

(19)
(12)(KR)
(A)(51) 。 Int. Cl. ⁷
G02F 1/133(11)
(43)2002 - 0022129
2002 03 25(21) 10 - 2001 - 0056783
(22) 2001 09 14(30) JP - P - 2000 - 0028
1012
JP - P - 2000 - 0036 2000 09 14 (JP)
1080 2000 11 28 (JP)(71) 가 가
가 가 6 7 35

(72) 가 가 6 7 - 35 가 가

(74)

:

(54)

가
가 TFT
A; B;
C; C
D , , , ,
D ,

， ， ， ，

1a 1g .

2 TFT .

3a 3b .

4 TFT .

5 TFT .

6 L/S .

7 L/S ,

8 .

9 .

10a , 10b

11a 11b .

12 .

13a 13h .

* *

5 : 6 :

9 : 12 :

()

， ， TFT

()

FT , TFT 13 . 13 T

(G) 13a (Cs) (10) (2) (3)

(G) (3) (4)

(TFT) (3)

(5) (5) (13b). (5) (6)

(5) 가 (13c). (5) (H₁) (13d). (6)

(H₁) TFT (D) (H₁) (S) (S₁) , (13e).

(7) (S₁) (D₁) 2 (H₂) (13f). 1 (7)

(7) (D₁) 3 (H₃) (8) (13g). 1 2 (7, 8)

2

Al, Ag (10) (13H).

TFT . TFT ,

13 TFT

1 2 (7, 8) (10) (5)

3 , TFT (S) (D) (10) (10)

가 가 가

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TFT

,

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TFT

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가

가

가

TFT

B;

A;

C;

C

D

C

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D

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D

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E;

F;

G

F

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D

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E;

G_y

.

,

D

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E_x ;

,

G_x

.

TFT

,

가

.

1/4

1

TFT

1a

, Mo, Cr, Al, Ta, W

(1)

(G)

(Cs)

CVD

(2)

(3)

(2)

(2)

. 1 %

(3)

(4)

(G)

(4)

(2)

(G)

(G)

(S)

(D)

. TFT

TFT

A D

A:

(5) CVD

(1b).

B:

(5)

(6)

C:

(6)

(1c).

(6)

(S)

(D)

(5)

(H1)

(6)

(6)

6 / (" L/S")
 7 , L/S
 , x L (μm) / S (μm)
 1200ms
 = 0.25 μm s = 0.50 μm 0.6 μm

6 L/S 8

(21)
 22 (22)
 (6) 10b
 가

가
 11a
 (6)
 (6)

12 (6)
 (6)

(5) (6) ((6)
 6) (5) D가
 D: (5) C (6)
 E ICP - (5) (5) RI
 (5) (H₁)
 (1d).

(5) D
 (5) TFT
 . TFT

TFT (S) (D)

1e 1g , D

E G

E: Al, Ag, Al ,

(11)

(H₁) (S)(S₁) ,(H₁)

(D)

(D₁) ,

(1e).

Al, A

g, Al , Ag

Cr, Mo, Ti, Ta, W

가

F:

(12)

(10)

(D₁)

(12)

(1f).

(12)

F ,

(12)

1/4

(12)

(10)

(12) 2

TFT

G: 1g

(9)

(12)

TFT

(9)

ITO

(9)

(10)

(10) Ag₂S

(precipitation)

(H₂)

(10)

TFT

(12)

F ,

(12)

(12)

(D10

(12)

(6)

C

(12) 3a

(12) , G , (9) (12) TFT
 TFT , (10)
 (12) (9) (10)
 가 , (10)
 S1), , (D1) 4 (10) E TFT , (,
 G (9)
 , (5) D , E_x G_x , 5
 , (9) (10) TFT
 E_x; (H₁) (S) (S₁) , , (H₁) (D)
 (D₁) , (10) (9)
 G_x; (10) (9) (19) Al, Ag, Al , Ag
 (11) (9) ITO가 , Mo Ti ITO ,
 , 가 가 , -
 TFT , - TFT
 , TFT
 ,
 ,
 가 , , ,
 , ,
 , Ag
 ,
 ,

1.

TFT

가

가

TFT

A ;

B ;

C ,

가

C ;

D , C

2.

1 , C (reflow) , D .

3.

1 , C 가 , .

4.

1 , D , , E ;

F;

G , .

5.

4 , F , , ,

,

.

6.

4 5 , 1/4 가 ,

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7.

1 , D ,

, ,

,

E;

G_y ,

.

8.

