

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

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G02F 1/13 (43) 2004 07 07

(21) 10-2002-0088517
(22) 2002 12 31

(71) . 20

(72) 394-22 502

(74) :

(54) I P T

T , ; IPT ; IP
 ; 가 ;
 ; 가 ;
 .
 IPT , IPT ,
 .
 , 3 IPT .

6
 , ,

1 .
2 .
3 .

4	3	A - A', B - B'	.
5	4	A - A', B - B'	.
6		IPT	1
7a	7f	IPT	1
8		IPT	2
9a	9f	IPT	2

< >

71, 91 --- 72, 92 ---
73 --- 74, 94 ---
75, 95 --- 76 ---
77, 97 --- 78, 98 ---
93 --- 96 ---

IPT , IPT IPT
(flat panel display)
(Thin film Transistor -liquidcr
ystal display ; TFT -LCD)가
(Liquid Crystal Display; LCD)
1 가 (1) , (Color Filter)가 (2)
(3) ,
(6) (1) TFT (4)가 (2) (5)
(7) (8)
(11) (1) (2) (9) , PCB(10)
TCP(Tape Carrier Package)(12) (1)
TFT
(Thin Film Transistor)가

3 (unit) , , PCB(Printed Circuit Board)
 (13) .
 2 .
 2 (23) , (21) (21) 가 (25) .
 al) , (23) (21) (23)가 (Scan sign
 가 (25) .
 (Thin Film Transistor: TFT)가 (23)
 가 (25) .
 (21) (23) (25)
 (21) , 가 (Test) (Shorting bar)
 , IPT(In Processing Test) / (Line defect), IPT
 (Point defect)
 / .
 , .
 3 (31a) , (EVEN) (Dp1,Dp2,...,Dpn) (ODD) 3 1
 가 1 (33a) , 1 (31b) , 1 (31a)
 (31b) 가 2 (33b) 2
 (ODD) (Gp1, Gp3,...) 3 (31c) , (EVEN)
 가 (Gp2, Gp4,...) 4 (31d) , 3 (31c)
 (31d) 가 (33c) , 4 3 (33c) 4
 , 1 (33a), 2 (33b), 3 (33c) 4 (33d)
 (37)
 , (100) (D1,D2,...,Dn) (G1,G2,...,Gm)
 ,
 4 3 A-A', B-B' , 5 4 A-A', B-B' .
 4 5 (100) , (100) (10
 1) , (101) , 1 (31a)
 1 가 (33a) , 1 (33a) 1 (33a)
 33a) (102) , (102) 1 (37)
 , 4 '31b' 2 .

, (100) , (100) 3 (33c) , 3 (33c)
 (101) , (101) 3 (101) (102) , (102)
 (101) (33c) (37) .

가 1 (33a) , 1 (31a)
 가 2 (33b)가 , 가 2 (31b)
 3 (31c) , 가 3 (33c)
 4 (31d) 가 4 (33d)가 .

, IPT (Line defect),
 (Point defect) , /

, IPT 가
 , 3 IPT
 .

, IPT
 IPT .

IPT ,

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 가 ;

가 ;

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가 ;

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, IPT ,

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가 ;

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가 ;

가

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IPT ,

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가 ;

가 ;

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가 ;

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IPT ,

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가 ;

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가 ;

가

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, IPT ,

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6 IPT 1 (72) ; (72)가
, IPT (71) (73) ; (73)가
(74) ; (74) (75) ; (75)가
(76) ; () (77) ;
(77) (78) .

7a 7f IPT 1 (72) 가 7a
, (71)

, 1
(patterning) ,
(72) .

(Aluminum),

7b (73) (72)가
가 .

(73) (72) IPT IPT 가 (CO
NTRACT) 가 가 .

7c (73)가 (74)
가 .

7d (74) 가 (75) 가 .
(73)가 (75) 가 .

(Mo), (Cr), (W), (Ni)

7e (75)가 (76) 가 IPT 가 가 .

7f (76)가 (77)
(78) 가 .

(77) (rubbing) BCB(
BenzoCycloButene)

(78) (TAB) ITO(Indium Tin Oxide)가 .

8 IPT IPT 2 (92) ; (92)가
(94) ; (94) (93) ; (93)가
(95) ; (95)가
(96) ; (97) (98)

9a 9f IPT 2 (92) 가
9a (91)

(91) (92)
(patterning)

(Aluminum),

9b (92)
(93) 가 .

PT IPT 가 (93) (CONTACT) 가 가 .
IPT

9c (93)가 (94)
가 .

9d (94) (95)
가 .

