

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

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(22) 2002 04 17

(71) . 20

(72) 224-1LG 204 419

(74) :

(54)

1000 ; 2 3000 , 1 ; ; 1
2000 ; ;
;

3b

1 .
2a 2e .
3 3e .
4 CVD .

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1: 3a: 1
3b: 2 3:

4a: 4b:

4: 5a:

5b: 6:

7: 8:

9: 11:

or) (Active Matrix) (Thin Film Transist
가 가
(Lap - Top)
(6) , 1 (19) (10)
(30) (20) , (10) (12) (7)
(10) 가 (19)
(4a) 가 가 (2) ,
(4) , (4a) n+ (ohmic contact layer)(4b)
(4) 가 (2) (5a) , (3) ,
(5b) , (5a) (5b) (8) (5b)
(11) (9)
, (19)가 (19) 가
(9) 가 ITO
(5) 가 (2a) (high level) 가 가
(5b) (channel) (5a) 가 (5)
, (2a) (low level) 가 가 (5)
(5b)
,
2a 2d , 2a , 2a
hing) , (10) , (photo resist) , (photo-etc
(pattering) (2)
, 2b , (2) (10) 2000
1 (3a) , 1 2000
2 (3b) , 4000 1

2 (4000) (3b) (4b) (amorphous - Si)

(4a) (P) n+ (4) (5a) (5b)

2c (4) (3) (5b)

2d (8) (4a) (8) (5b)

(3) (11) (5b)

2e (8) ITO (9) (11) (5b)

1 2 , 9 (CVD:Chemical Vapor Deposi

tion)가 5 , 1 가 3 2

가 1 , 1 2

1 가 2 2 , 2

5 1 , 1 , 2

1000 , 2 1000 , 1 1 , 2

1000 ; 2 3000 1 ; 1

1000 ; 1000 ; ;

3a 3e

3a (1) (1) (2)

3b (2) (1) SiN SiO C

VD(Chemical Vapor Deposition) 3000 1 (3a)

CVD(Chmical Vapor Deposition) 4 A, B, C, D (23) ,

(23) (21) , (23) 3 CVD 가

(heater;25) , 3000 1 (3a)

1 (3a) 3 CVD 1 .

3c 1 (3a) 1 (3a) CVD (loading) 1

(3a) 2 2000 n+ (4)

5 CVD 2 5 2 (3b) (4)

n+

1 1 2000 2 (2000) (2000 +2000) 1

4 5 1 1000 1 1000 2

2 1000 가 .

1 3000 1000 1 2 1

가 2 가 .

(3b) 2 (3b) (4) (2) 2 (4)

(4b) n+ (amorphous-Si) (4a) (P) n+ .

(4) (4a) (5a) (5b)

3d (8) (8) (4a) (5a) (5b) (11)

3e (9) (8) ITO (9) (11) (5b)

가 가 (2) ; 3e (ohmic contact layer)(4b) 1

(4) ; (4a) (4) n+ 3000 2 (3b)

(3a) ; (3a) 1000 가 (5a) ; (8)

가 (3) ; (4) (5b) ; (5a) (9) .

(5b) (11) (9)

(19)가 (19) 가

가 (9) () ITO

(4) 가 (channel) (2) (high level) (5a) 가 가 (4)

(5b) .

(2) (low level) 가 가 (4)

(5b) .

, 1 2 2
3 1 2

2 1000 1 1 1000
1 2 가 .

(57)

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n+

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7.

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9

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8.

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1 ;

1 , 1 2 ;

2 2 ;

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, ;

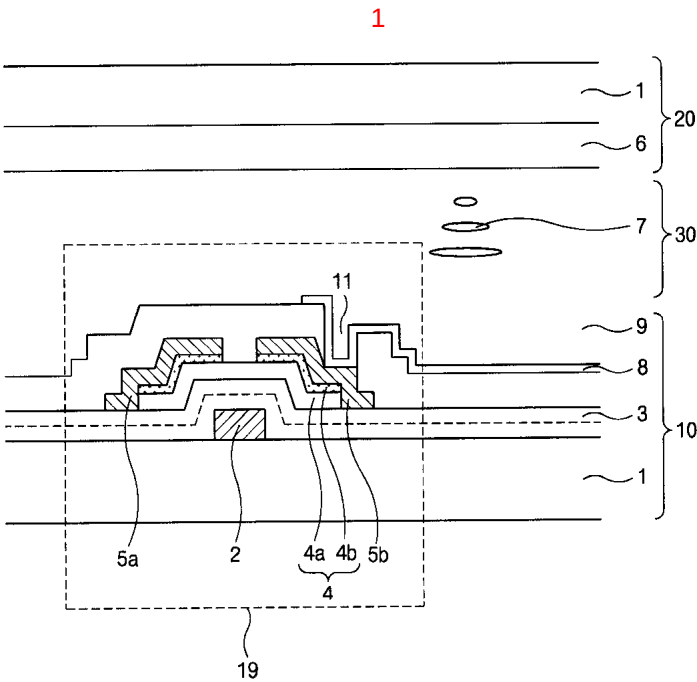
,

9.

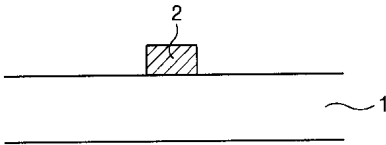
8 , 1 3000 .

10.

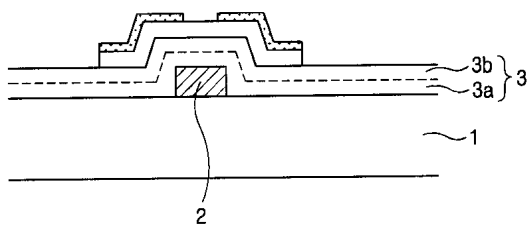
8 , 2 1000 .



