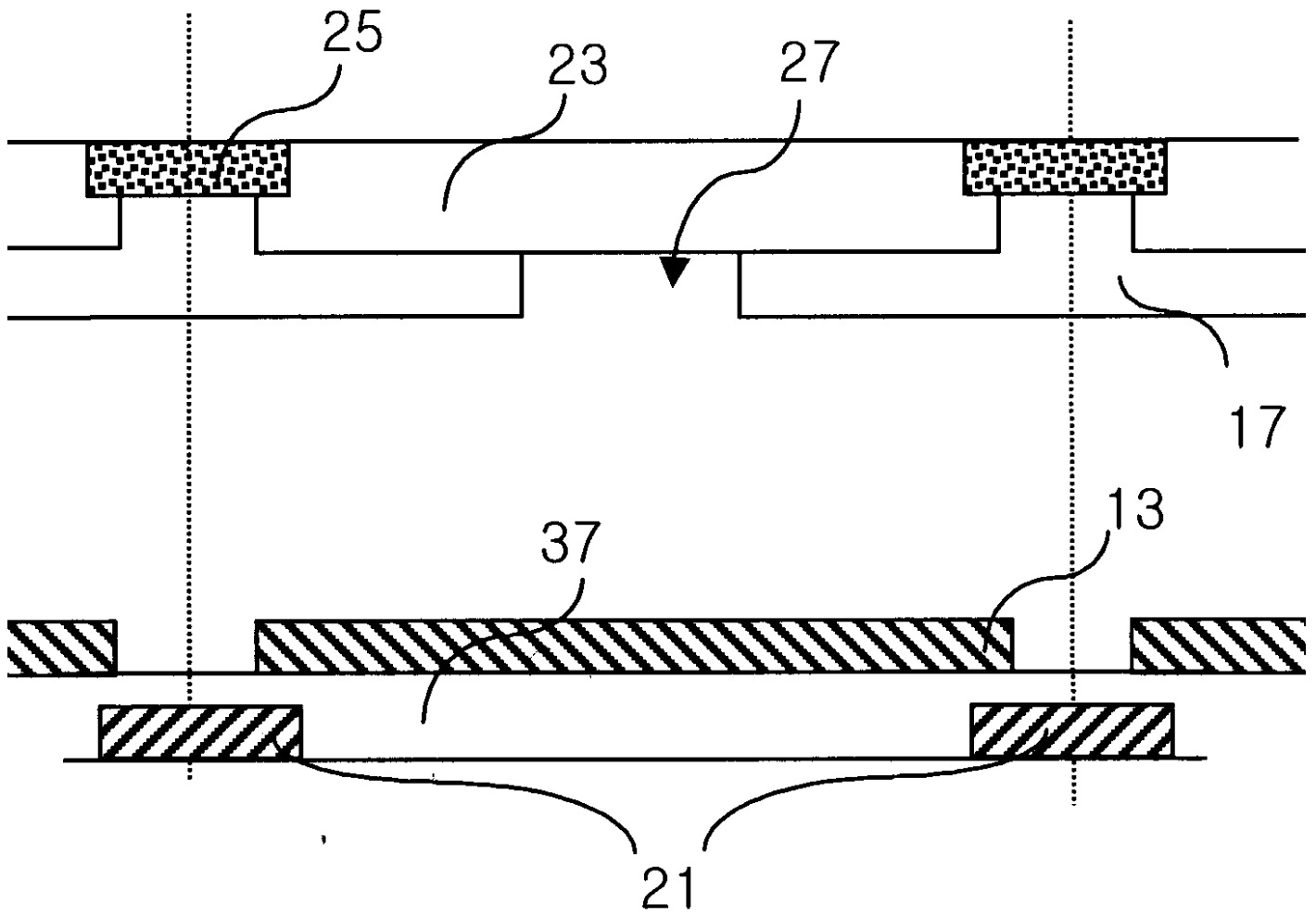
10a ,
 , 10b 가 , .

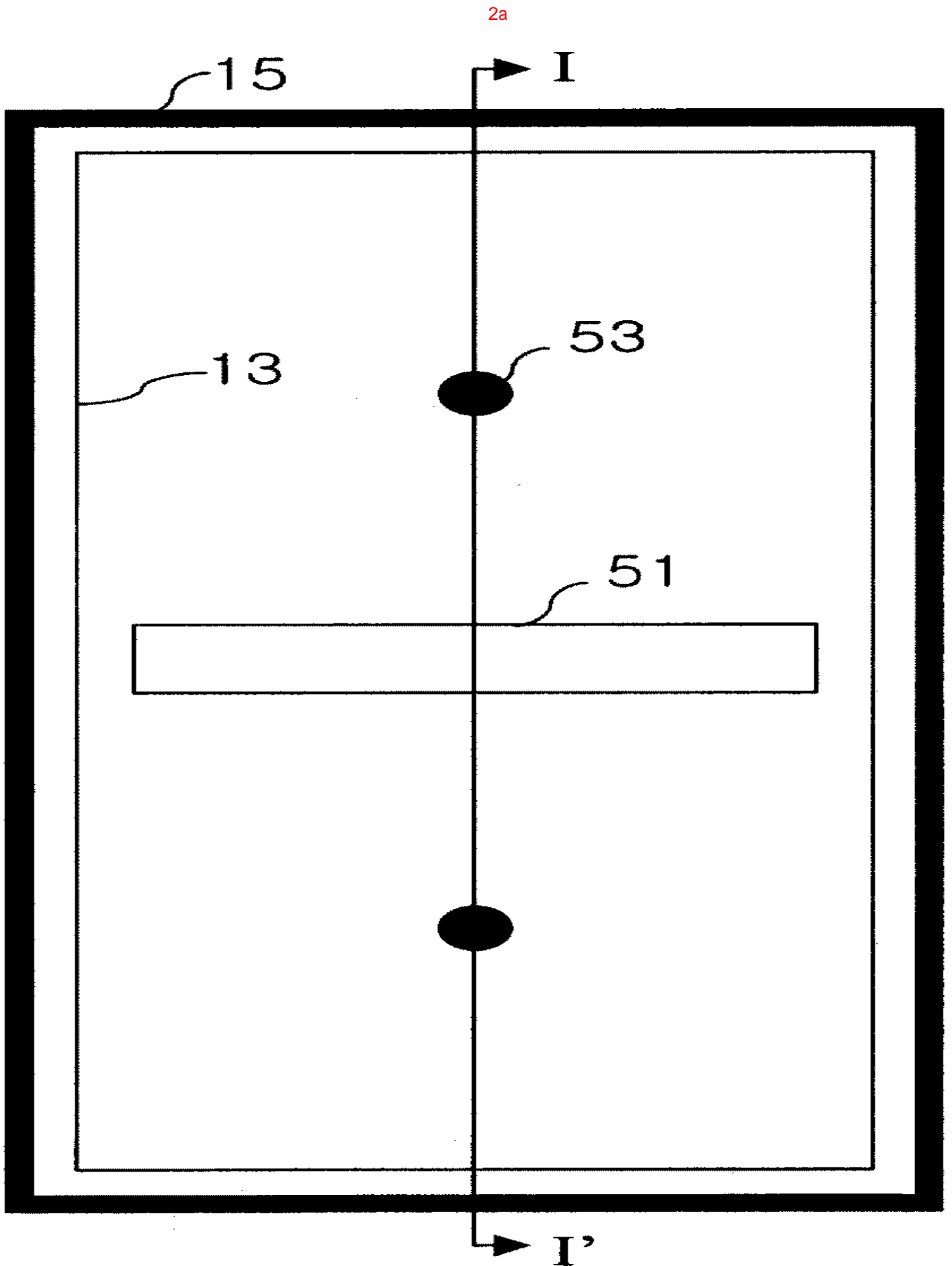
가 , 1 / 2 (, PVCN(polyvinylcinnamate), PSCN(polysiloxan
 ecinnamate), CelCN(cellulosecinnamate) 가 , 1 ,
 direction) 가 (pretilt angle) 가 (alignment direction) 1 (pretilt
 direction) , , , .

1 2 가 .

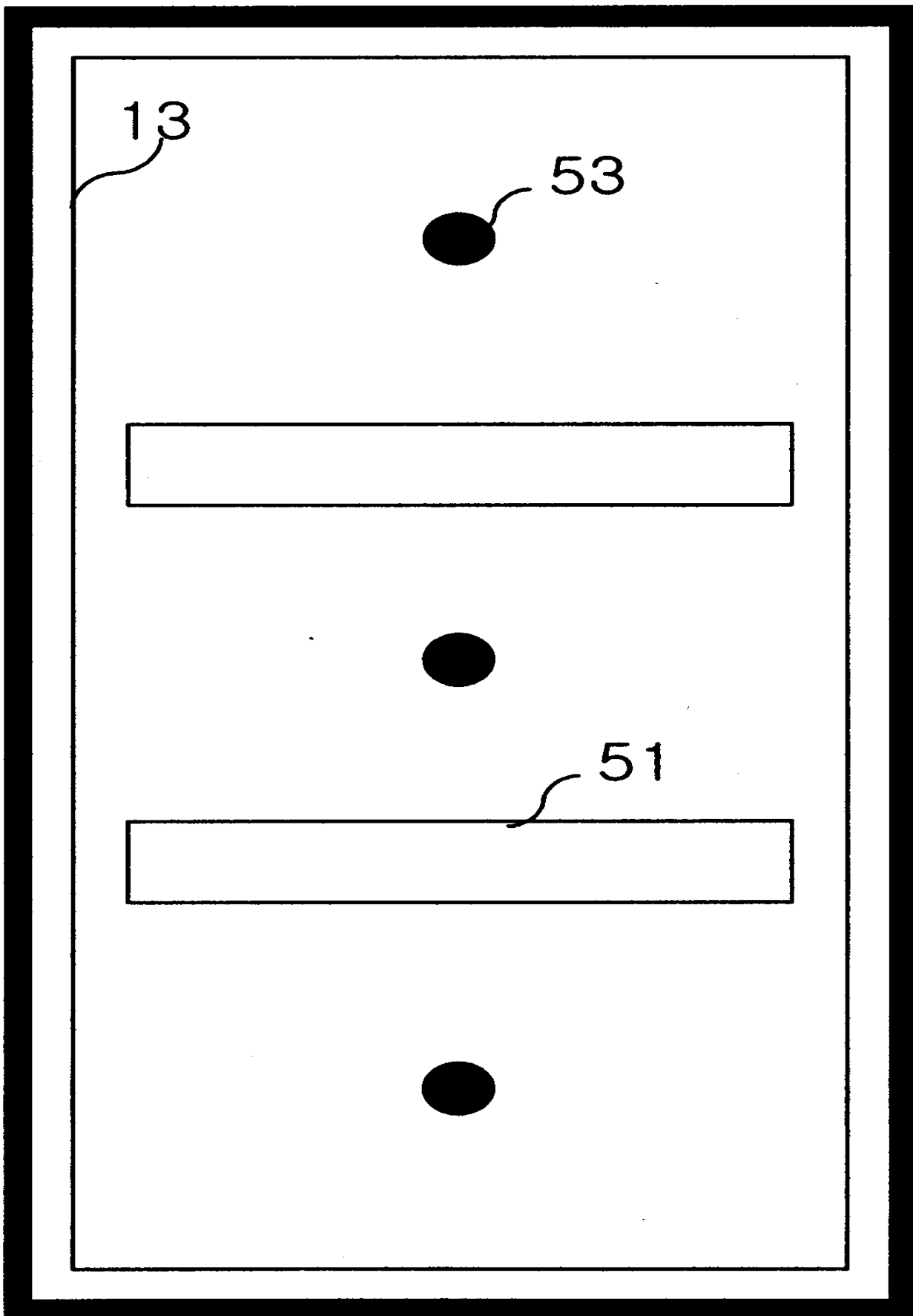
가 , + x ,
 , 가 , ,
 가 .

1

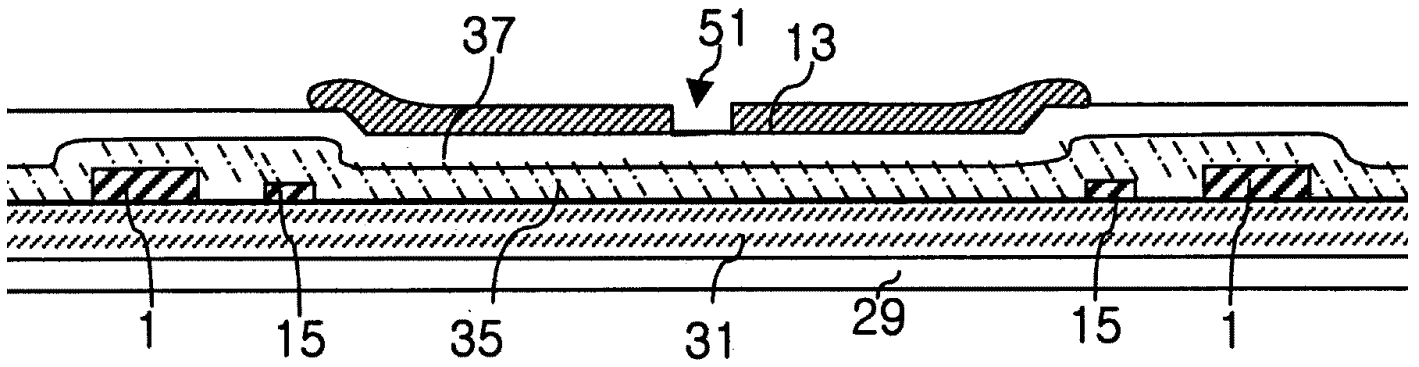
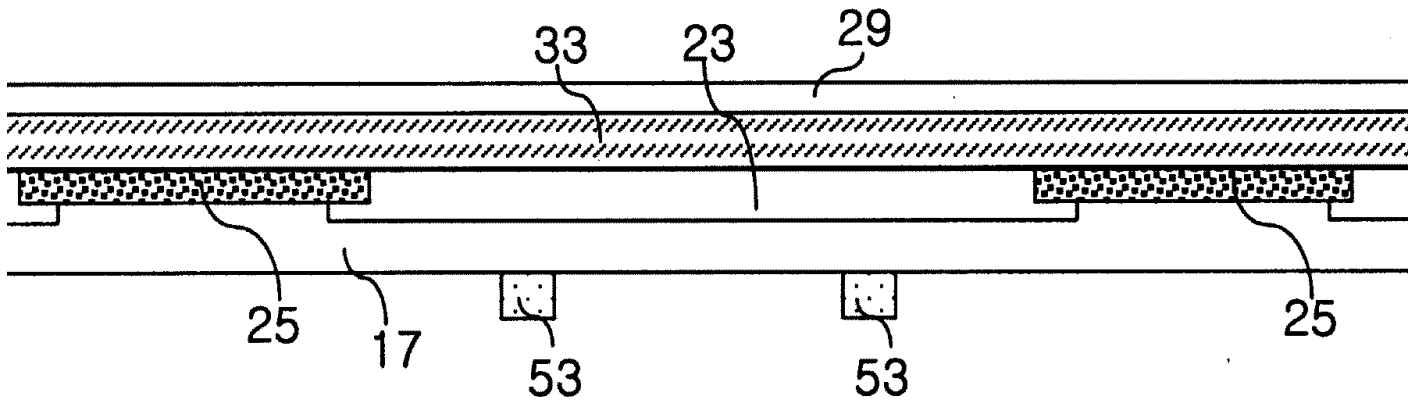