, 가 (Mo), (Cr), (W), (Ni)

•

9e, (95)가
(96)가

가

IPT

IPT

(96)
가 (CONTACT)

가 가

(97) , 9f (96)가 () (98) 가 .

(97)

(rubbing)

BenzoCycloButene)

BCB(

(98) ITO(Indium Tin Oxide)가

이제, IPT가 가, 3 IPT

가 가 가 가 . , .

IPT

, IPT

, 3

IPT

(57)

1.

•
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가 ;

•
;

IPT .

2.

•
;

•
;

가 ;

;
가 ;

가
IPT .

3.
2 ,

IPT .

4.
2 ,

IPT .

5.
;

가 ,
;

가 ;

;

가 ,
;

IPT .

6.
;

;

가 ;

;

가 ;

가
IPT .

7.
6 ,

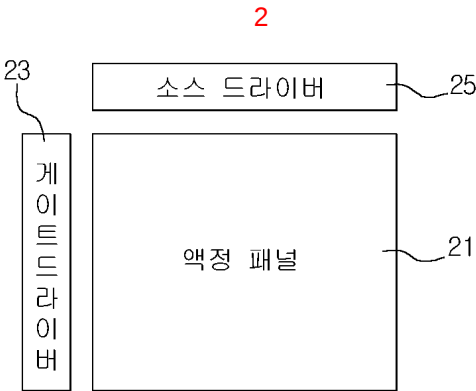
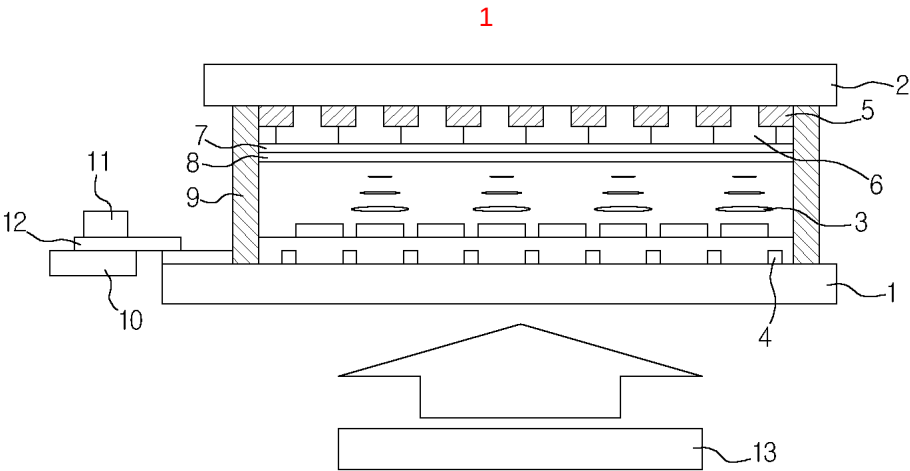
PT . I