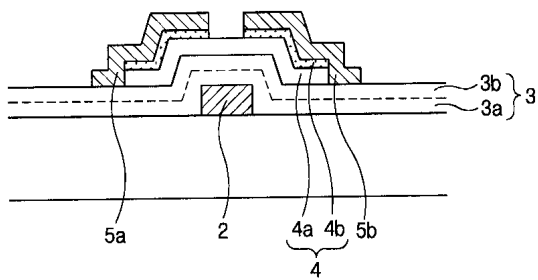
2a



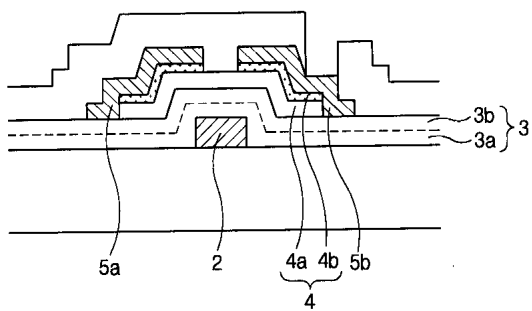
2b



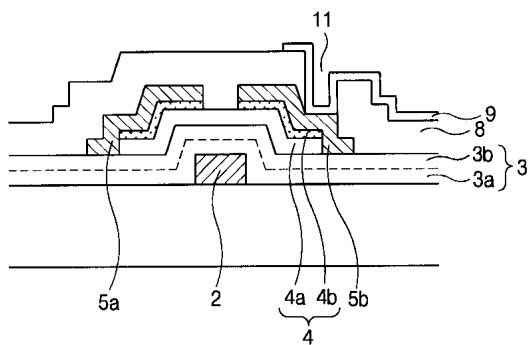
2c



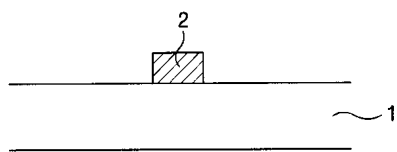
2d



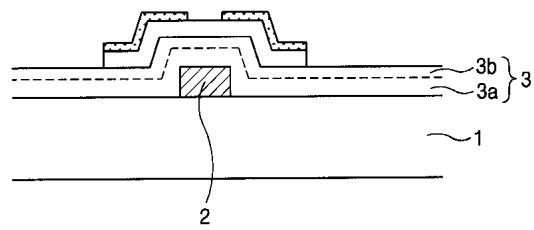
2e



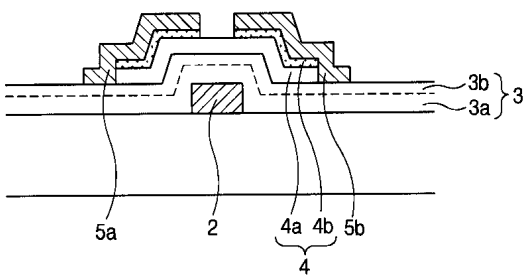
3a



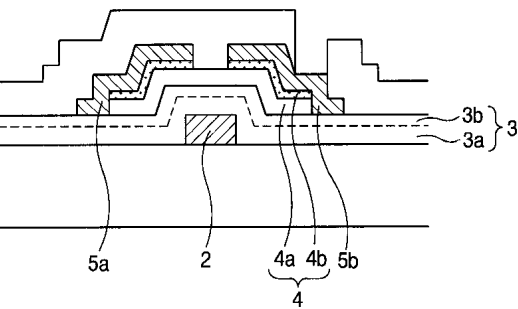
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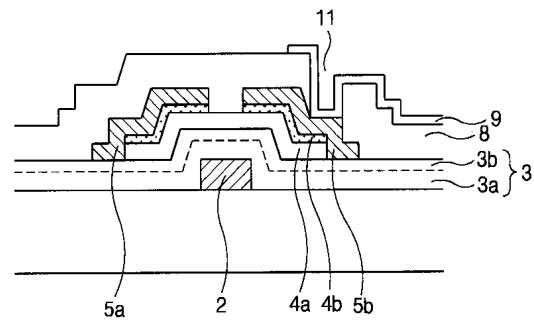
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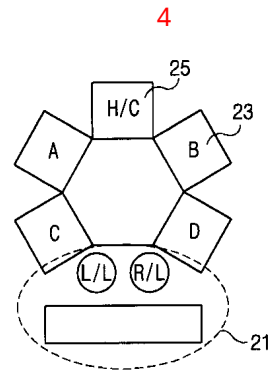


3d



3e





专利名称(译)	液晶显示装置及其制造方法		
公开(公告)号	KR1020030082325A	公开(公告)日	2003-10-22
申请号	KR1020020020990	申请日	2002-04-17
[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	HEO JEONGSOO 허정수		
发明人	허정수		
IPC分类号	G02F1/136		
CPC分类号	G02F1/133345 G02F1/1343 G02F1/136 G02F2201/123		
代理人(译)	PARK , JANG WON		
其他公开文献	KR100876402B1		
外部链接	Espacenet		

摘要(译)

液晶显示装置的制造方法技术领域本发明涉及一种液晶显示装置的制造方法，包括：制备基板；在基板上形成栅电极；在栅电极上形成厚度为3000埃的第一栅极绝缘膜；在第一栅极绝缘膜上形成厚度为1000埃的第二栅极绝缘膜和厚度为2000埃的有源层；在有源层上形成源电极和漏电极；在源电极和漏电极上形成保护膜；并且形成连接到保护膜上的漏电极的一部分的像素电极。图3b

