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(21) 10-2004-0037819
(22) 2004 05 27

(30) JP-P-2003-00149482 2003 05 27 (JP)

(71) 가 가 가 , 1753

(72) 가 가 가 1753 ,

(74) :

(54) 가 L C D

LCD TFT (11) (12) LC TFT (11)
(13) (14) (17)
(14) (15) 가 TFT (11)
가 TFT (11)

1a

1a 1b 1 LCD
2a 2b 2 LCD
3 LCD
4a 4f LCD LCD

5 3 TFT

6 TFT

7a 7b LCD

8a 8b LCD

1 : 1 2 : 2

3 : ITO 4 : 1

5 : 2 6 : 1

7 : 2 11 : TFT

12 : 13 :

(LCD) , LCD LC
가 - 가 LCD
LCD D , LCD (AM-LCD) 가 LC
(11) (12) (LC) TFT (11) (13) TFT (14)
(13) (13) (17) (13) (14)
(15) (16) (16) (15)
(12) TFT
4a 4f 3 LCD TFT
(23)(4a) 1 (22) 1
(24) 1 (23) 1 (41)
(42)(4c) 2 (25), (26), 2 (27) 2
(28, 29) (26) 4d 2 (42) (4e)

(26) (30) (31, 32)(4f) 2 (42)

LC LC TFT TFT

가

5 (52) (43) () (55) 가 (51)

43) (52) (51) 가 ()

52) , 가 RD , (52) , (

(43) () (55) (

가) , 가 ,

, 가 (52) .

6 (52) 가 (51)

(52) RD , 6 (53)

'A' 'B' (3) (段) (54) 'B' (54)

'A' (55) (54) , (53)

'B' (54) 'A' 'B' 'A'

7a , 7b 7a

A-A' (4f 21)

2 , 1 (7)(4f 27), (1)(4f 23), 1 (6)(4f 24), 2 (2)(4f 42),

1 (1) 2 ITO (3)(4f 31) . 1 (6) 2 (7) ,

, ITO , 1 (3) (4) 2 (15) 2 7a , (2) , 1 (4) (

) 2 (5) .

8a 8b 7a 7b , 1 (1), 1 (6), 2 (7),

ITO (3) , 1 (6) 2 (7) , 1 (4) ,

8a , ITO (3) , 1 (1) , 1

(4) 7

7a 7 b 8a 8b , 1 (6)

2 (7) , ITO (3)

1 (6) 2 (7)

가 LCD

LCD

TFT , 2001-311963 ,

TFT

(1).

1997-43629 ,

가

(1).

2001-311963 , , 가 ITO

LDC .

1997-43629 가 LCD ,

가 ,

가 , LCD 가

- 가 LCD -

(LCD) , (LC)

1 2 , 1 가 2 1 1

2 , 2 가 LCD

LCD , 2 1 , 1 2

가 ,

1a 1b , 1 LCD 3 (11) (12) LC

3 LCD AM-LCD , LCD TFT

TFT (11) (13) (13) (14) . TFT (18) (17) (

13) (14)

(13) (15) , (16) (15) (14)

(16)

(12)

LCD ,

가 1 2 ,

1b 1 (4) 가 1 (6), 1 (1), (1)

(4) 2 (2), 2 (4) 1 (1)

2 (7) 2 (5) 2 (2) ITO 2 (3) (5) 가 1

(3) 2 (7) , 2 (5) ITO . ITO

2 (5) 1 (4) 가 ,
) 2 (5) ITO (3) ITO (3
 (3) (3) 'a' 1 (1) (1), 1 2 (5) 'a' ITO
 (3) 1 (1) (2) 2 (2) 1 (2) (4) ITO 2
 (5) 1 (1) 2 1 (4) (3) 4
 , 1a 1b 가 LCD 4a 4f
 1 (6) 1 (1) (6) 1 (1) (6)
 , 1 (6) (3 14) 1 (6)
 , 1 (4) 2 (2) 가 2 (2) (7) 2 (5)
 , ITO (3 17) ITO (3) 2 (5) 1 ITO (4) (3)
 가 , LC LCD
 TFT (3) , TFT 가 가
 , TFT (11) (12) LC , LCD
 , 가 (10) , 1a 1b
 가 , 2 LCD (7) , TFT (11) ITO (3)
 2a 2b , 2 LCD
 RD 2a RD 2b , ITO (3) 2 (5) 1 (4) (5) 2
 RD (7) 4 (3) 4 가 1a 1b (5)
 ITO (3) (5) RD (2) ITO (3) 1 (1) 2 ,
 1 (4) , 2 (4) ITO (3) 1 (3)
 , ITO (3) , ITO 6 (3) 1 (
 4) , 가 가 , ITO (3)
 1 (4) 1
 LCD , 1 , 1 2 1