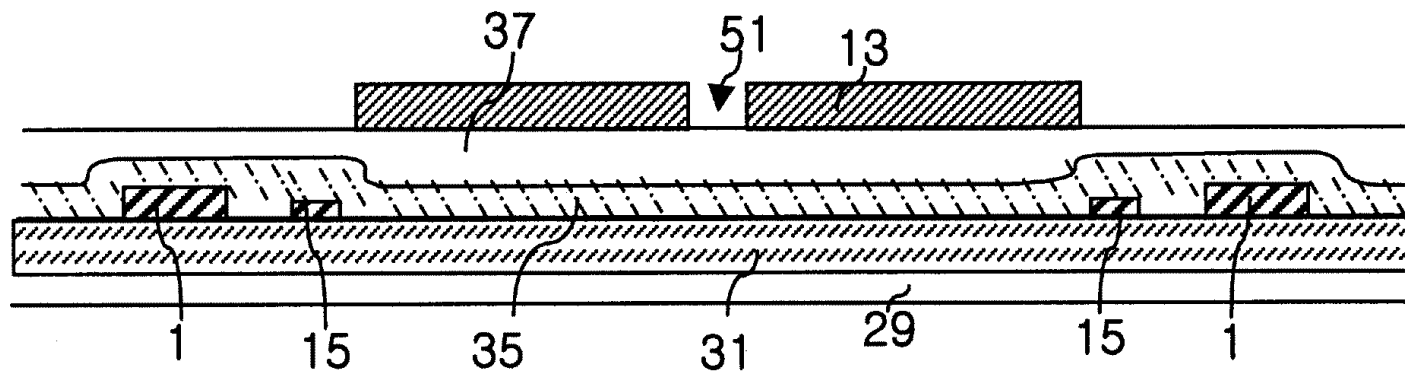
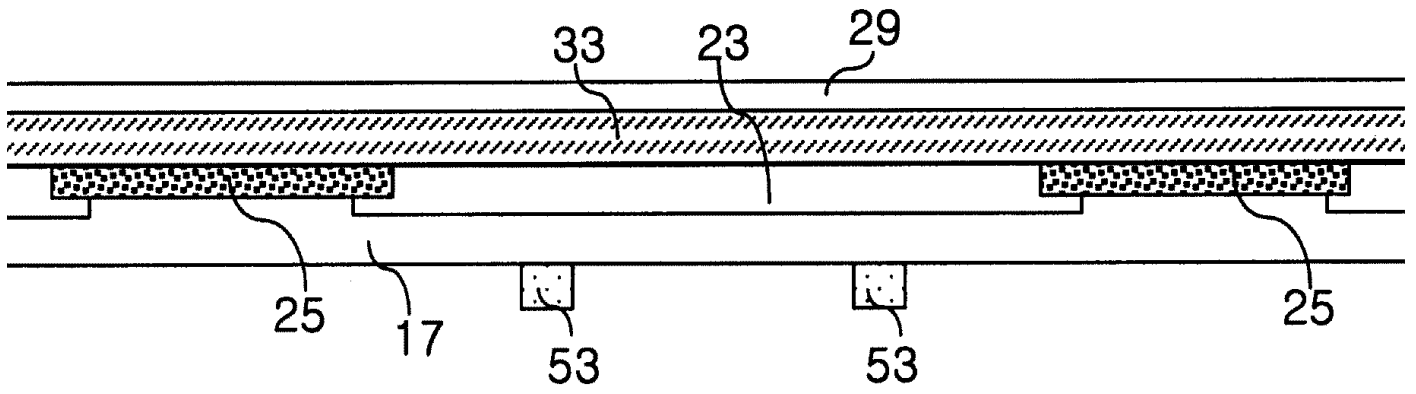
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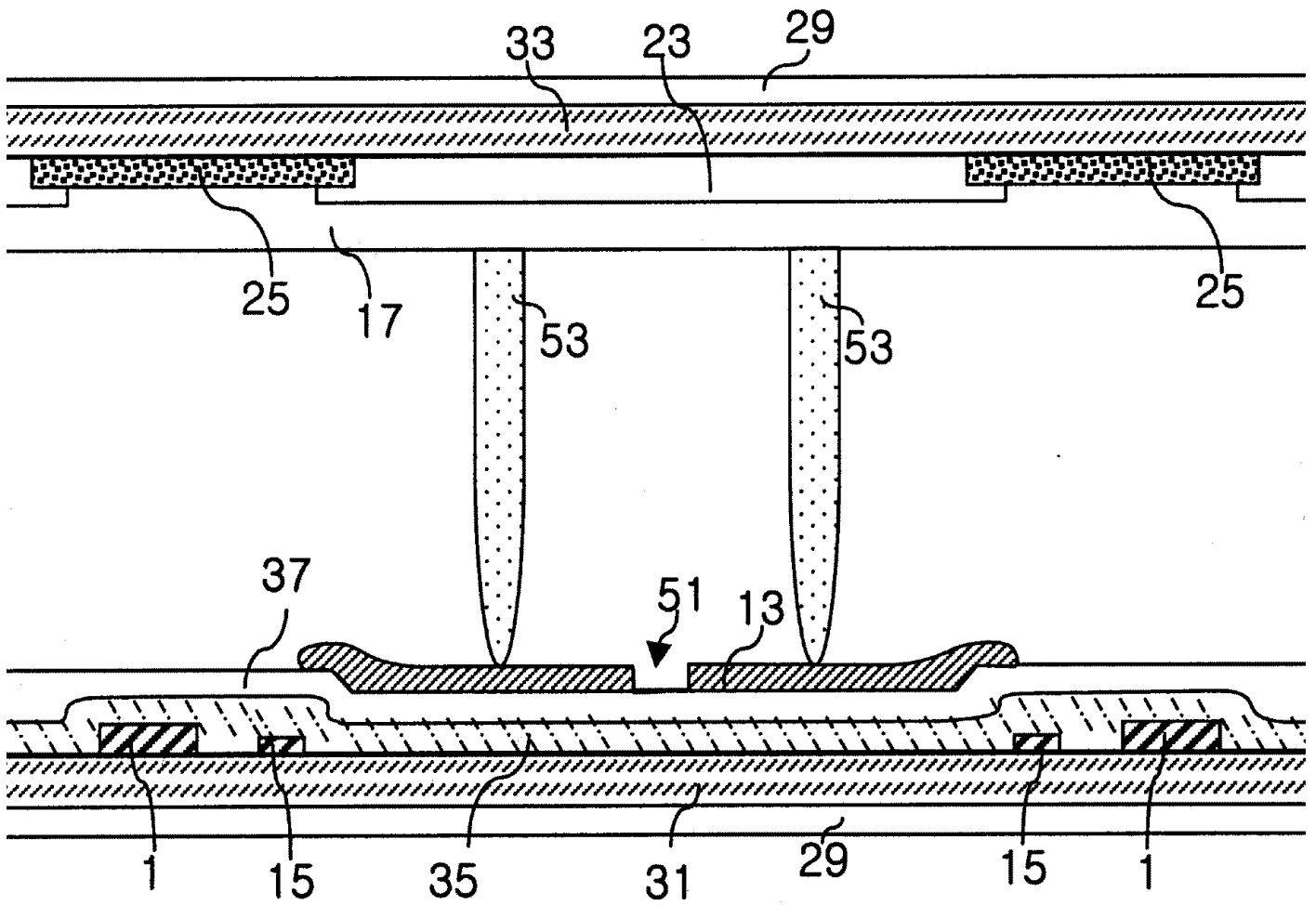
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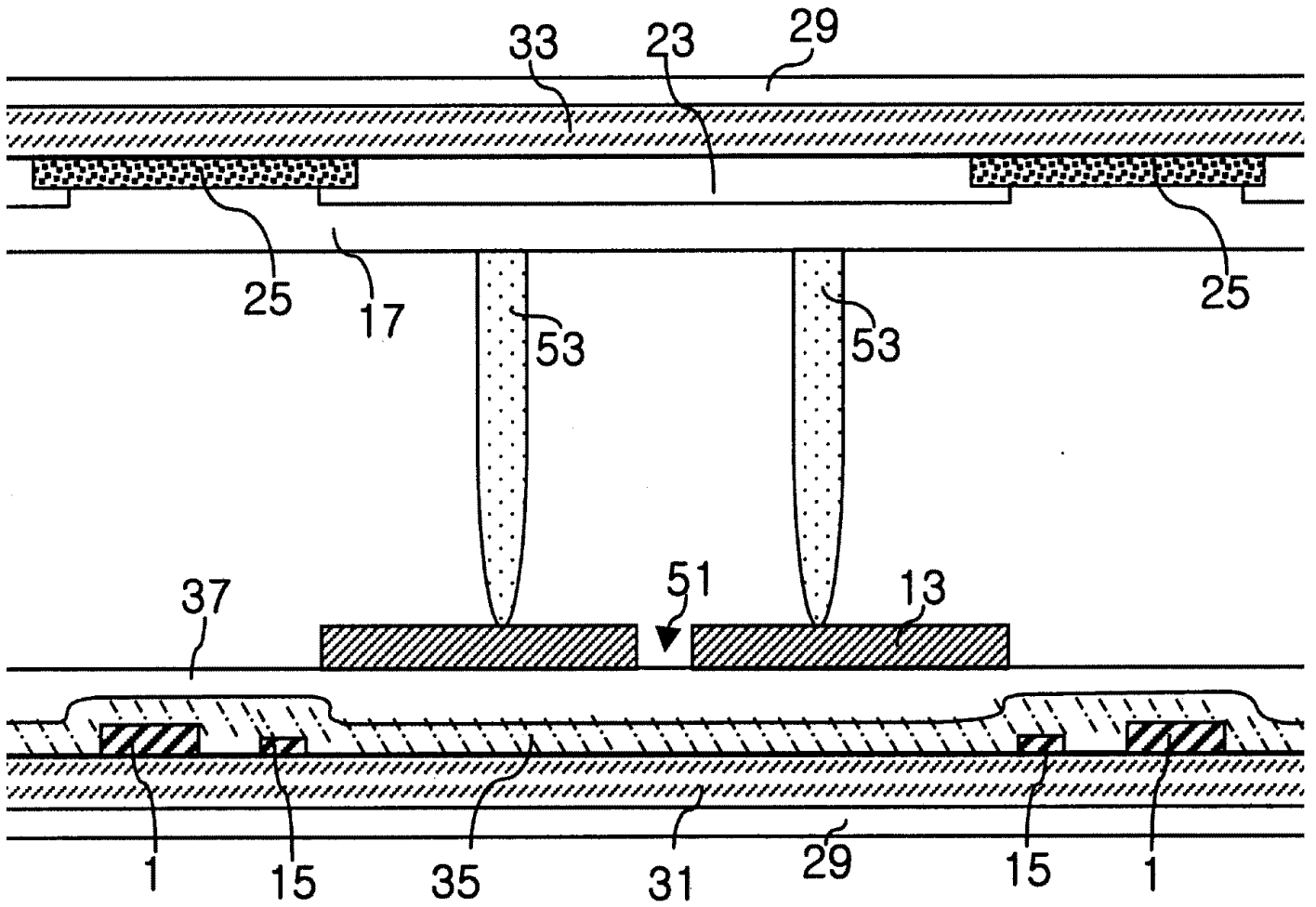
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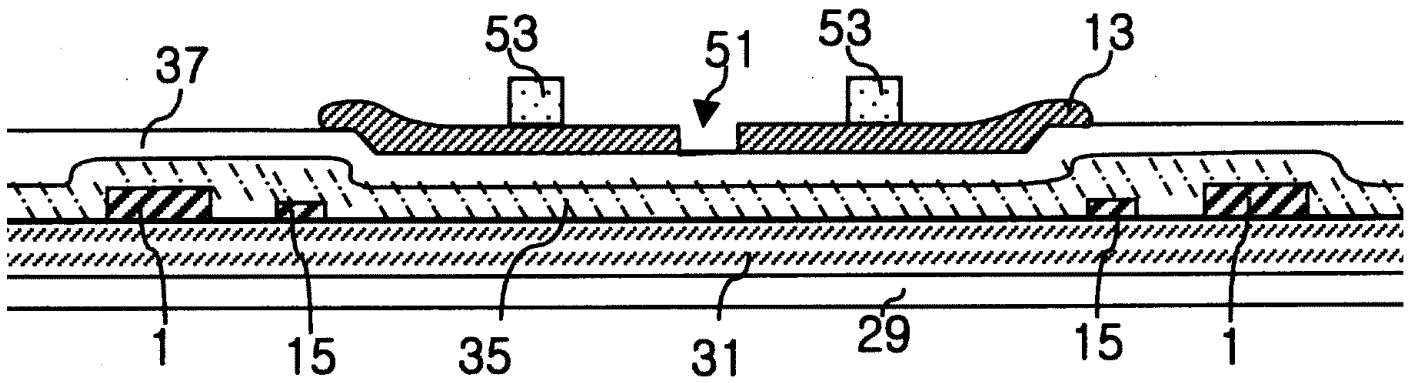
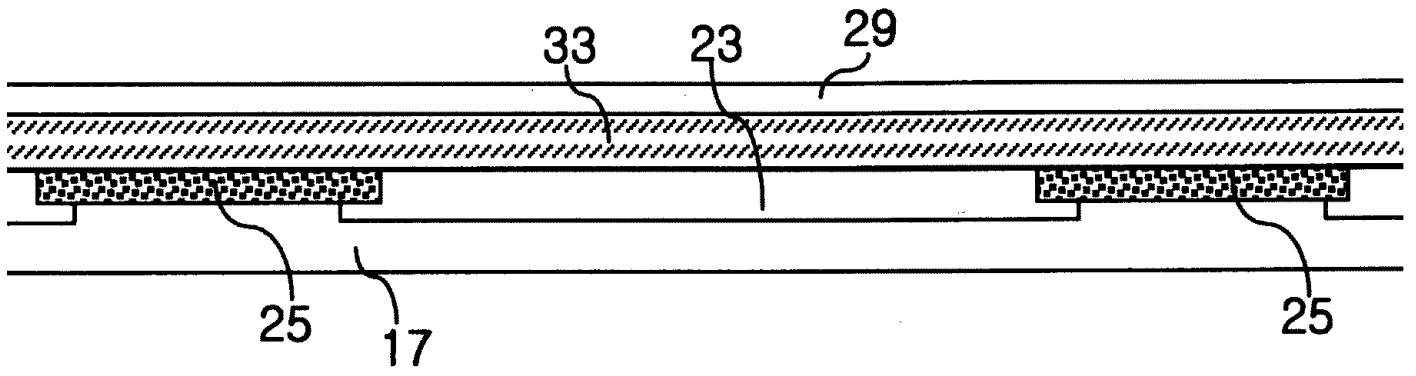
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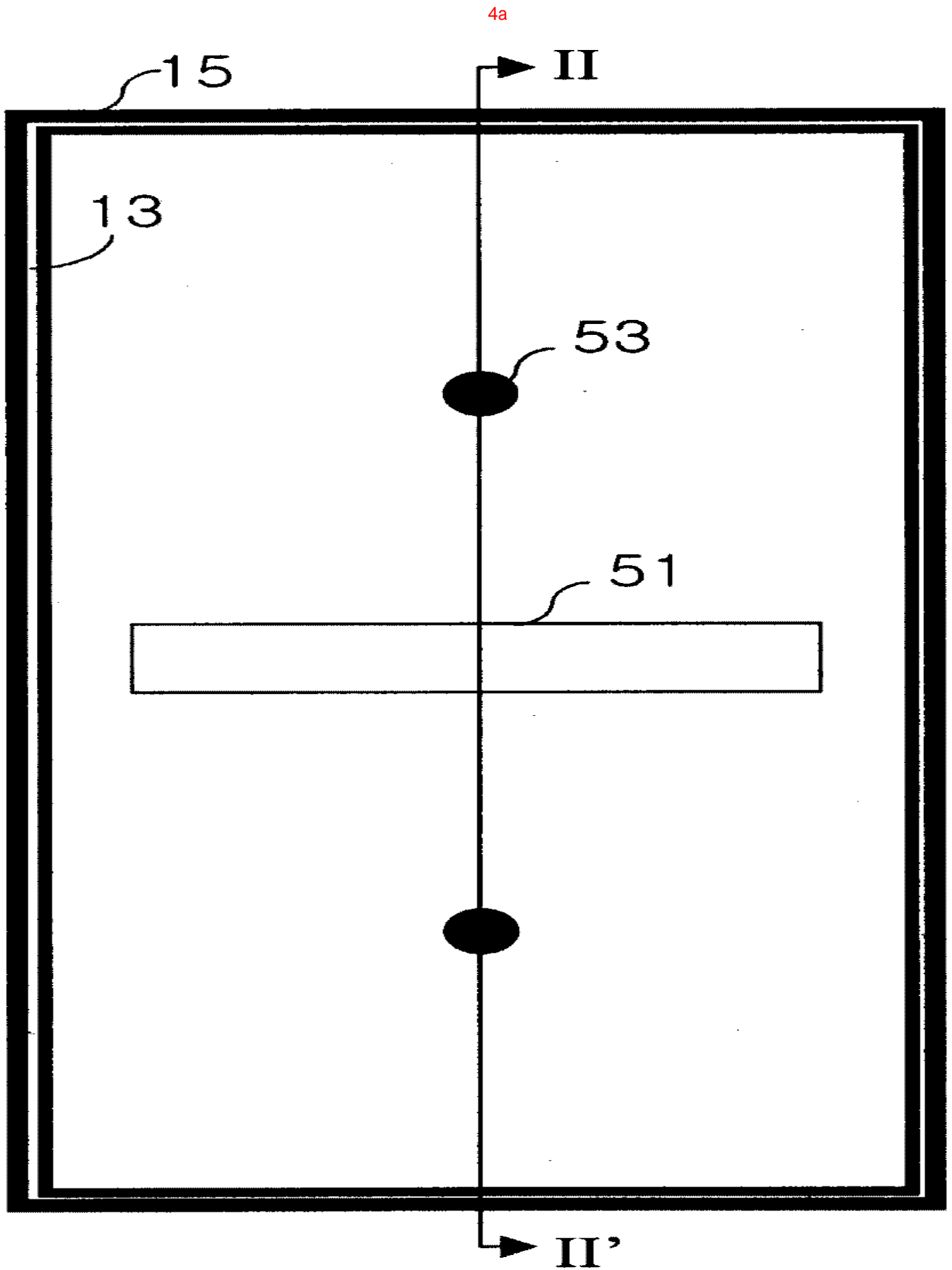