8.
1 IPT ,

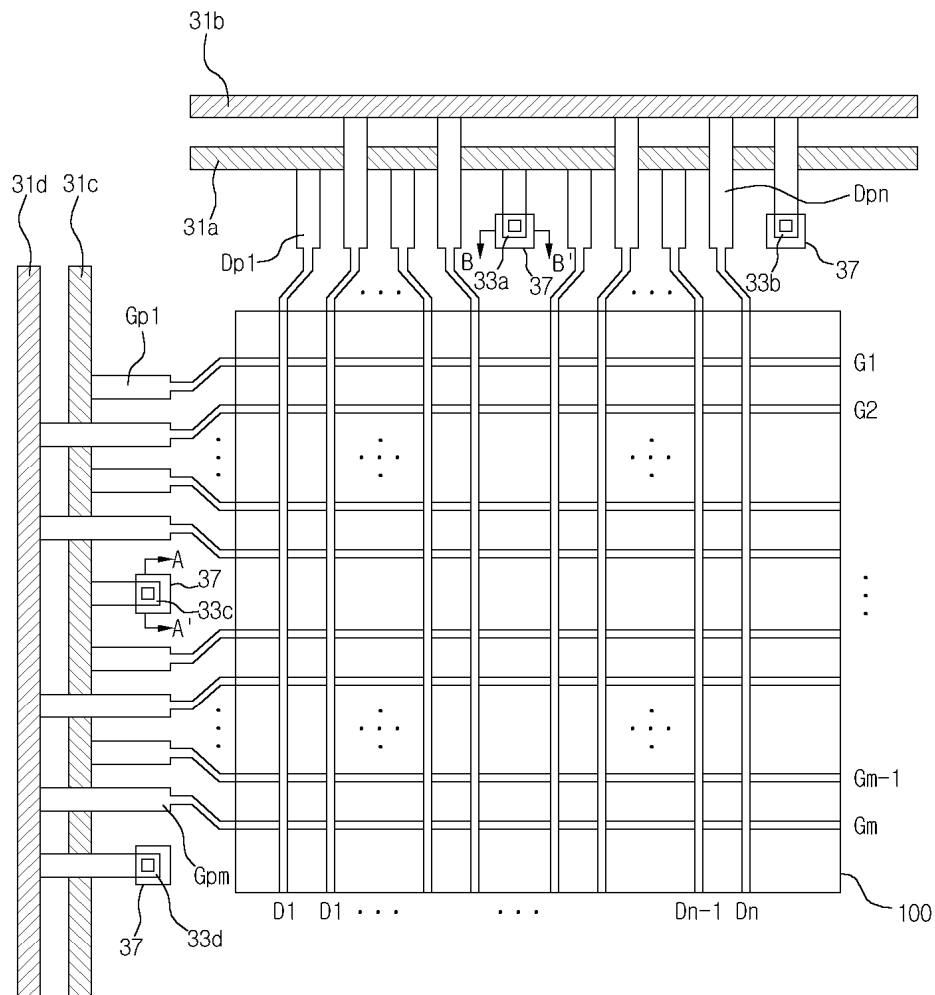
IPT

9.

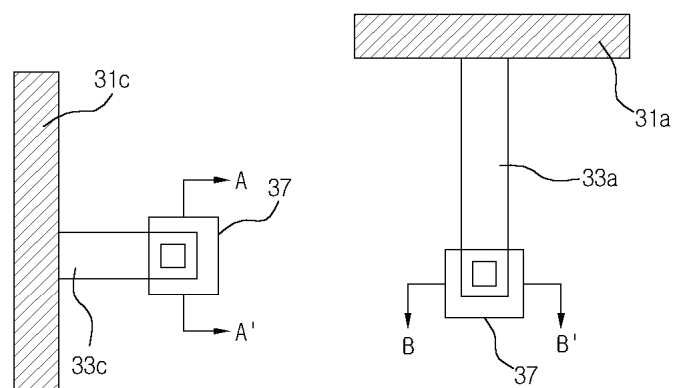
5 IPT IPT IPT



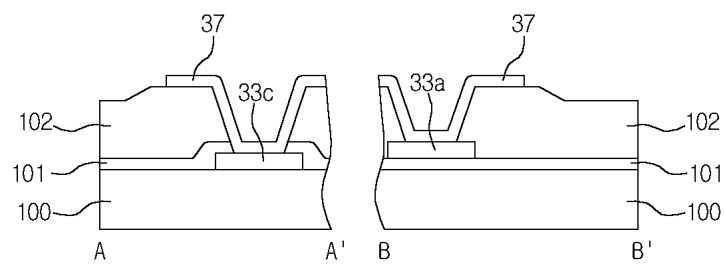
3

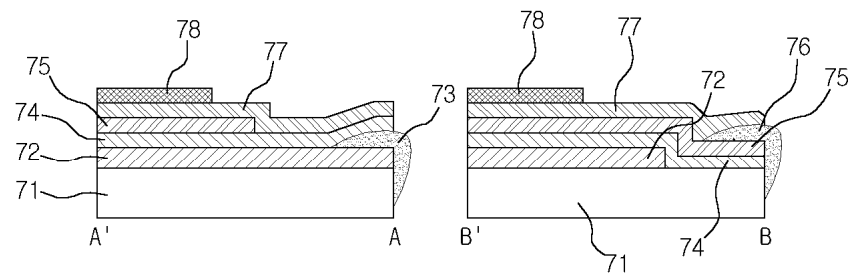
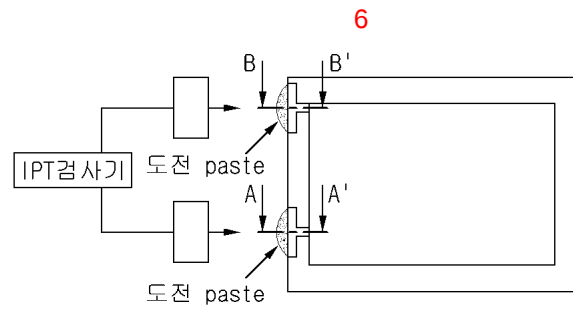
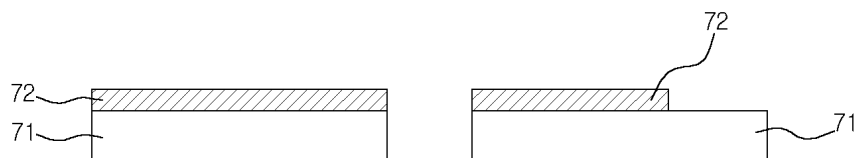
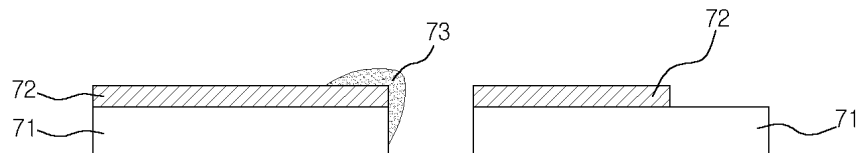
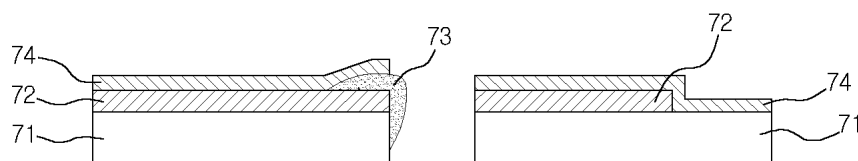
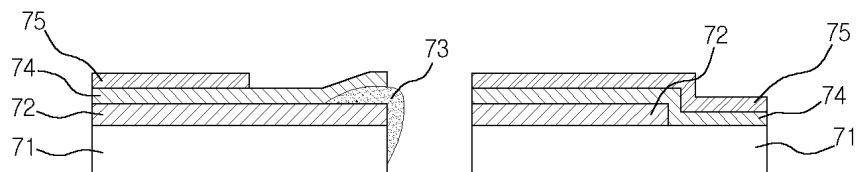