4 , D ,

, ,

,

E_x ;

G_x ,

.

9.

TFT , 가

,

,

.

10.

9 , ,

.

11.

10 , 1/4

,

.

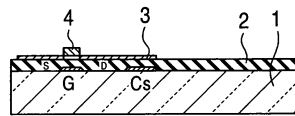
12.

11 ,

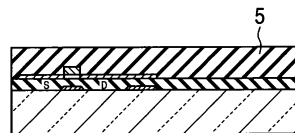
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13.

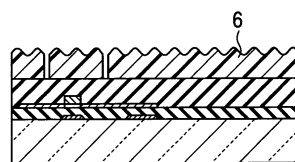
1a



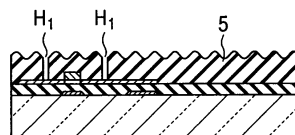
1b



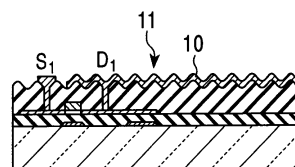
1c



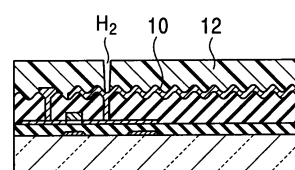
1d



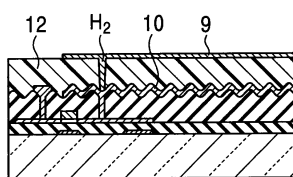
1e



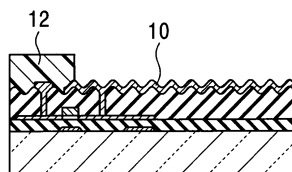
1f



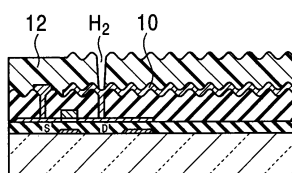
1g



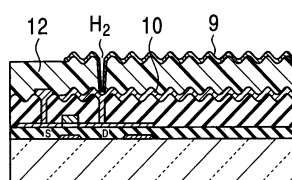
2



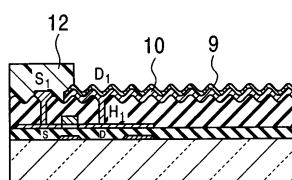
3a



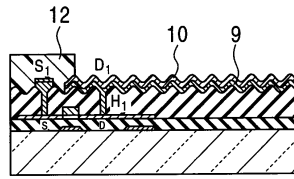
3b



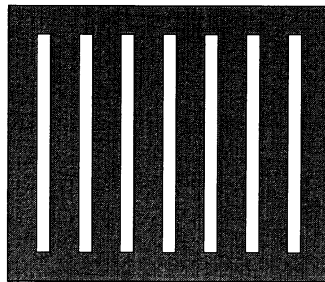
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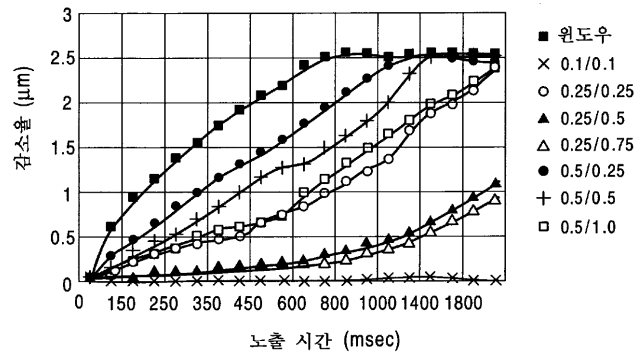
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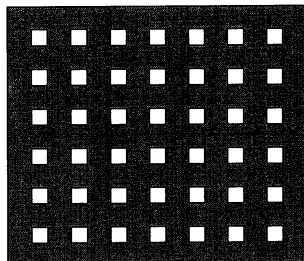
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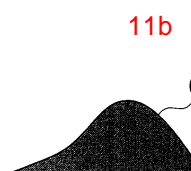
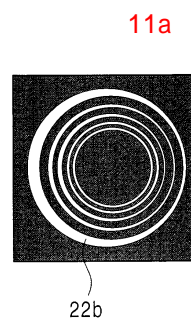
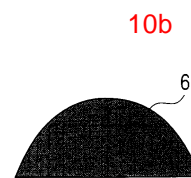
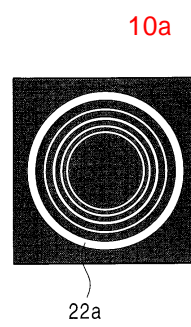
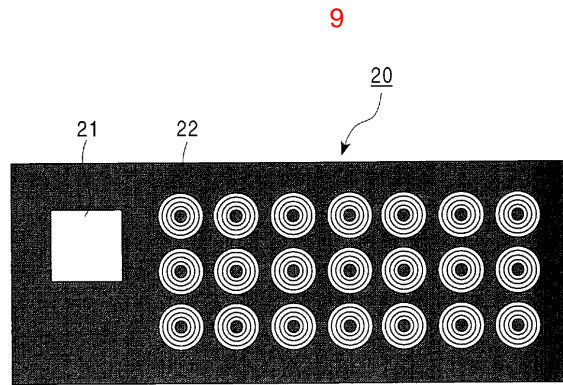