3d

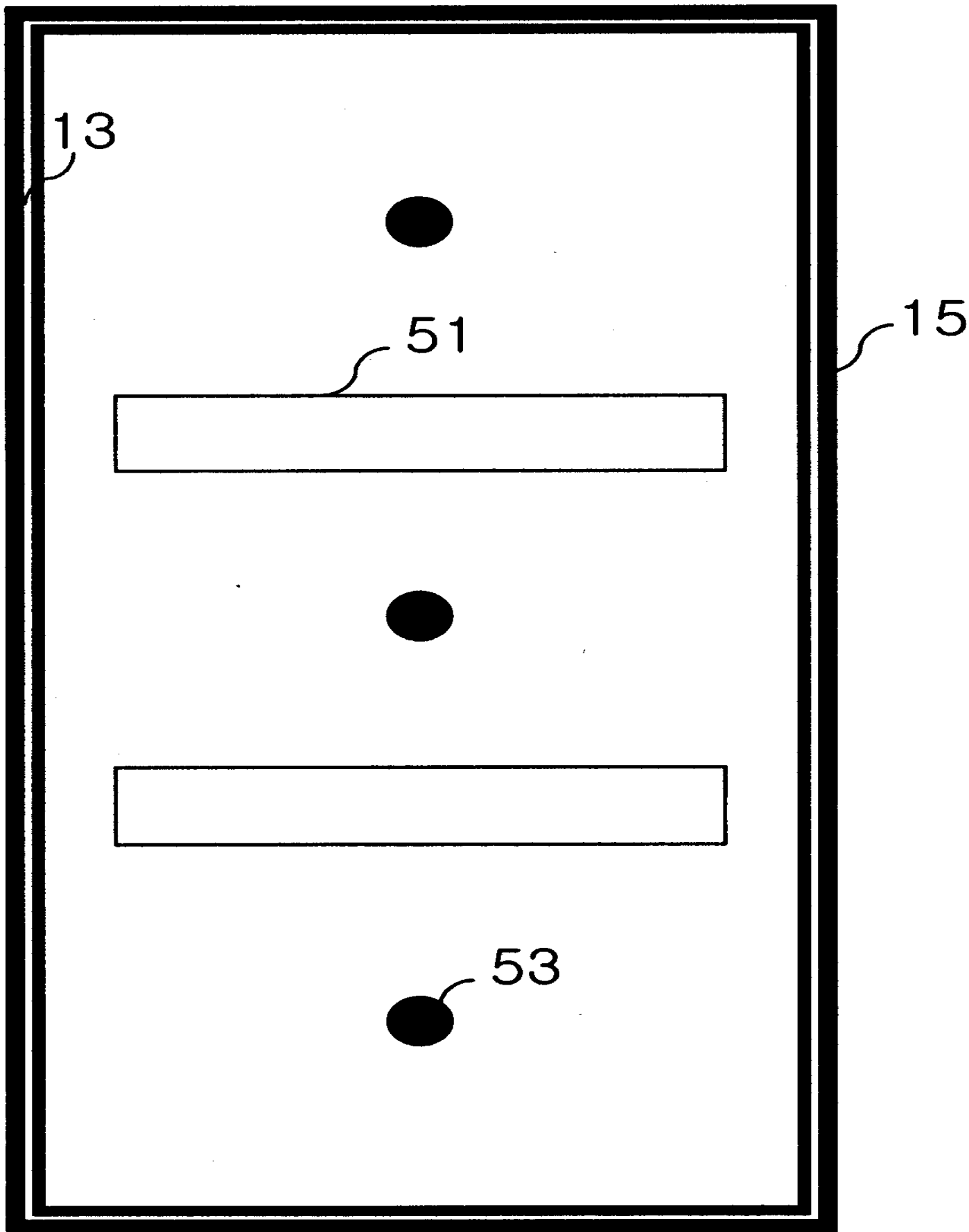


3e

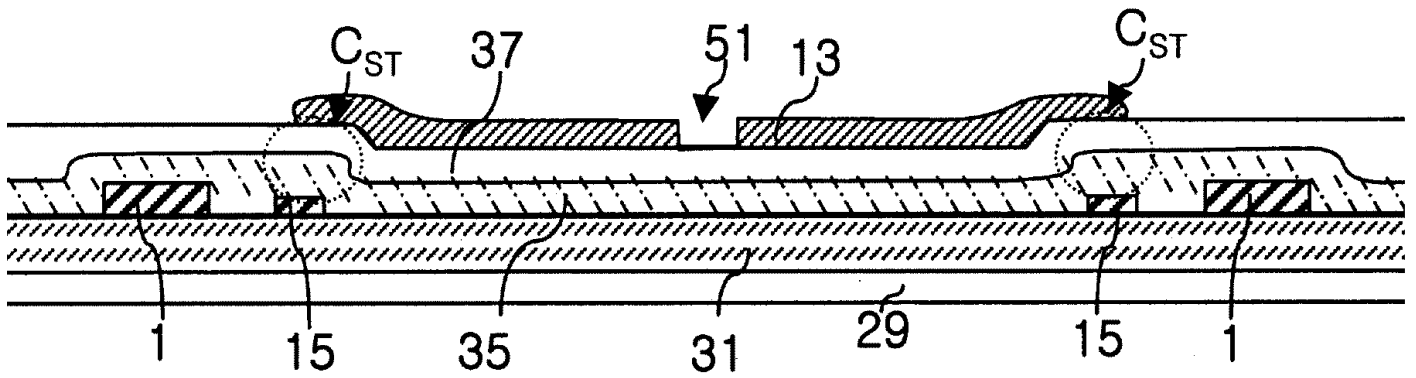
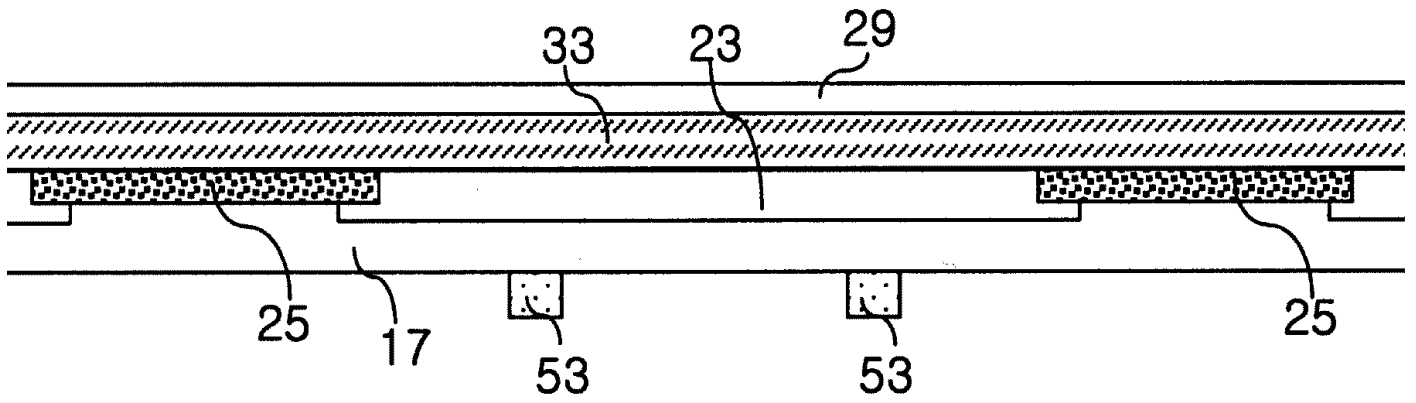