4

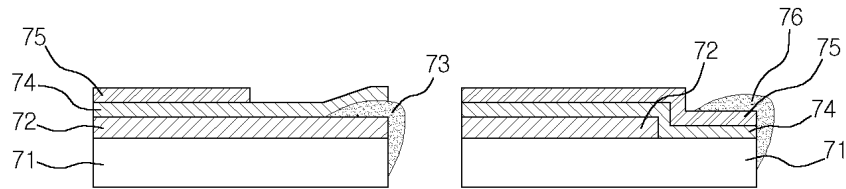


5

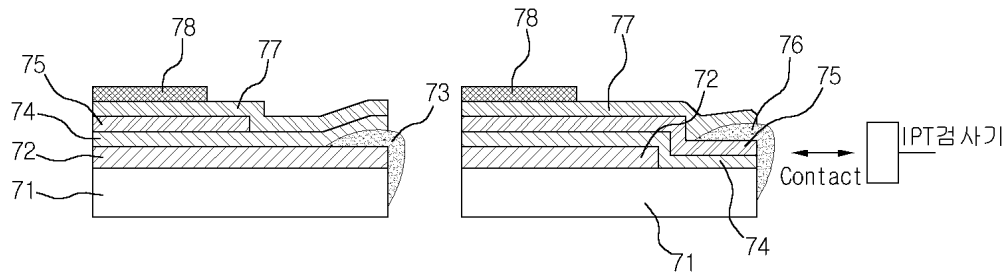


**7a****7b****7c****7d**

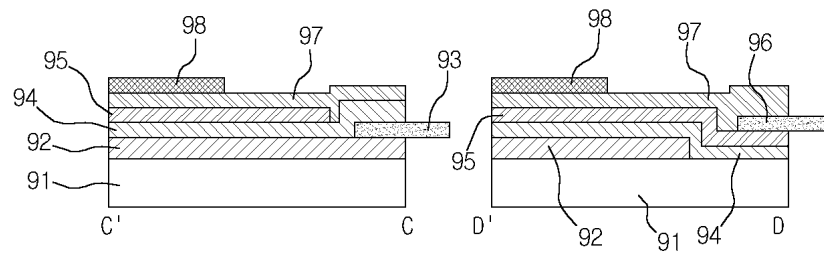
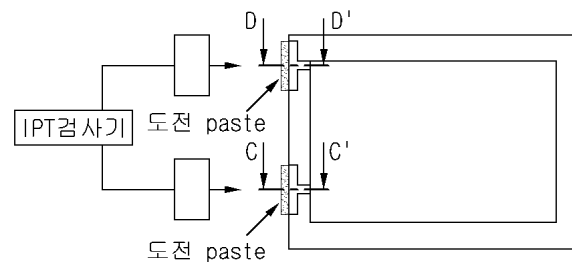
7e