가

1

(1) (段)

(2) ITO

'a'

가

(3) 1

2

가

LCD

2

(7)

AM-LCD
(6)

8a

1
8b

(段)

, ITO

'a'

,

1

2

(57)

1.

LCD)

(11)

(12)

(LC)

(

(11)

(10),

(10)

(13),

(13)

(14),

(13)

(14)

(17),

(13)

(14)

(43)

가

1

2

(6, 7)

1

2

(4, 5)

1

(1)

(1),

(3)

,

(3)

1

(4)

2

(5)

(11)

,

가

2.

1

(2)

2

(7)

2

1

(2)

(1)

1

(3)

(4)

(3)

1

2

(1)

3.

1

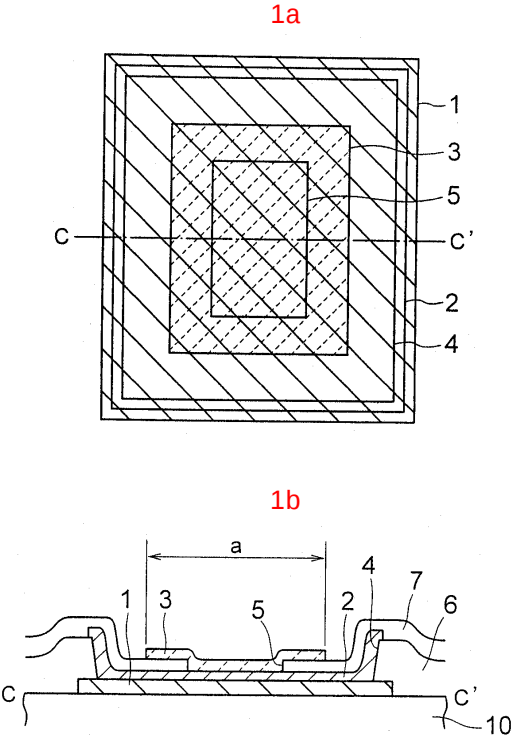
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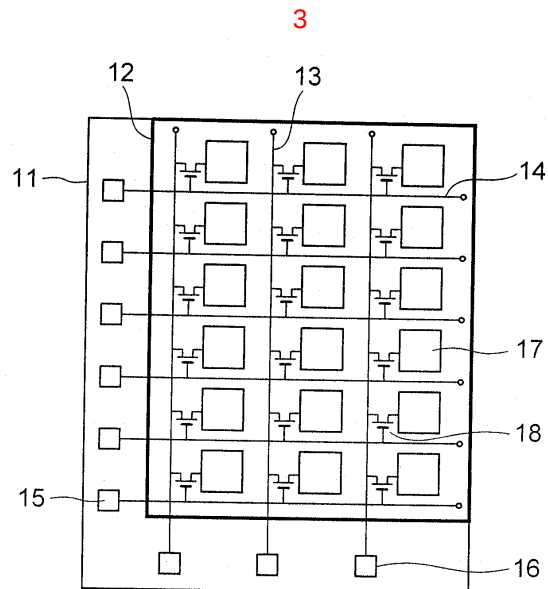
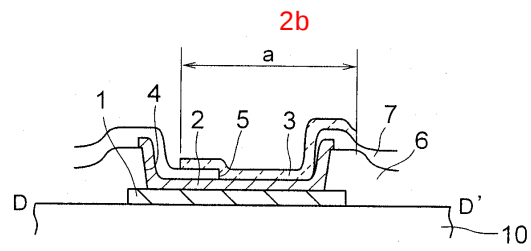
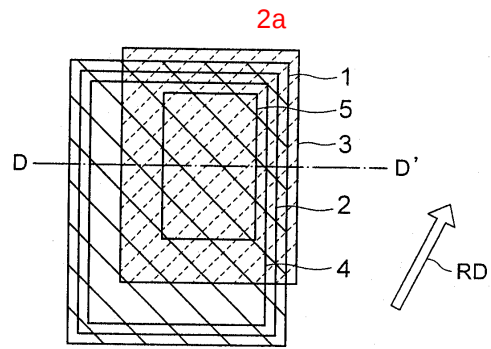
1