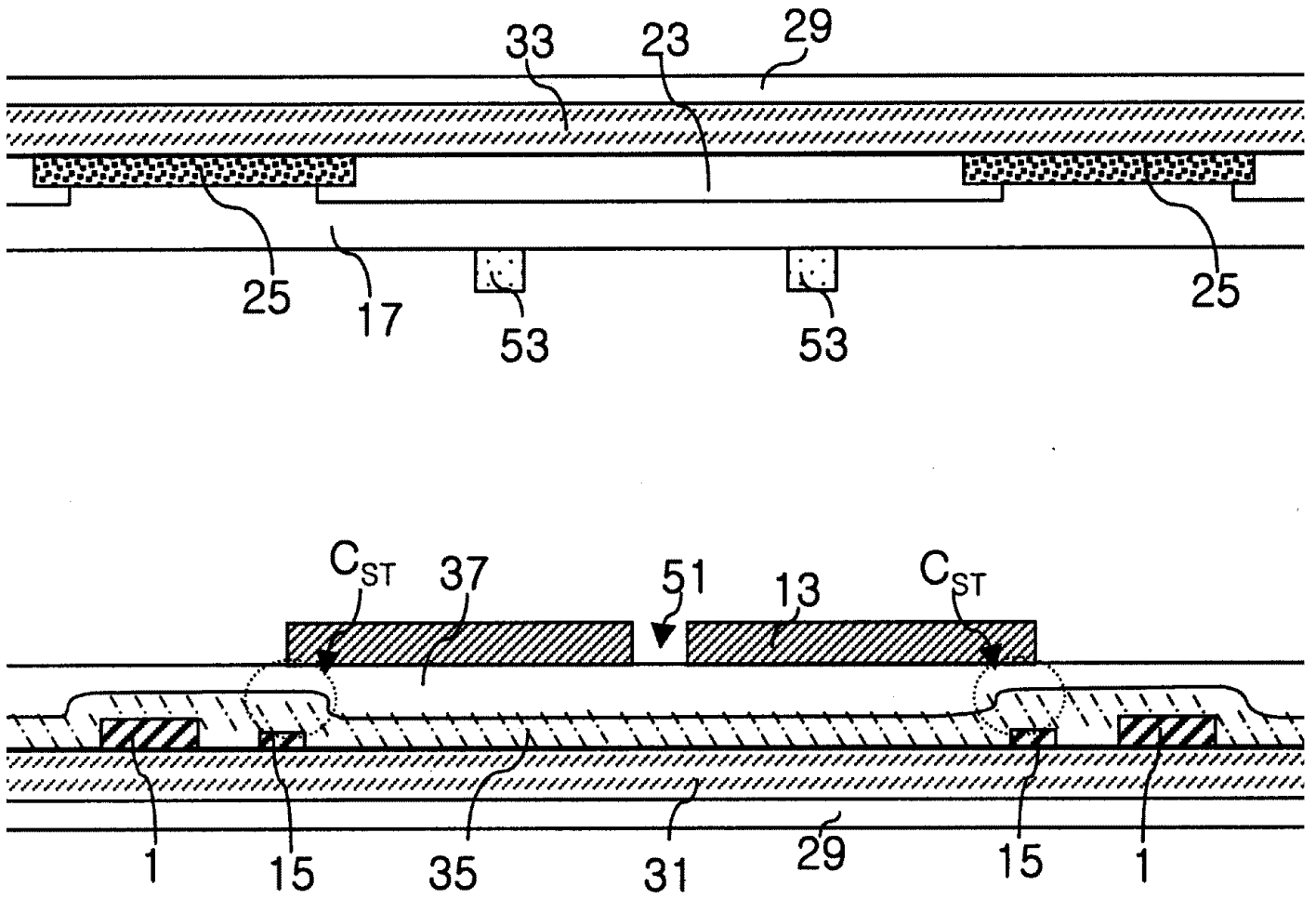
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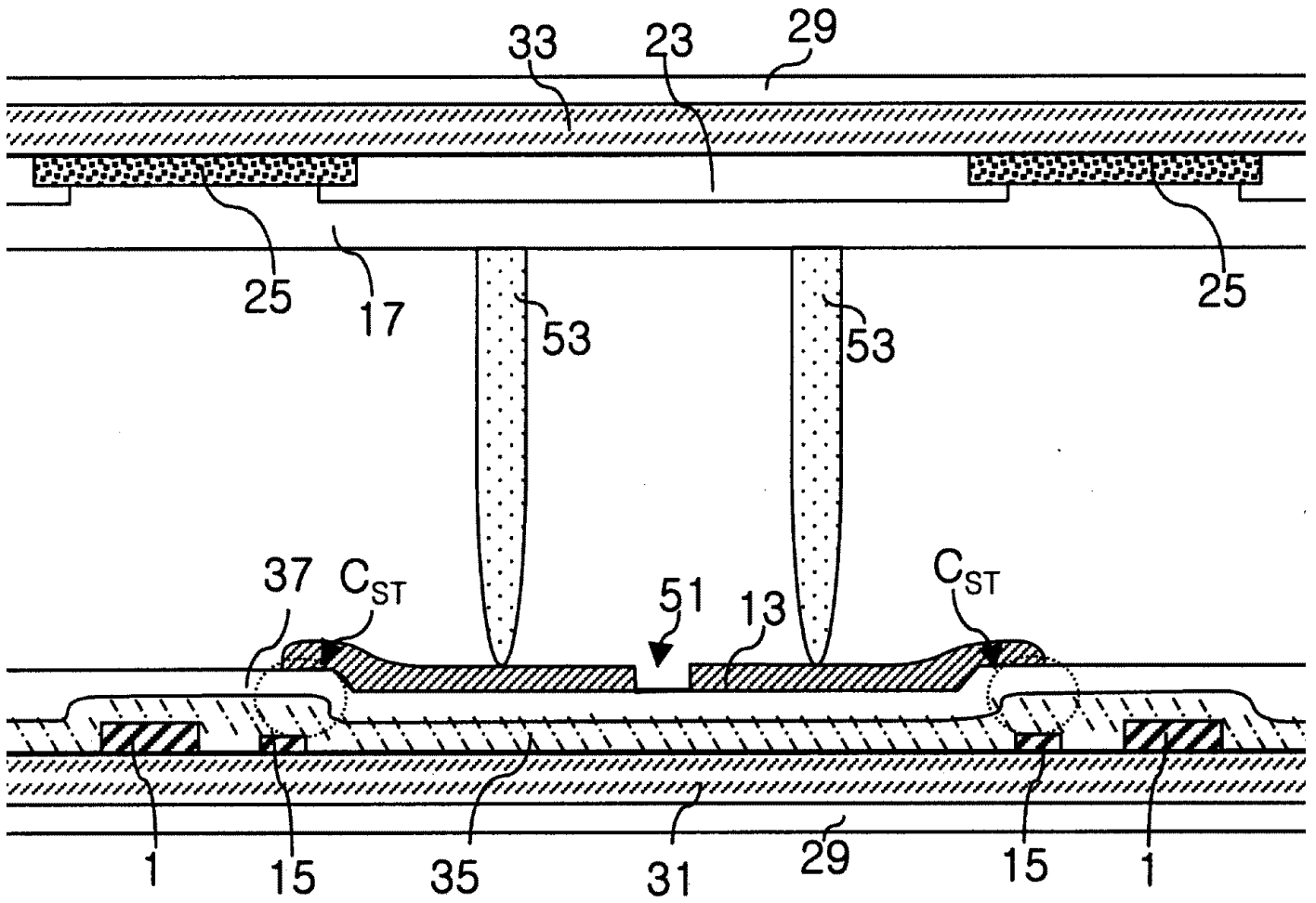
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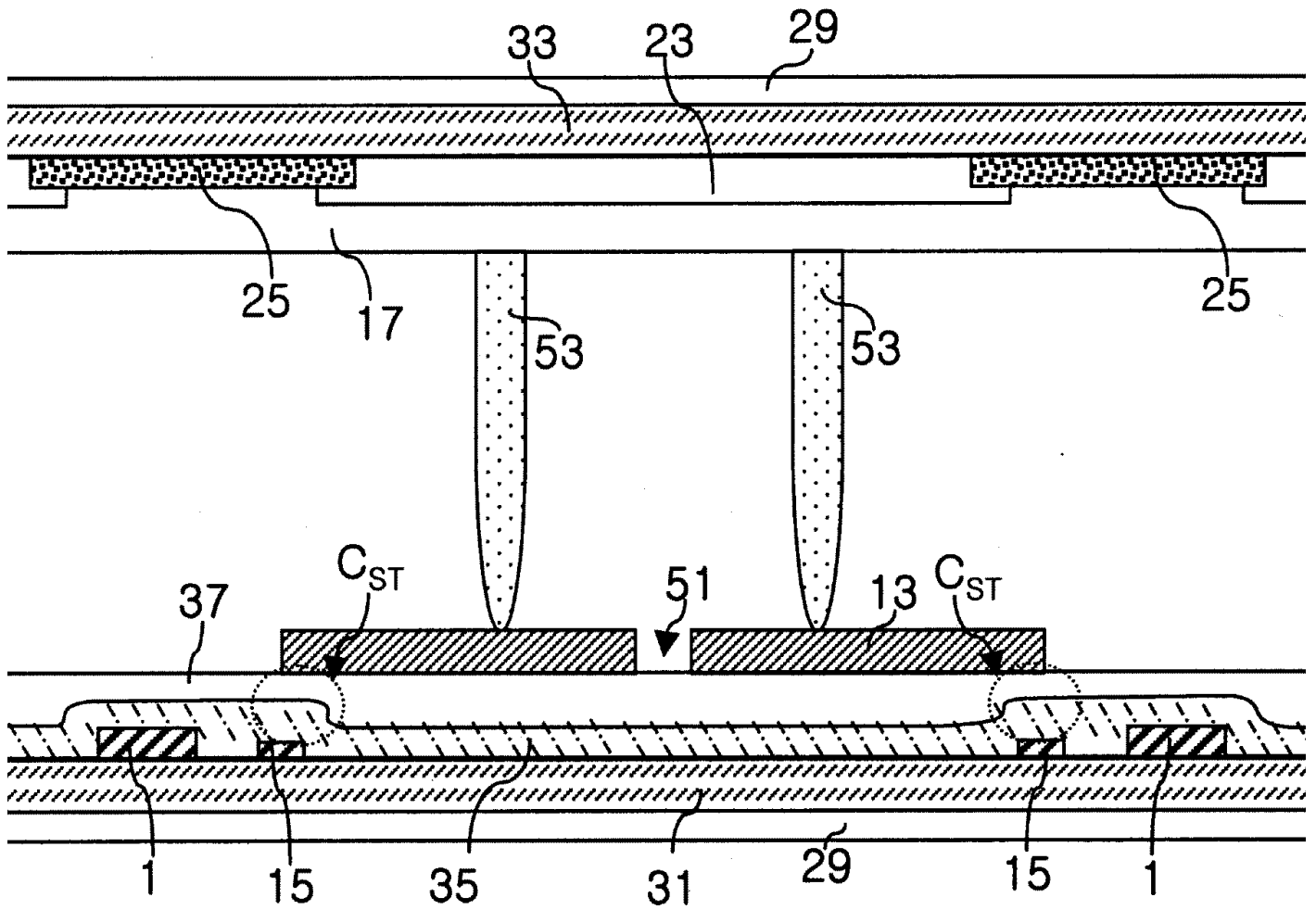
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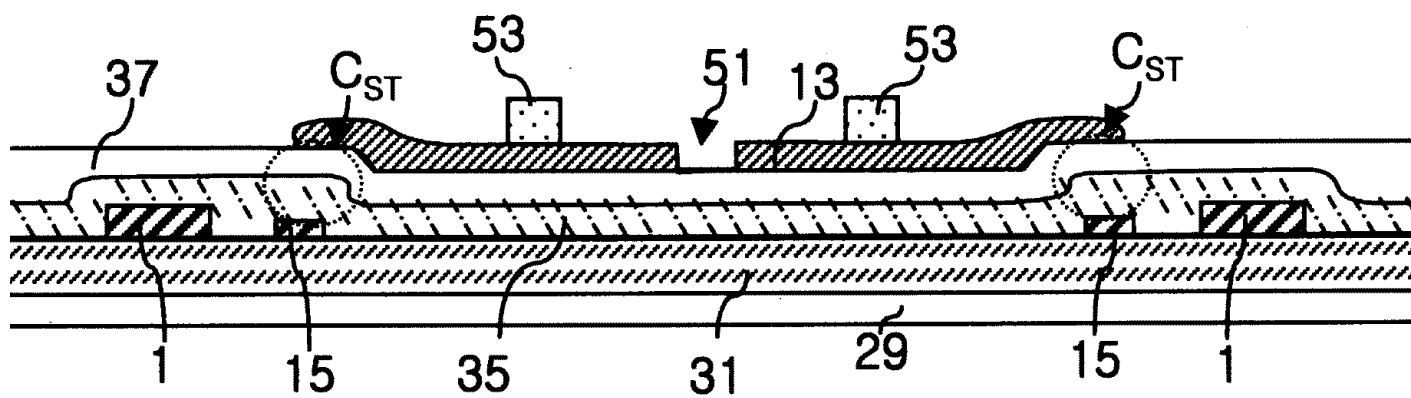
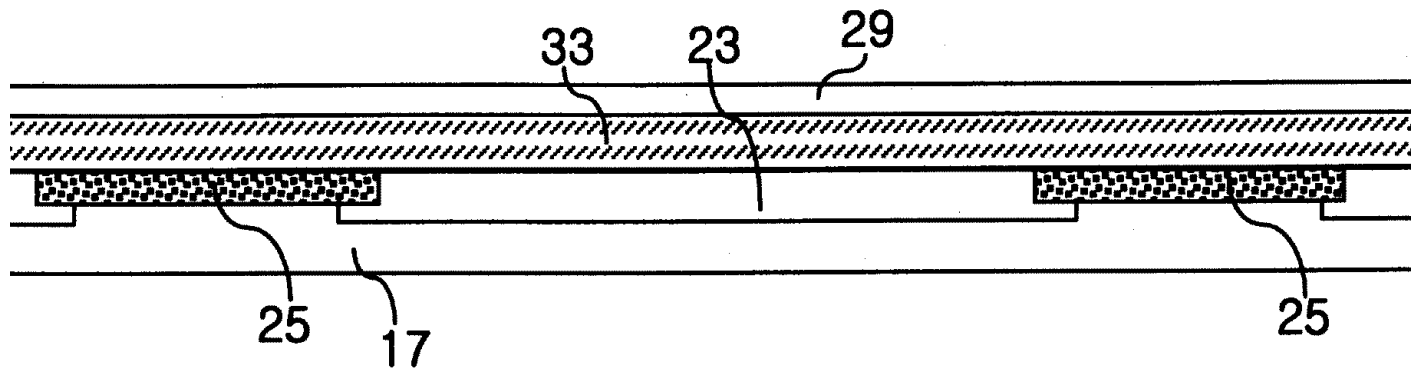
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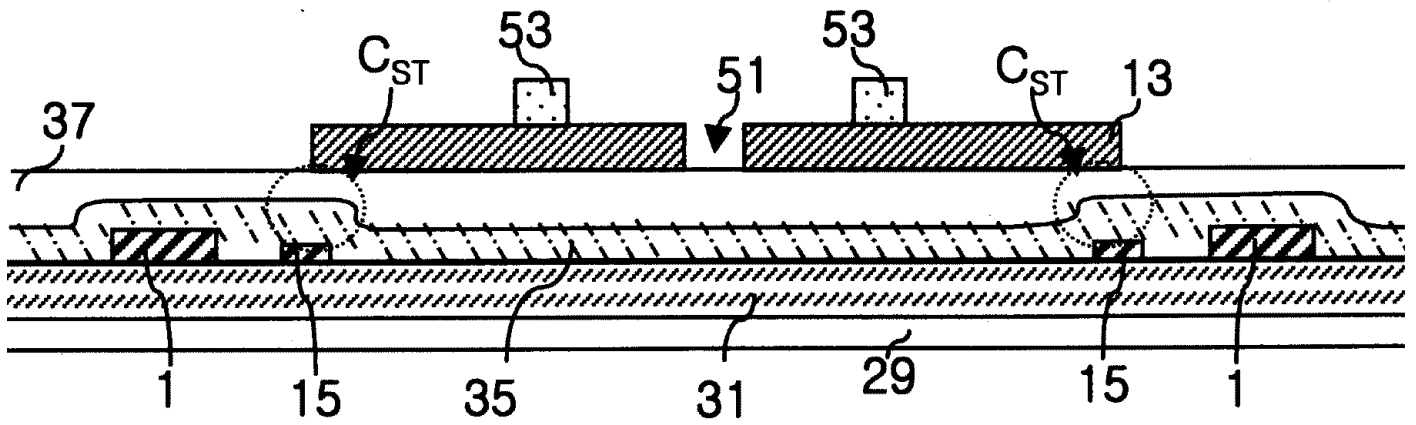
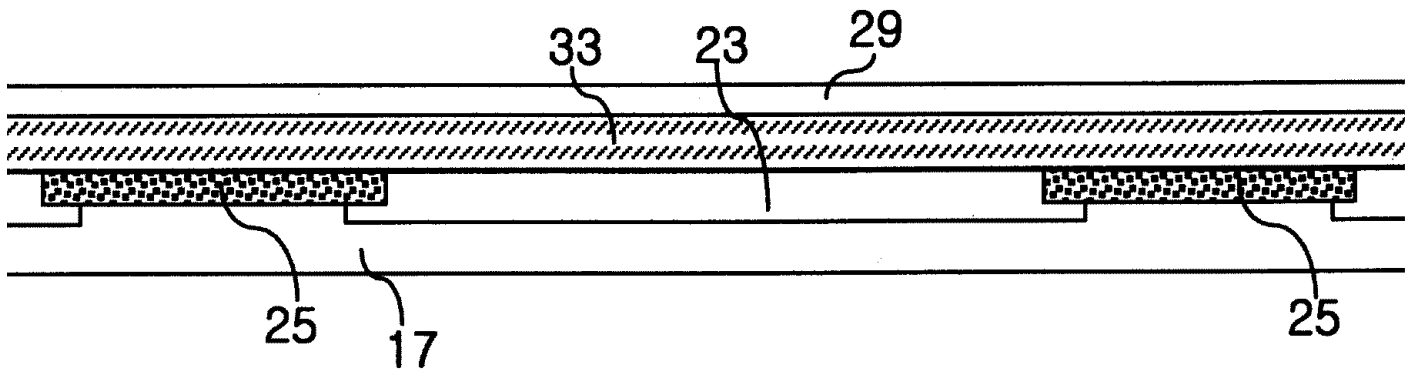
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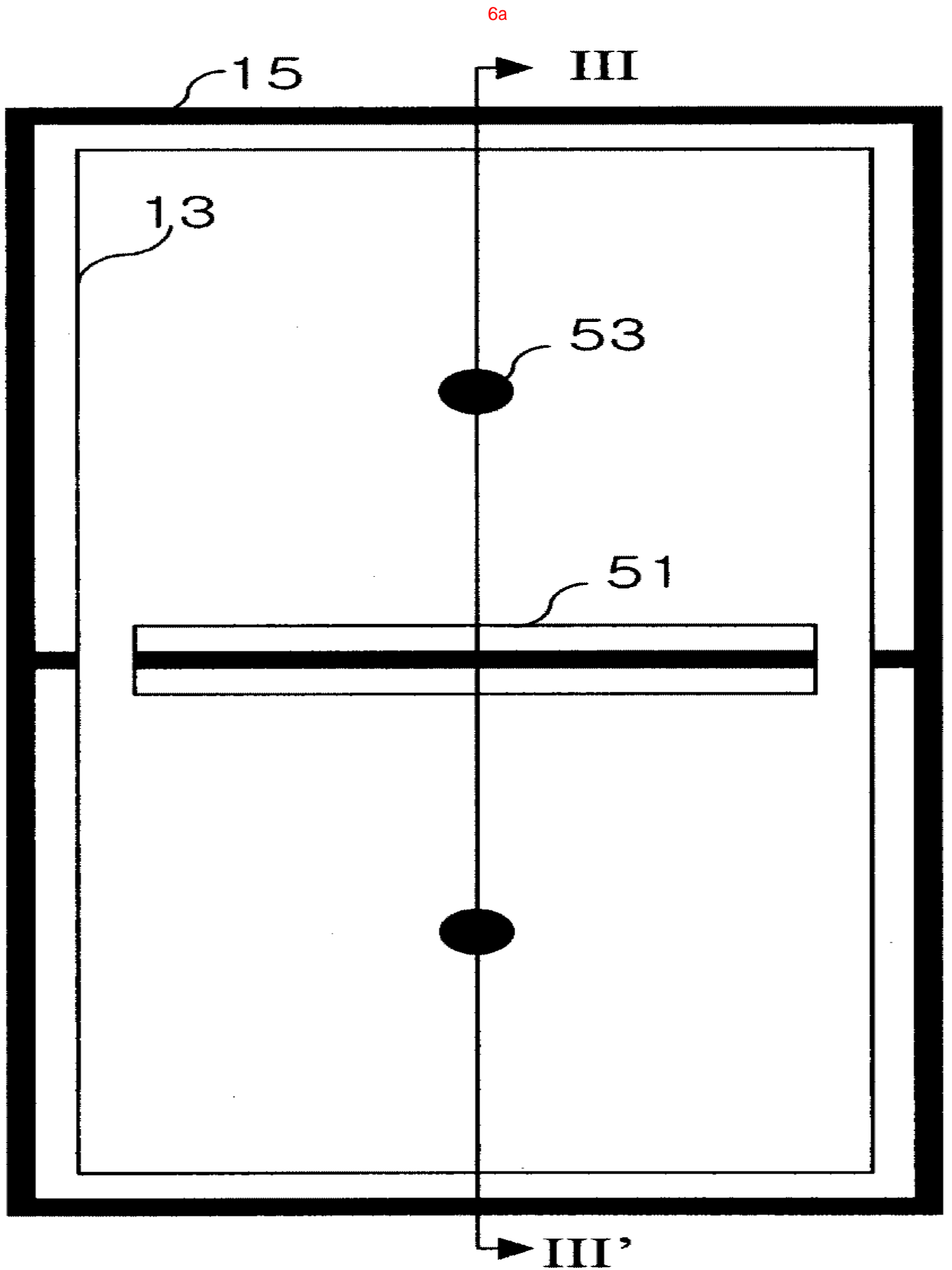