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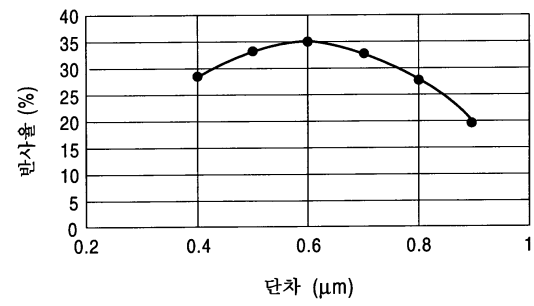


8

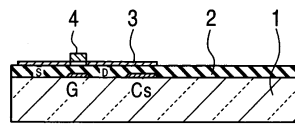




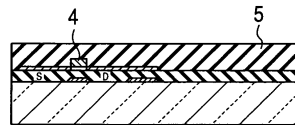
12



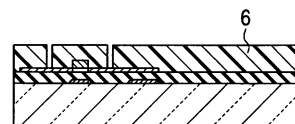
13a



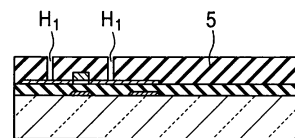
13b



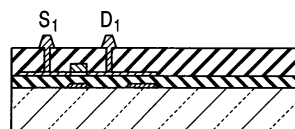
13c



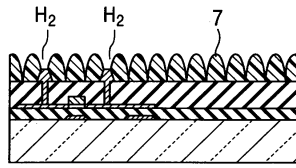
13d



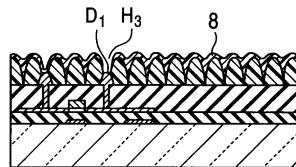
13e



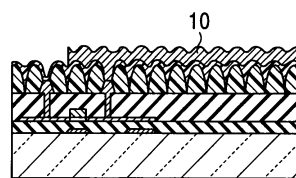
13f



13g



13h



专利名称(译)	反射式液晶显示装置		
公开(公告)号	KR1020020022129A	公开(公告)日	2002-03-25
申请号	KR1020010056783	申请日	2001-09-14
[标]申请(专利权)人(译)	索尼公司		
申请(专利权)人(译)	索尼公司		
当前申请(专利权)人(译)	索尼公司		
[标]发明人	FUJINO MASAHIRO		
发明人	FUJINO,MASAHIRO		
IPC分类号	G02F1/1362 G02F1/1368 G09F9/30 H01L21/336 G02F1/1335 H01L29/786 G02F1/133 G02F1/136 G02F1/1343		
CPC分类号	G02F1/133553 G02F1/136227		
代理人(译)	李，何炳 李昌勋		
优先权	2000281012 2000-09-14 JP 2000361080 2000-11-28 JP		
其他公开文献	KR100853633B1		
外部链接	Espacenet		

摘要(译)

本发明提供一种制造有源矩阵反射型液晶显示装置的方法，包括形成和处理层间绝缘膜。形成和处理层间绝缘膜包括：在硅膜上形成层间绝缘膜，在硅膜上形成TFT的源极和漏极；在层间绝缘膜上形成光致抗蚀剂层；C) 使用掩模对特定图案的光致抗蚀剂层进行图案化，所述掩模具有形成在与要形成的反射电极对应的分辨率极限以下的图案作为光致抗蚀剂层的光致抗蚀剂掩模；以及在步骤C中使用图案化的光致抗蚀剂层作为蚀刻掩模蚀刻层间绝缘膜的步骤D。在步骤D之后，沉积用于同时形成源电极，信号布线，漏电极和反射电极的金属膜。以这种方式可以简化制造方法，并且提高生产率。

2 指数方面 - 1 - 源极，漏极，反射电极，绝缘膜，金属膜