(4)

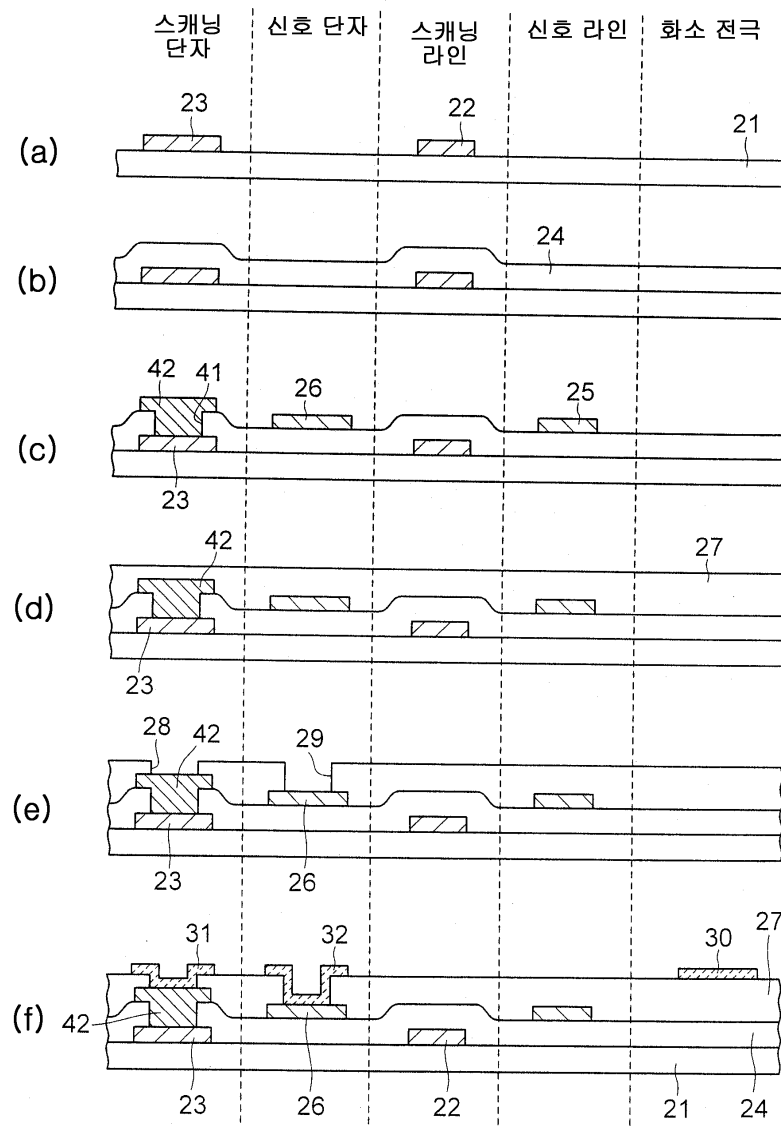
4.

- 1 ,
(3) 1 (4) , .
5.
4 ,
(3) 1 (4) , .
6.
5 ,
(43) 가 , (3)
7.
4 ,
(3) 1 (4) (43)
8.
7 ,
2 (5) 1 (4) , .