5e

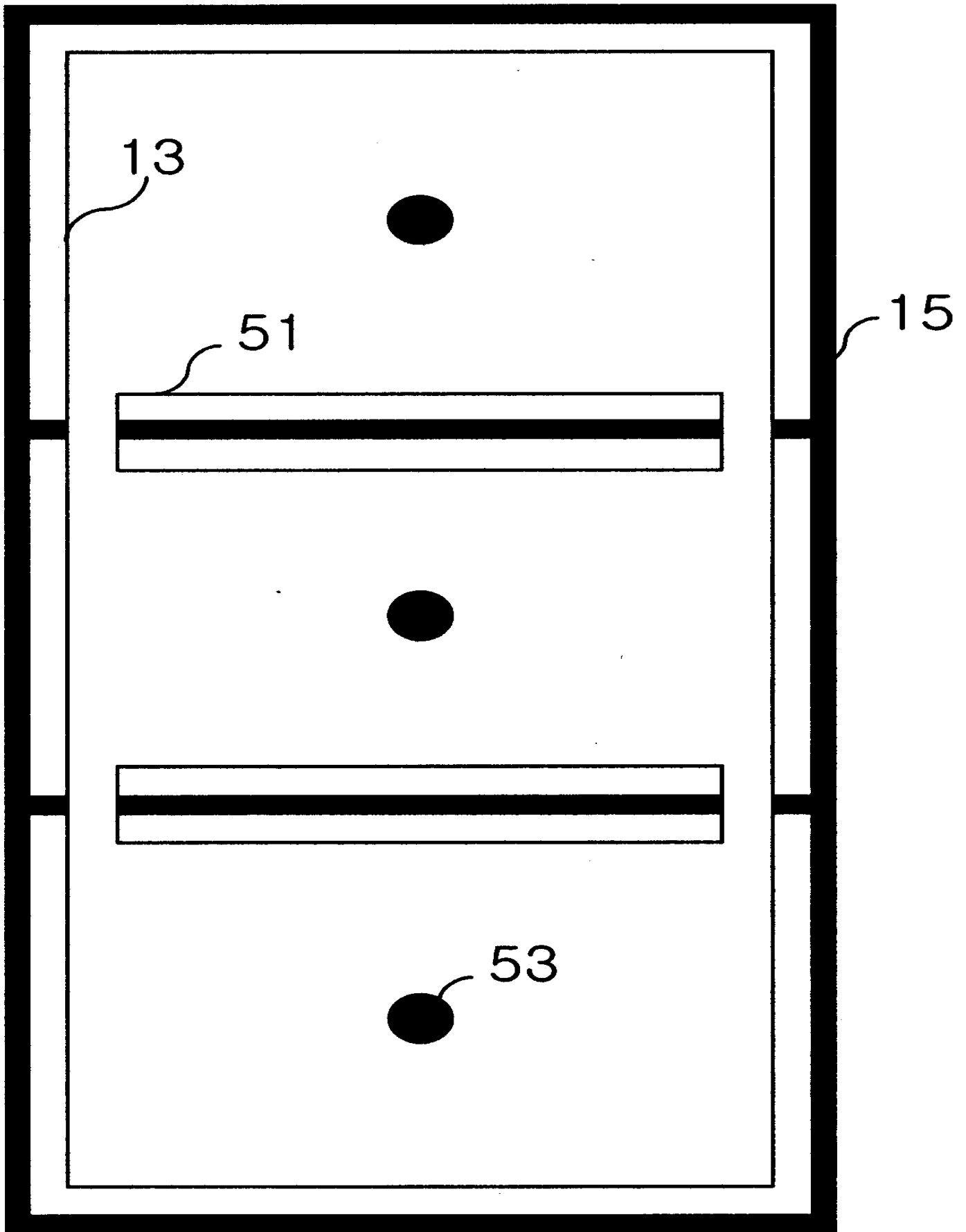


5f

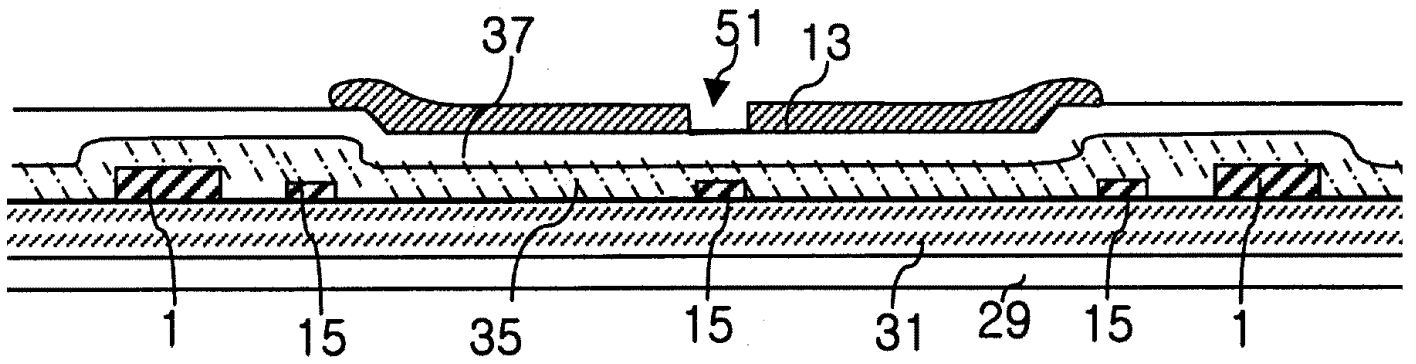
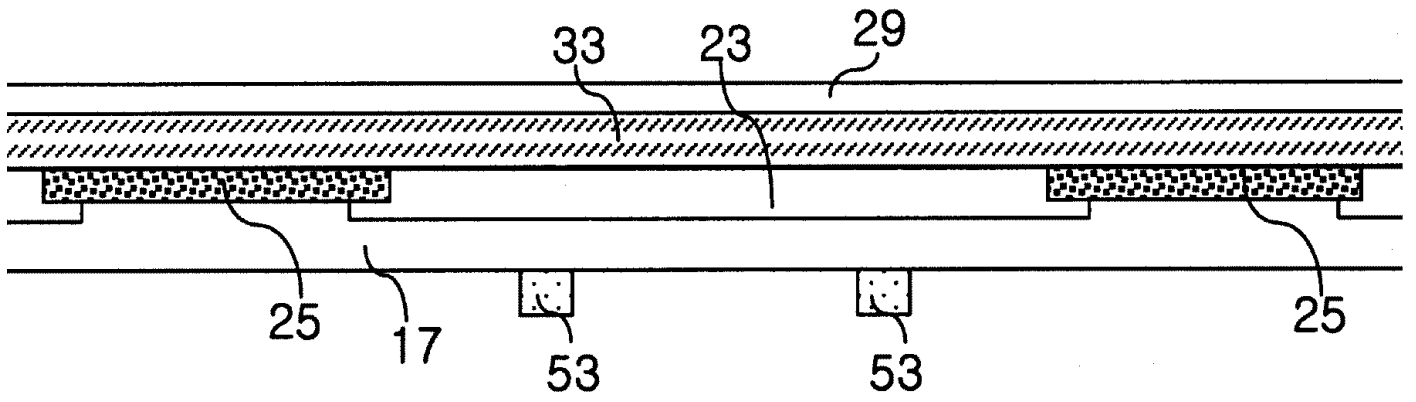




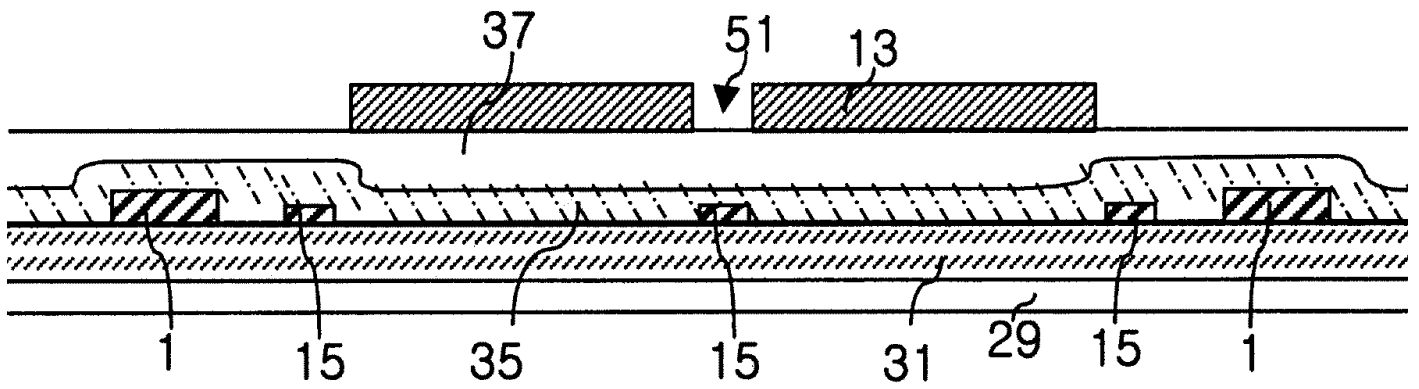
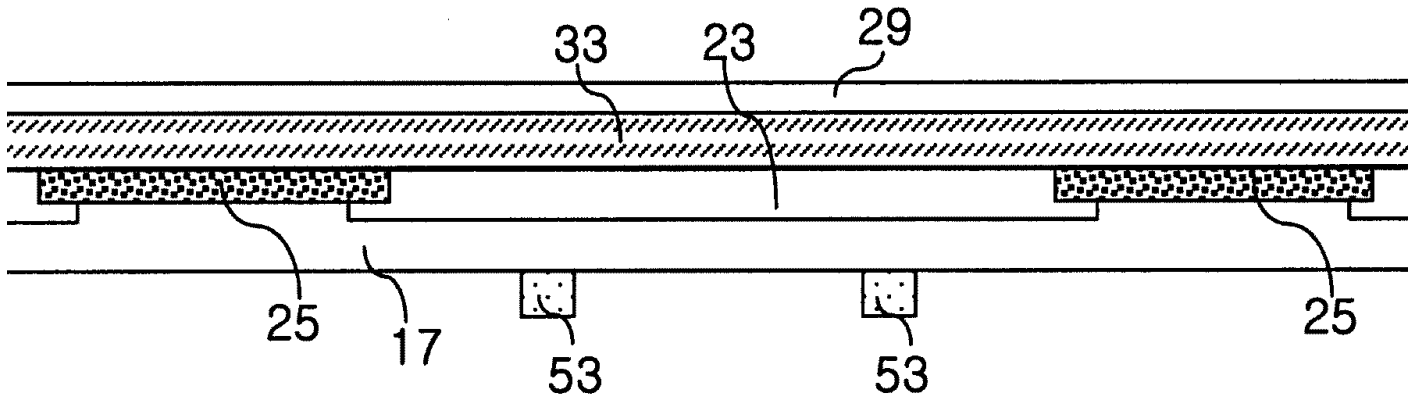
6b