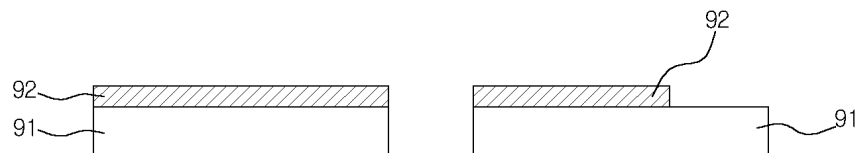
7f



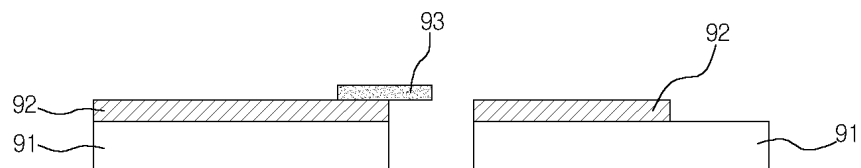
8



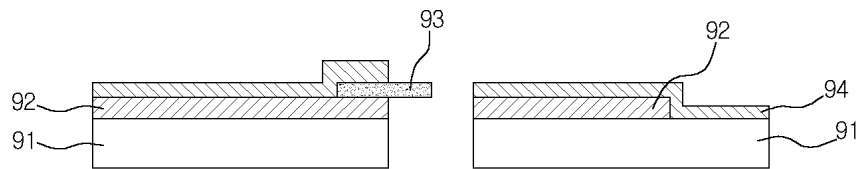
9a



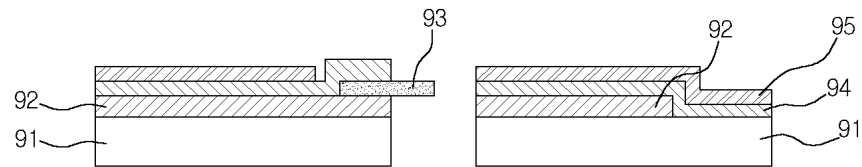
9b



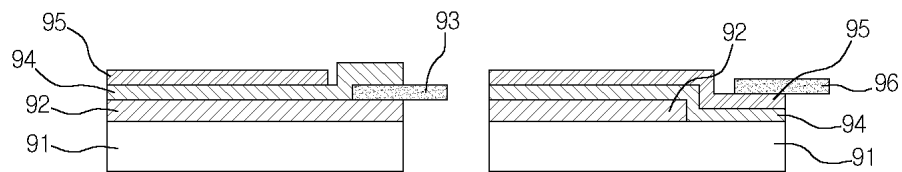
9c



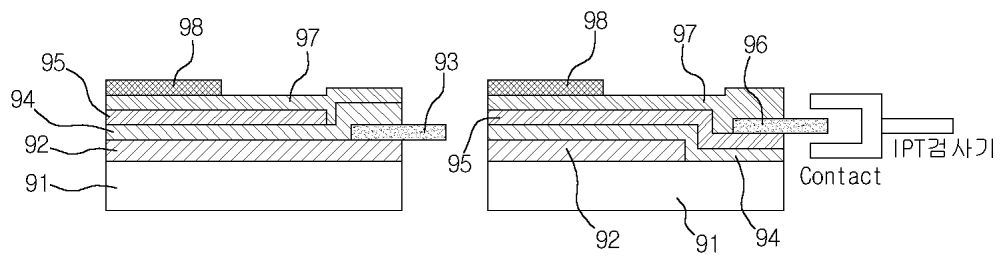
9d



9e



9f



专利名称(译)	液晶显示器的ip测试垫及其制造方法		
公开(公告)号	KR1020040062188A	公开(公告)日	2004-07-07
申请号	KR1020020088517	申请日	2002-12-31
[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	NAM SEUNGHEE 남승희		
发明人	남승희		
IPC分类号	G02F1/13		
外部链接	Espacenet		

摘要(译)

本发明公开了一种液晶显示器的IPT测试垫及其制造方法。它包括形成在栅极焊盘的一侧角落中的栅极焊盘，其中IPT测试焊盘形成在基板上，并且其中栅极焊盘由根据本发明的液晶显示器形成的基板和数据支付在栅极绝缘层的一侧角形成的焊盘，形成在其中形成栅极焊盘的基板上，形成在栅极绝缘层上的数据焊盘和形成数据焊盘的基板以及包括保护膜的结果形成的像素电极。根据本发明的液晶显示器的IPT测试垫及其制造方法在基板侧形成IPT测试垫。以这种方式，它不占据基板的区域，并且可以提高基板的可用性。此外，在用少于3个掩模的工艺形成的液晶显示器中，可以进行IPT检查。栅极焊盘，数据付费焊盘和测试焊盘。