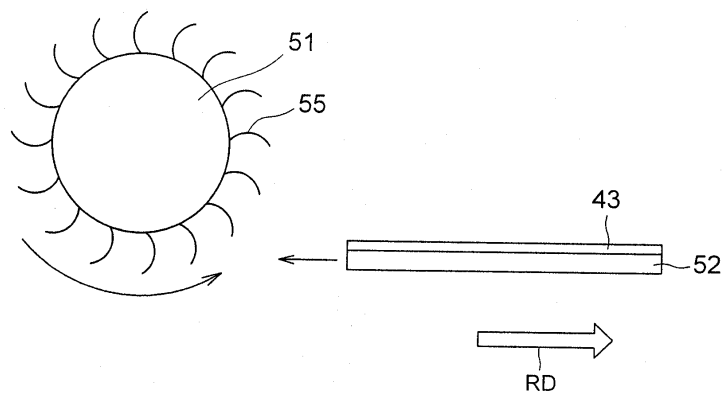




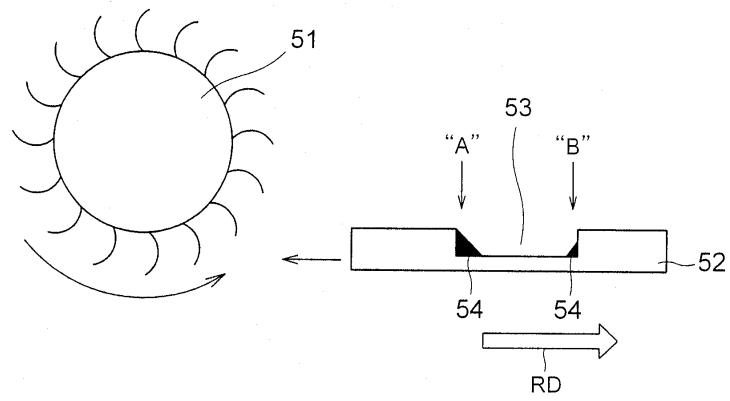
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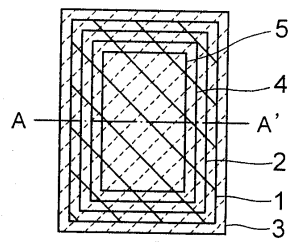
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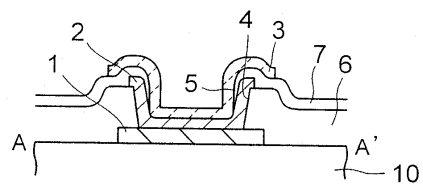
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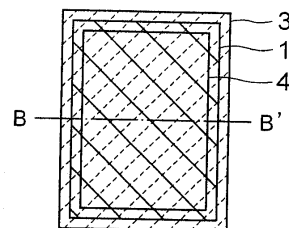
7a



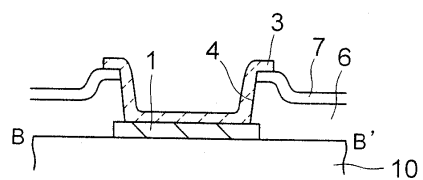
7b



8a



8b



专利名称(译)	带小型车的液晶显示装置		
公开(公告)号	KR1020040102344A	公开(公告)日	2004-12-04
申请号	KR1020040037819	申请日	2004-05-27
[标]申请(专利权)人(译)	NEC液晶技术株式会社		
申请(专利权)人(译)	日元号技术可否让这个夏		
当前申请(专利权)人(译)	日元号技术可否让这个夏		
[标]发明人	YOSHIKAWA TAE		
发明人	YOSHIKAWA,TAE		
IPC分类号	G02F1/1368 G02F1/1362 G02F1/1345 G02F1/1337		
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优先权	2003149482 2003-05-27 JP		
其他公开文献	KR100649915B1		
外部链接	Espacenet		

摘要(译)

LCD装置包括TFT基板11和相对基板12，并且在它们之间插入LC层。
TFT基板11具有由多条信号线13和多条扫描线14限定的像素电极17的阵列。扫描线14的每个端子15连接到驱动电路的端子，提供具有小的电平差的TFT基板11。从而防止在摩擦过程中产生的灰尘以较小的高度差粘附到TFT基板11上。图1a 指数方面 液晶显示装置