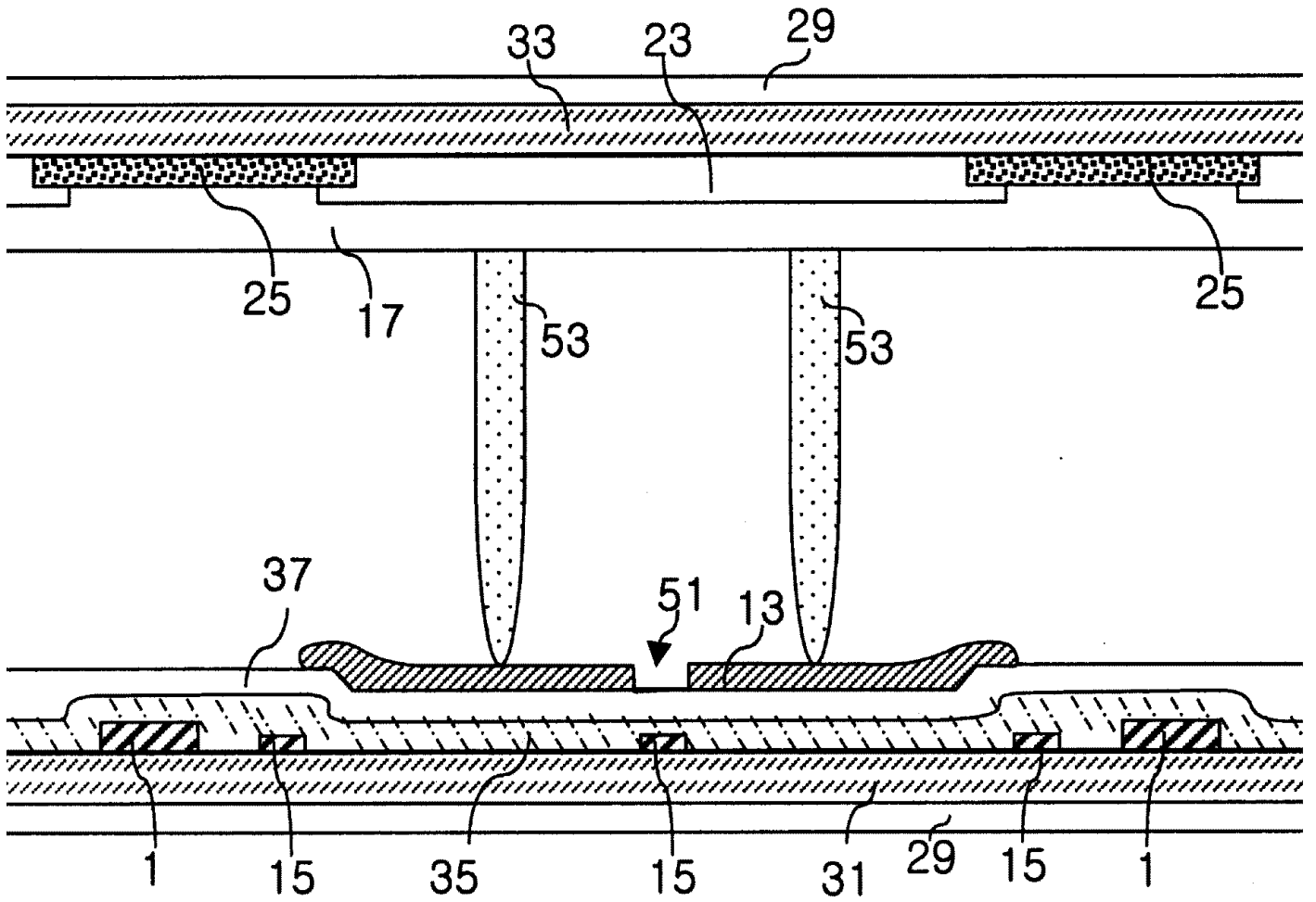
7a



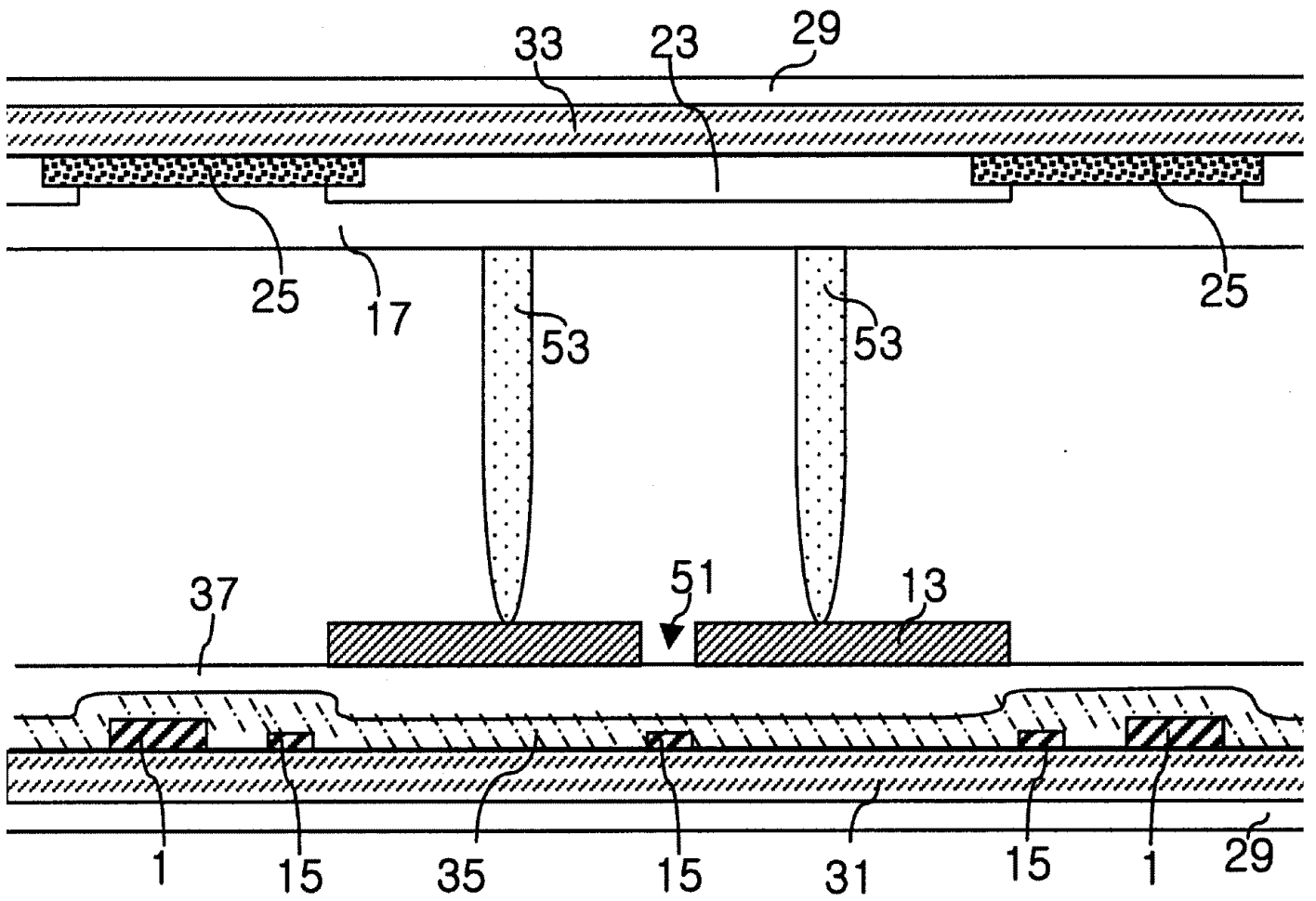
7b



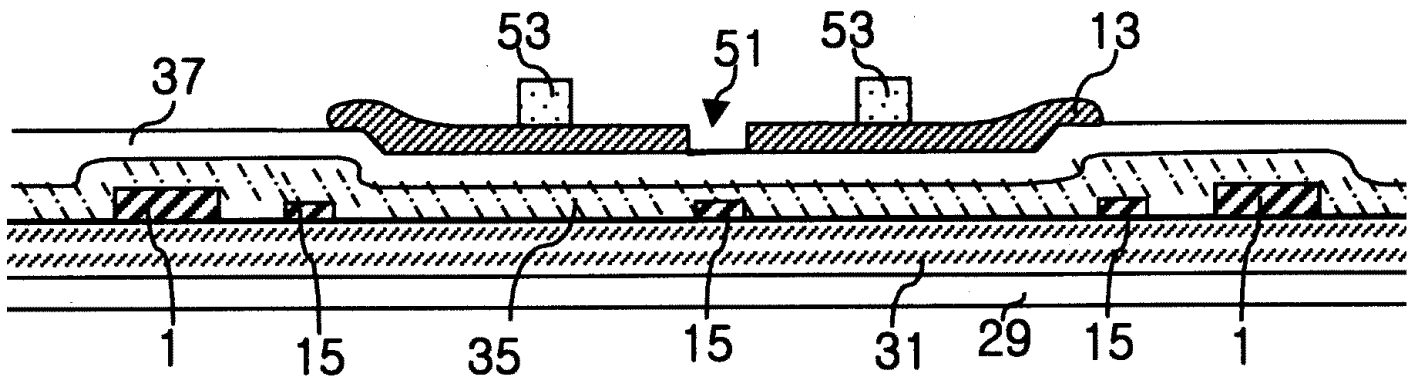
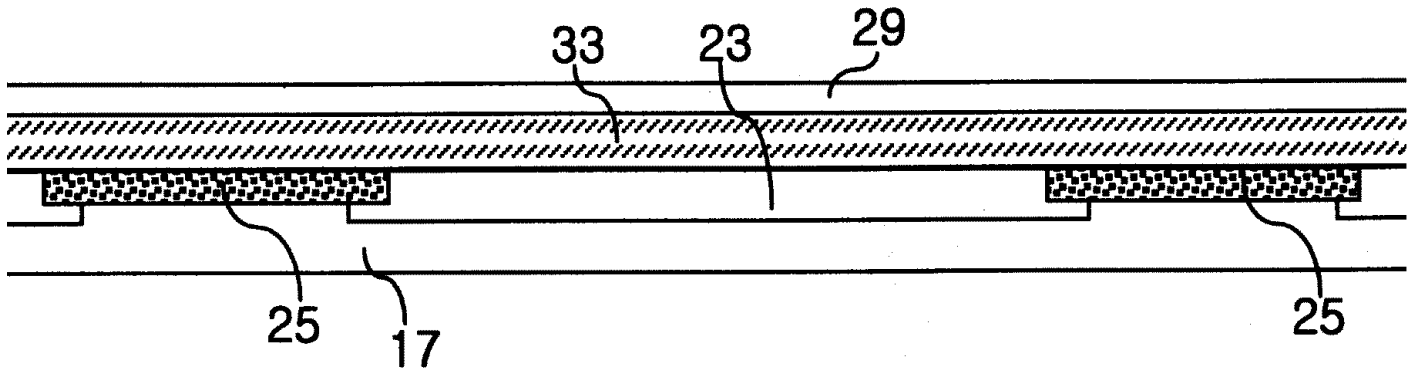
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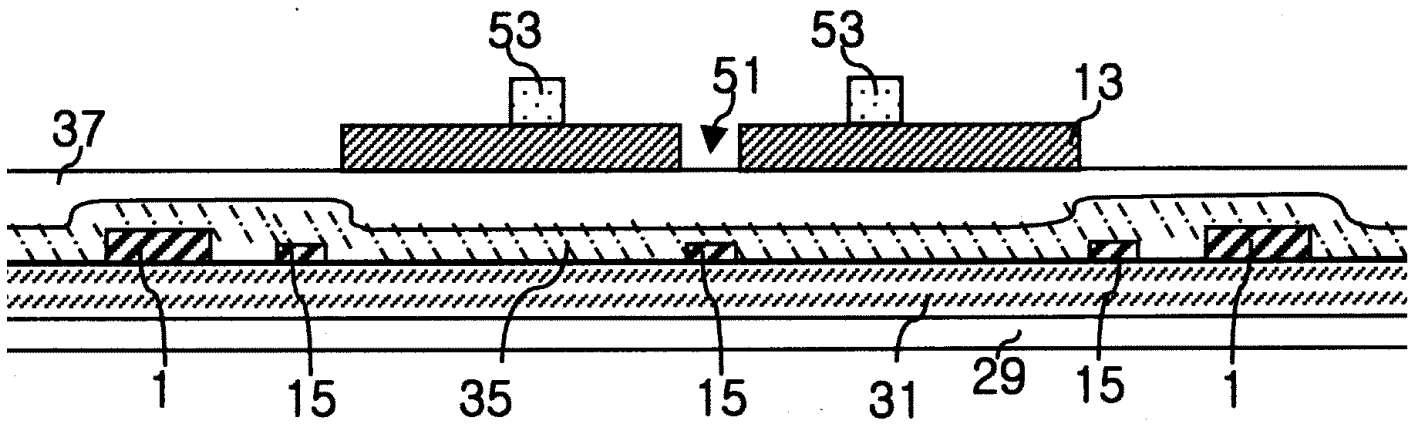
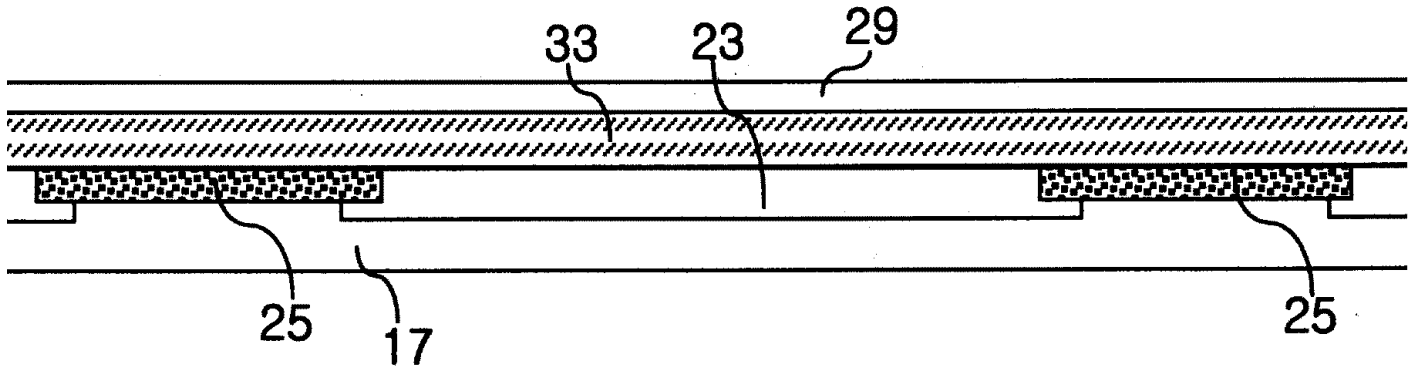
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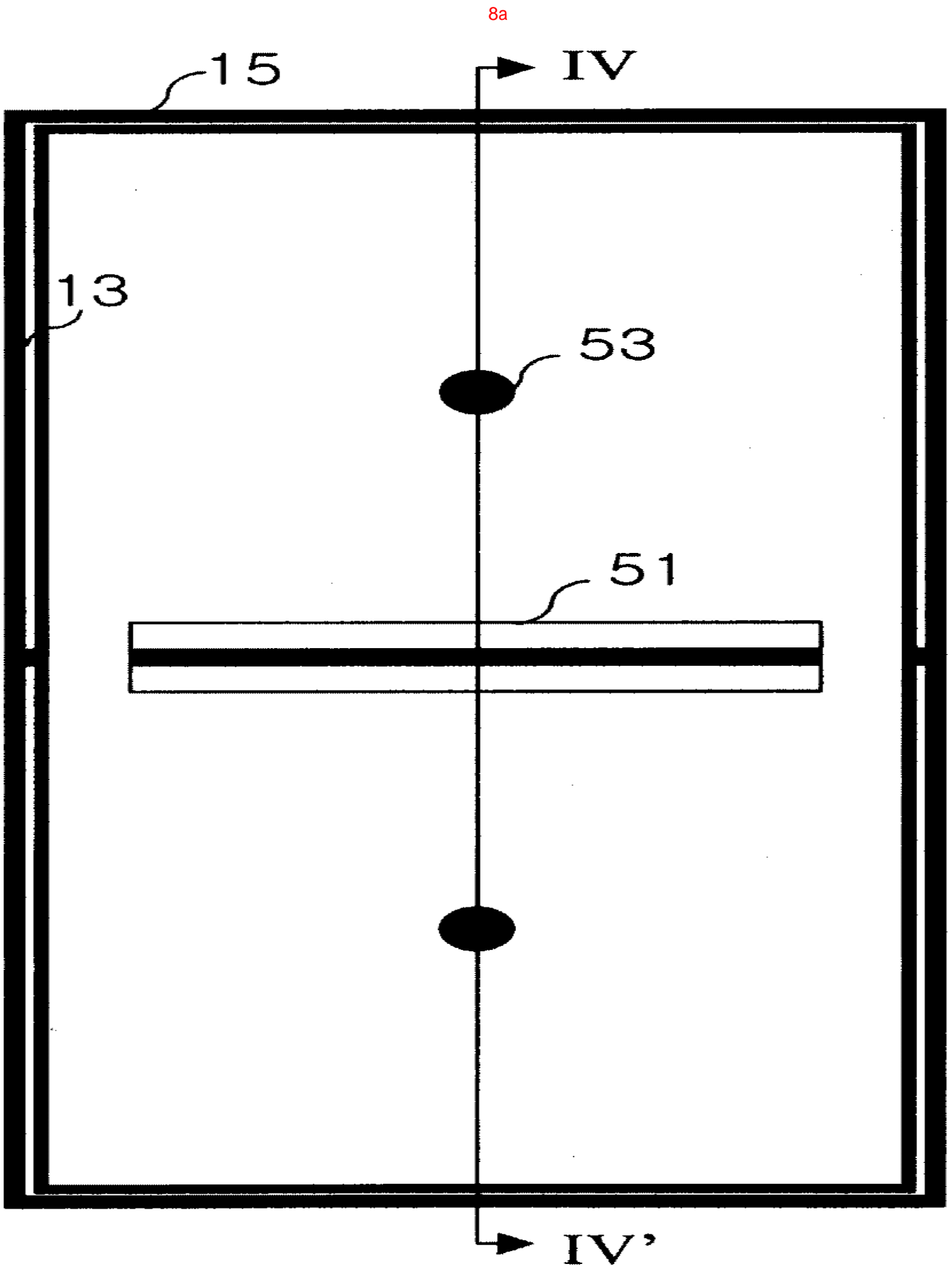


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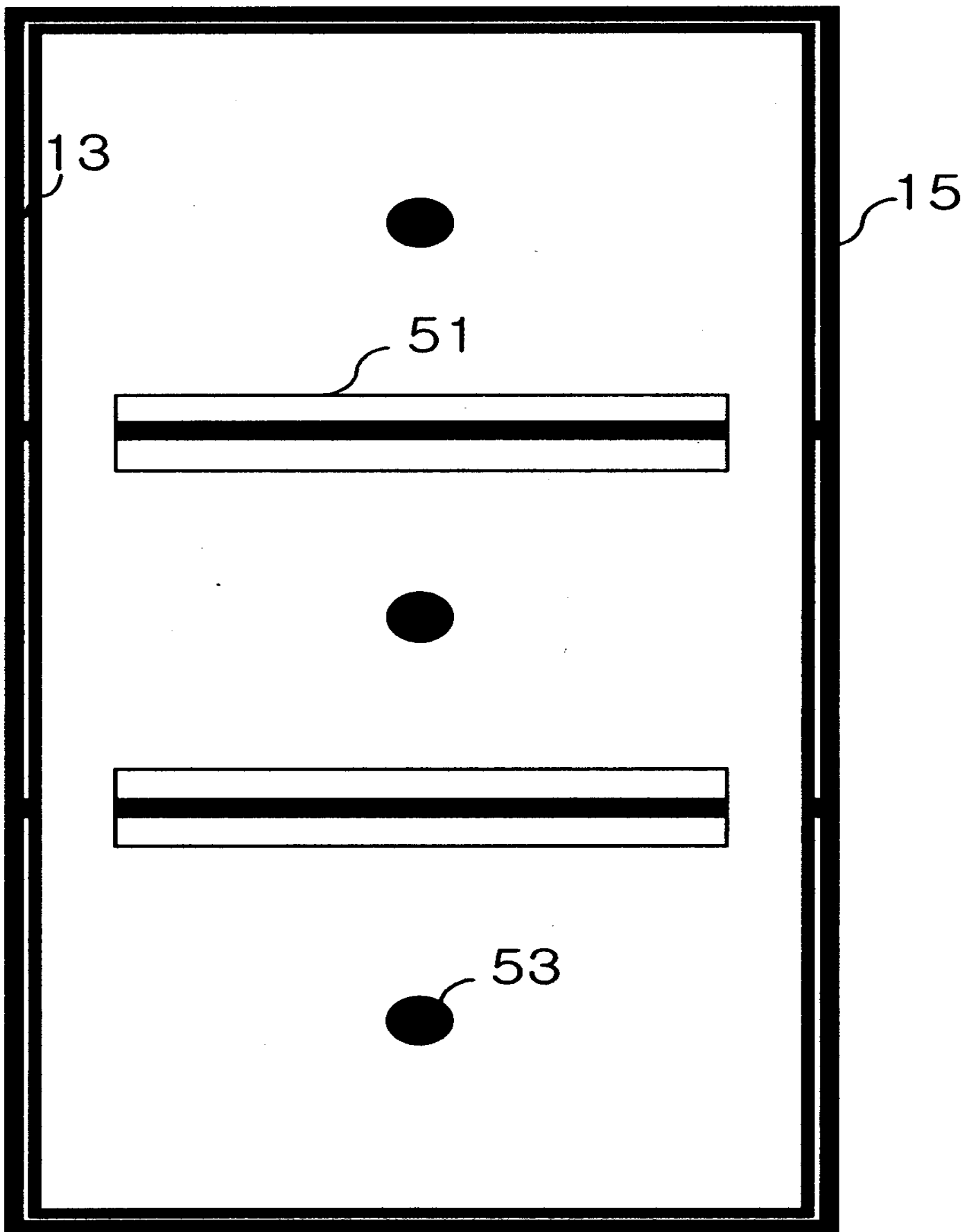


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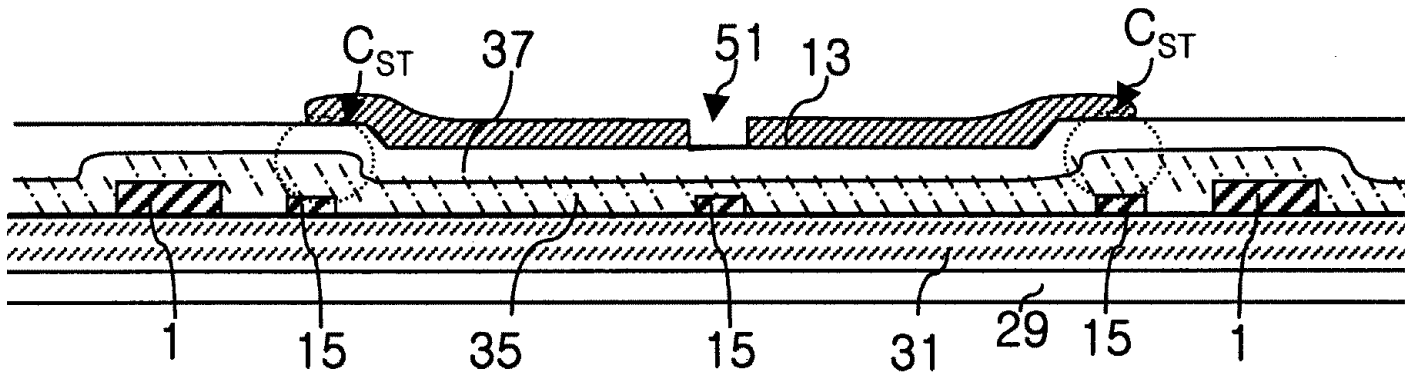
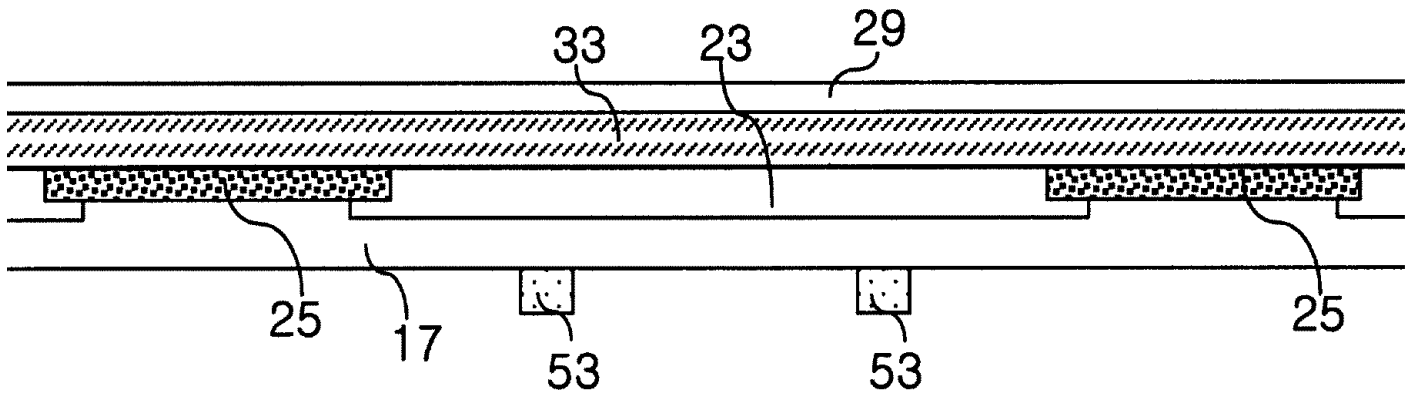




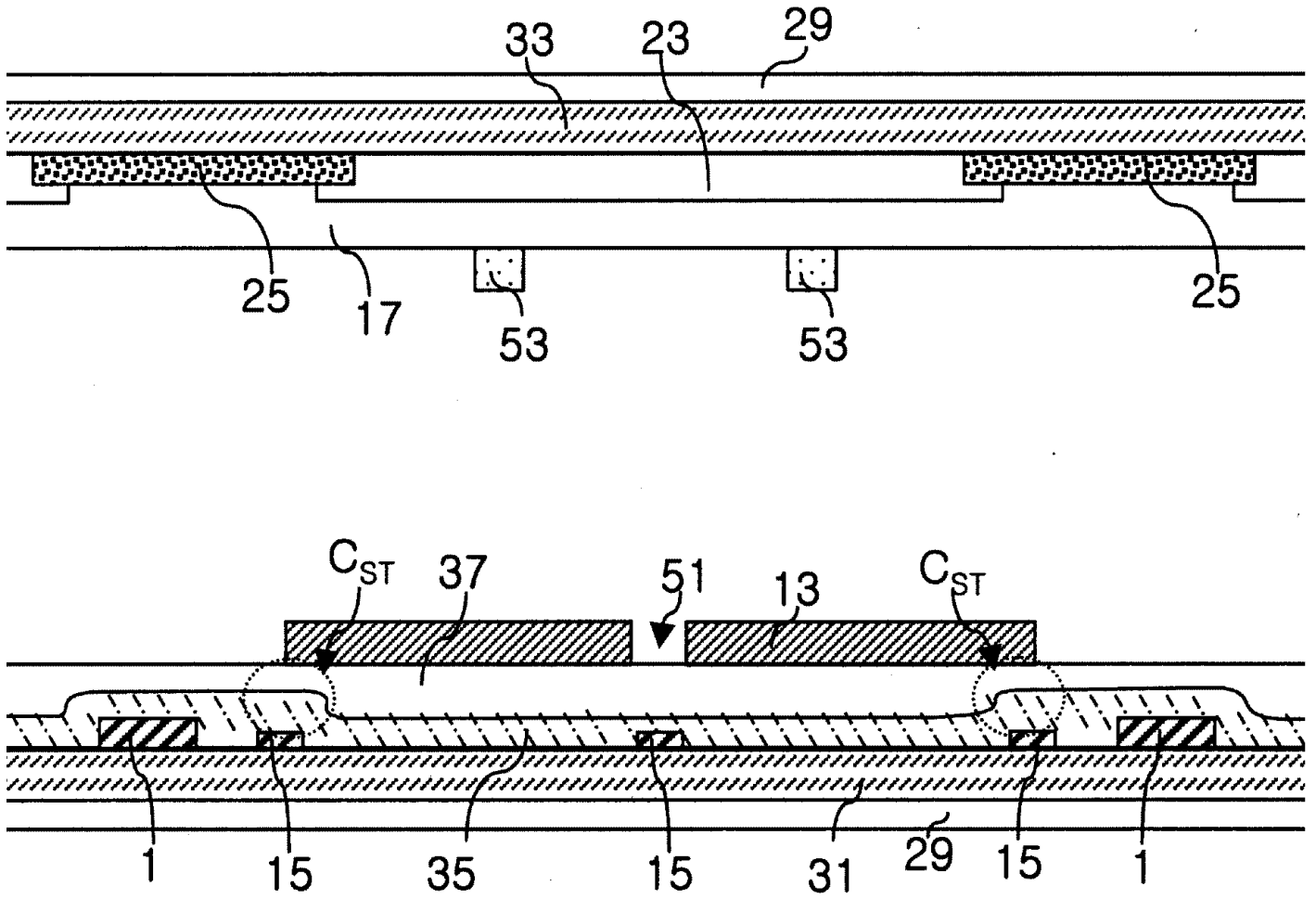
8b

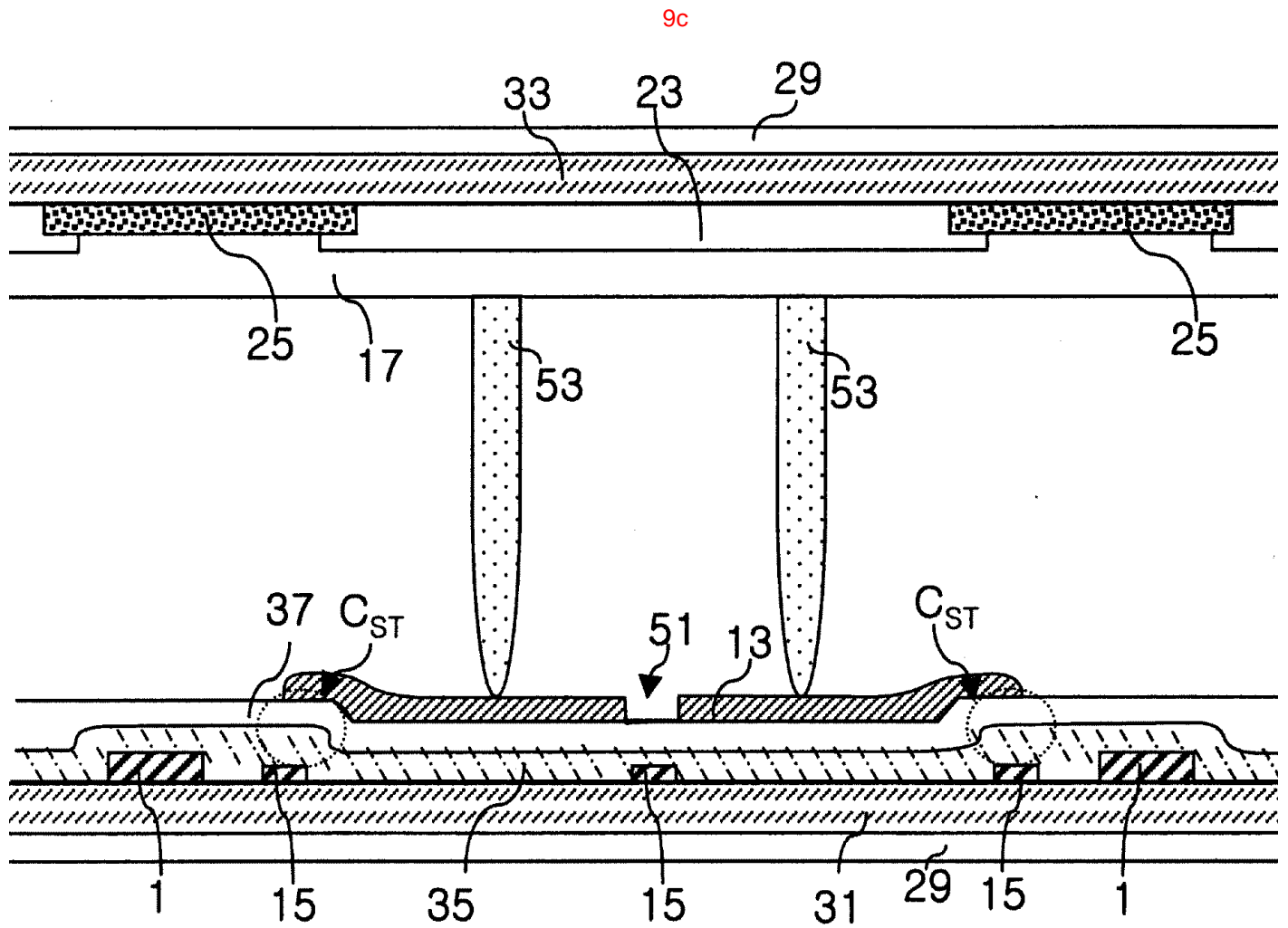


9a

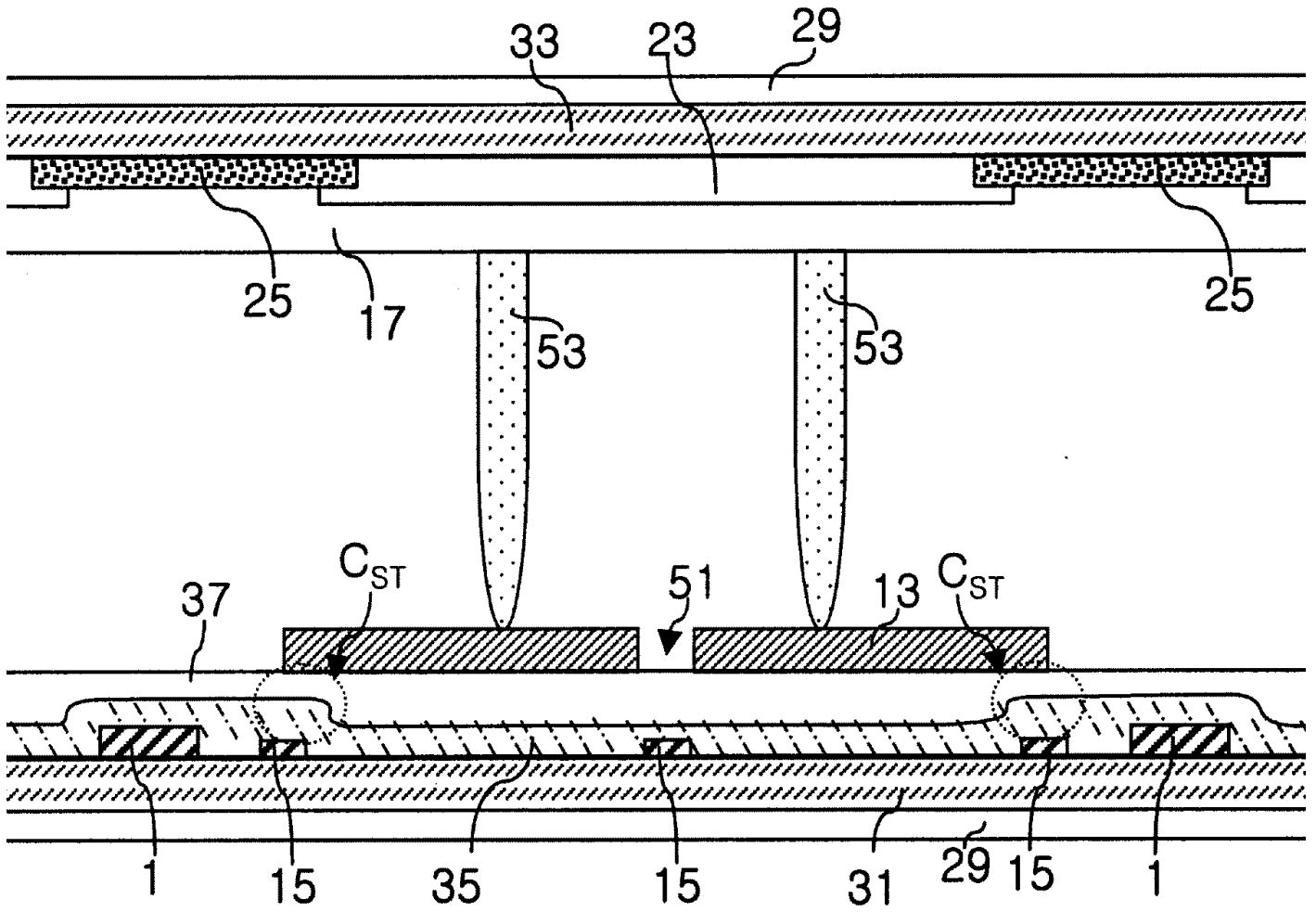


9b

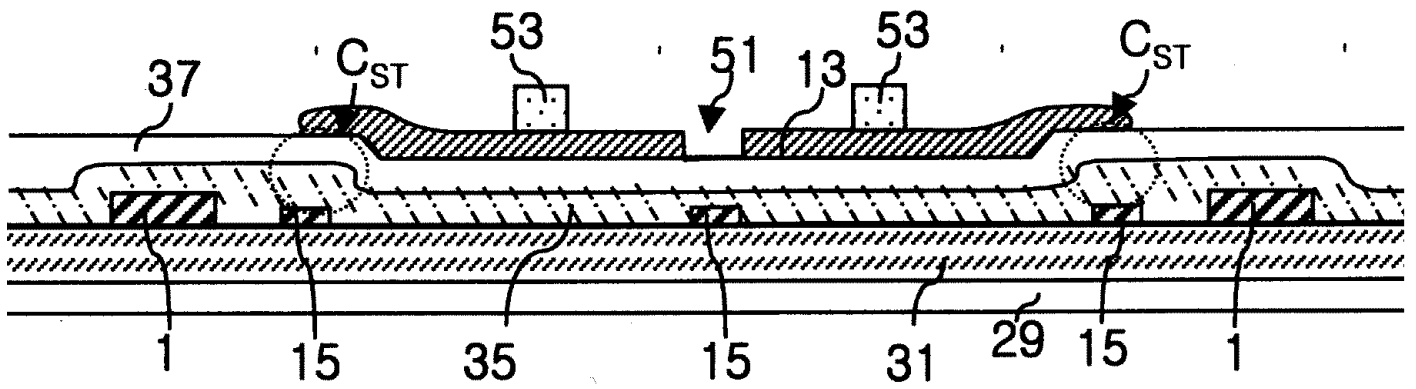
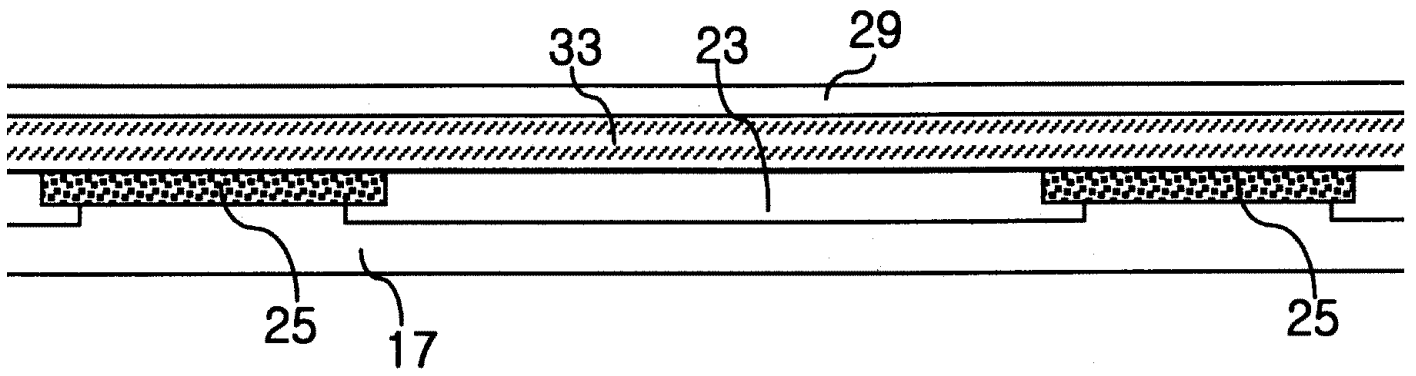




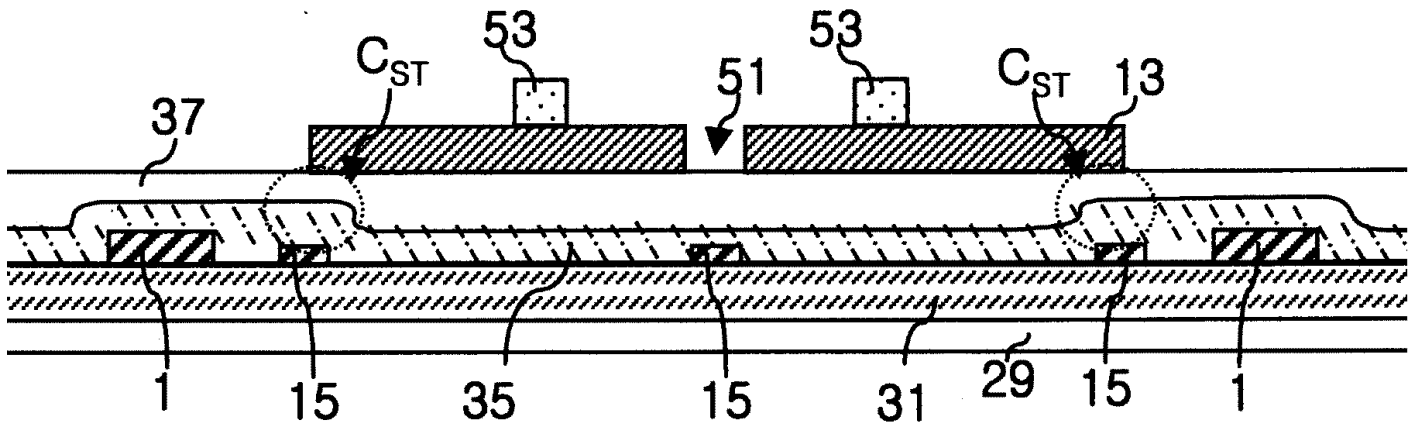
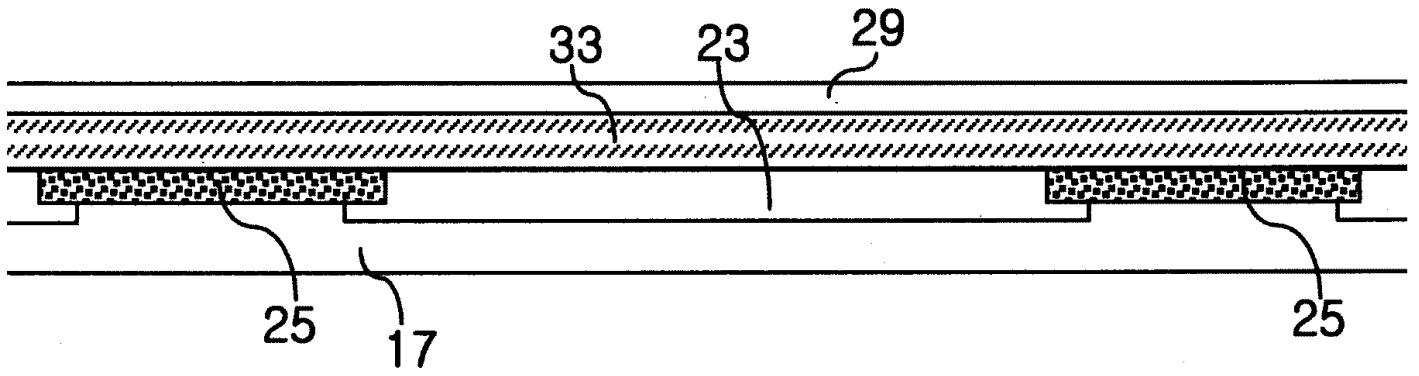
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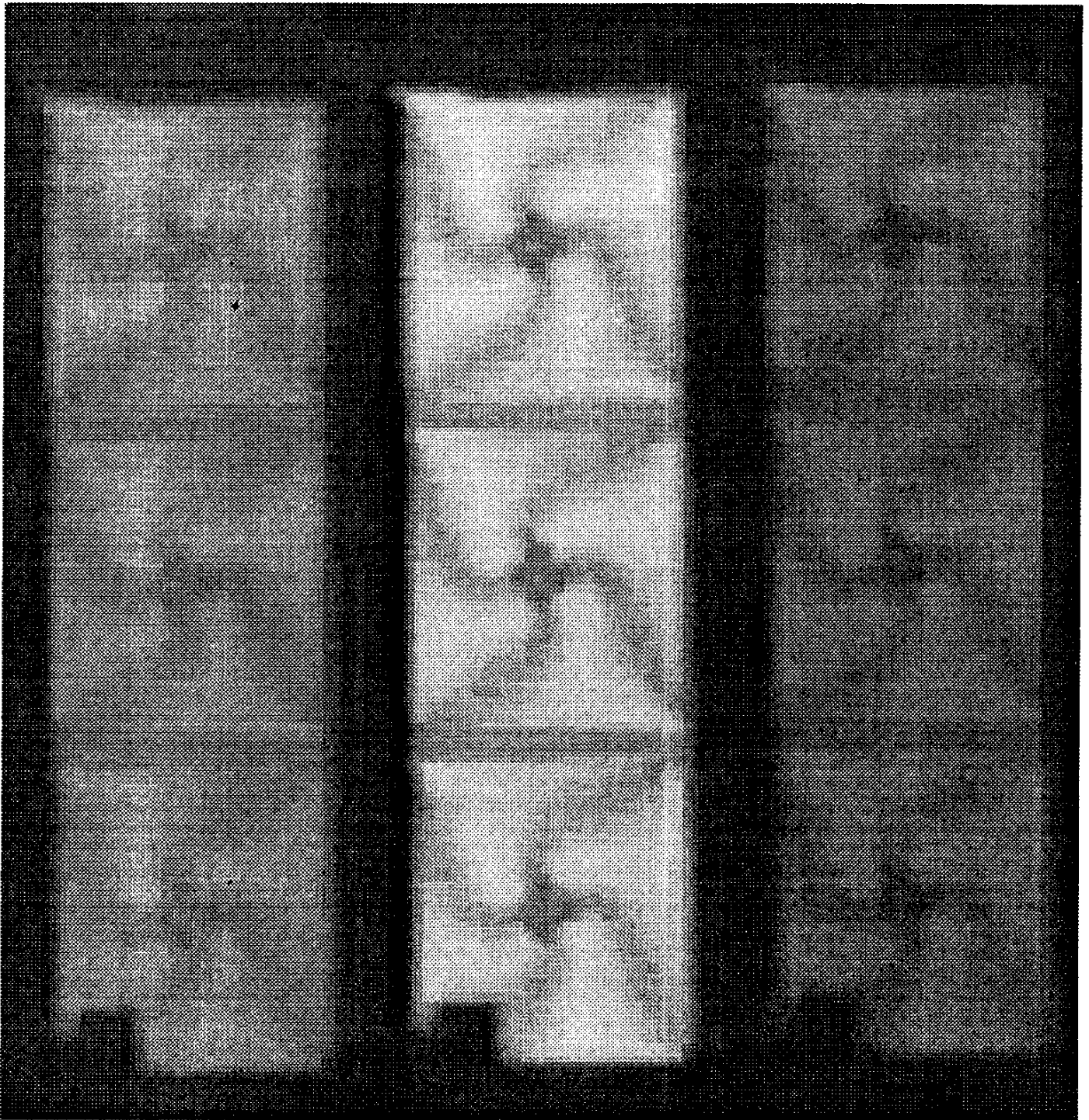
9e



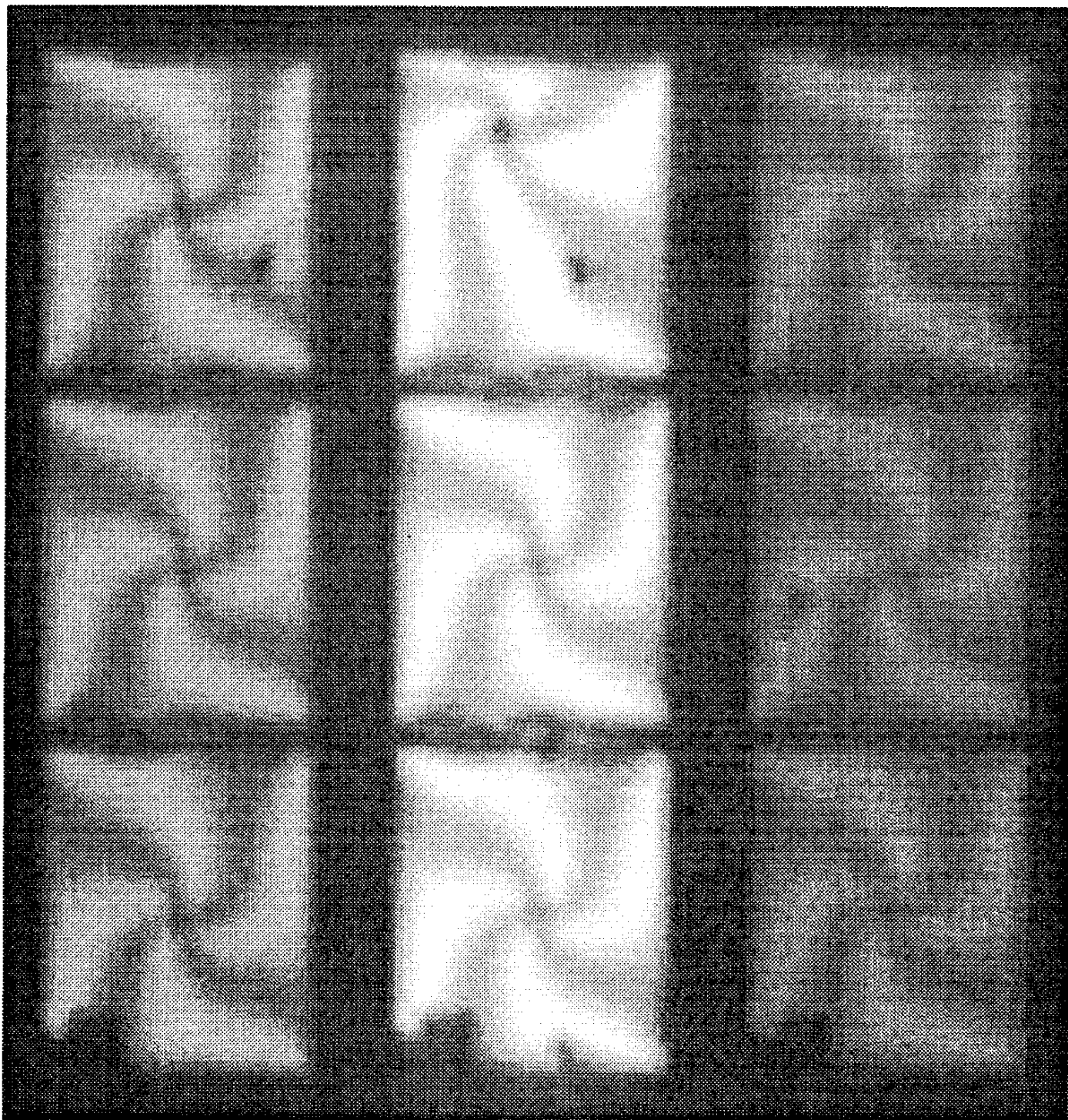
9f



10a



10b



专利名称(译)	多域液晶显示器		
公开(公告)号	KR1020010069132A	公开(公告)日	2001-07-23
申请号	KR1020000001403	申请日	2000-01-12
[标]申请(专利权)人(译)	乐金显示有限公司		
申请(专利权)人(译)	LG显示器有限公司		
当前申请(专利权)人(译)	LG显示器有限公司		
[标]发明人	KIM KYEONGJIN 김경진 LEE YUNBOK 이운복		
发明人	김경진 이운복		
IPC分类号	G02F1/13 G02F1/1339 G02F1/139 G02F1/136 G02F1/1343 G02F1/13363 G02F1/1337 G02F1/137 G02F G02F1/1333		
CPC分类号	G02F1/133707 G02F1/1393 G02F1/134336		
代理人(译)	金勇 新昌		
其他公开文献	KR100587364B1		
外部链接	Espacenet		

摘要(译)

本发明的多畴液晶显示装置包括面对的第一基板，第二基板和上述第一基板，以及公共侧电极，其形成为围绕上述形成的像素区域在至少一个电场感应窗口中，其划分形成在液晶层内的上述像素区域，形成在第二基板和多个栅极布线之间，并且限定像素区域数据线的的数据线形成为长度和在上述像素区域和上述像素电极内形成的上述第一基板和像素电极上的宽度相互独立，并且与上述栅极布线和公共电极形成相同的层。上述第二基板和至少一个介电结构，其使施加有电场感应窗的电场失真液晶层形成在像素区域的中心部分，电场感应窗口与其相互独立，并且上述第一基板和在第二基板之间形成的取向层在至少一个基板上形成。公共侧电极，电场感应窗和介电结构。

