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10-2004-0062133  
2004 07 07

(21) 10-2002-0088460  
(22) 2002 12 31

(71) . 20

(72) 1510

1008-1 가 302

146 104 703

224-1LGLCD 204 726

(74)  
:

(54)

- -

6

1

2 - -

3 2 , - -

4 3 , I-I'

5 가

6 5 , II-II'

\*\*\* \*\*\*

400: 410: 1

411: - - 420:

430: 440:

450:: 460:

520: 2 521:

522:

) , - - (line on glass : LOG  
(electrolytic corrosion)

, (matrix)

, (driving circuit)

(thin film transistor array)

(color filter)

;

가 , 가  
가 , 가  
가 가

; ; ;

om), (Vgh), (Vgl) (Vref) (Vc  
 1 가 1 (Vcom)  
 가 가 (integrated circuit : IC)

(tape automated bonding : TAB) (tape carrier package : TCP)

(printed circuit board : PCB)

- (one chip)

1 (10) (10) (30) ; (20) ; (30) (30) (40) ; (40) (60) (50) ; (60) (50) (50) (30) (60) (50) (50) (30) (10) (60) (50) (60) (55,65) (50) (50) (50) (60) (55,65) (55,65) (flexib  
 le plate cable : FPC, 70) (60) (70) (55,65) (50)

(55,65) (50) (60) 가 가 (55,65)

(55,65) 가 가 (70)

(60) (10) (50)

가 - - 2

2 (110) (110) (110) (120) ;

(110) (110) (140) ; (130) ; (130)

) (150) ; (140) (140) (160)

가 (160) 가 ,

(150) (150) (150) (110)

(130) (110) (120)

(110) (120)

(110) (110) 가 (120)

(110) (120)

(110)

(110)

(160) (111) (110)

(150) (111)

가 1 (55,65) (150) (160)

가 (55,65) (70)

(111) (150) (Vg

h), (Vgl), (Vcom), (GND) (Vcc) ,

SP), (111) (150) (G

(GSC) (GOE)

(111) (110)

3 2 (110) - - (111)

3 , (110)  
 - - (111A 111C)  
 - - (111A 111C) (110)

(112) (110) (112) (110) - - (111A 111C)  
 (110) ( , 2 '120' )

4 3 I-I' , - -  
 , - - (210) - - (211)  
 (211)  
 (210)  
 (211) (210)  
 (220) (230) (210)  
 (220) (230) (210)  
 (230) / (230)  
 (230) 가 (amorphous silicon)  
 (P) n+ (ohmic contact layer)

(230) (240) (240) SiNx SiOx  
 (薄膜) (spin on glass : SOG) - (photoacryl)  
 (benzocyclobutene : BCB),  
 (厚膜)  
 (240) (240)

(240) (270)  
 (210) ( , 2 '120'  
 가

(250) (211) (240)  
 (230) (240) (250)  
 (220)

(211) (220), (240) (250)  
 (260)  
 (260) 가  
 (240)  
 (211) (211)

(260) - - (211)

(240) (250) (250)  
 (220) (220) (240) (250)

(211)

(260) (211) (260)  
 (250) (211)

(211) (211)

(260) (211)

(260) (260) (211) (211)

(240) (250) (250)  
 (220) (240) (250)  
 (211) (260)

(220) (black matrix, 221)가 (221)가  
 (R), (G), (B) (220) (222)  
 (221) (210)

(221) Cr 가 Cr

(270) (210) (220) (260) (221) (222)  
 (270) (220) (222) (221) (221)가

(211) (260) (270)  
 (221) (222)

(270) (211)  
 (270)

(260) Cr (211) (221)

(260) (211) (211)  
 (260) Cr (211) (260) 가 , 3V 가 (211)  
 (222) -5V Cr (Vgl) (221) , 3V Cr 가  
 (221) 가

(260) 3V 가 Cr (221)  
 -5V 가

(221) Cr (221) 가 (270)

, (221) Cr (211)  
(221) (short)가 (221)가 (222) 가 (222) 가

- -

; 2 - - ; 1 1 2 - - 1  
; 1 ; - - ,  
; 1 1 1 ,  
1 2 ; 2 ; 2 2 ;  
가 - - ;

5 가 .  
5 , 1 (310) 1 (310) 2 (320) (330)  
가 1 (310) 2 (320)

1 (310) , 2 (320)  
, (330) 1 (310) ,

가 ,

(330) 2 (320) , ,  
1 (310)

1 (310) 2 (320) (330) (300)  
 , 1 (310) 2 (320) - (spacer ball) (photoli  
 thography) (patterned spacer)가 ,  
 , 1 (310) (330) (340)가 ,  
 (330) (350)가 .  
 ) 1 (310) (Vgh), (Vgl), (Vcom), (GND) (311A 311C  
 (GSP), (GSC) (Vcc)  
 (GOE)  
 - - (311A 311C) 1 (310)  
 - - (311A 311C) (360A 360C) (  
 ) (360A 360C) (300) (311A 311C)  
 6 5 II-II' , - -  
 , 1 (410) - - (411) . -  
 - (411) 1 (410)  
 , (420) - - (411) 1 (410)  
 (420) (430)  
 (420) (430) 1 (410) (430)  
 , /  
 , (P) (430) 가  
 , / n+ ,  
 , /  
 , (BCB), (430) (440) , (440)  
 (SOG) -  
 (440)  
 (440) , -  
 , (440) (400)  
 1 (410) 2 (440) (520)  
 가 .  
 , - - (411) (440)  
 (450) (400) (440)  
 (430) (440) , (450) (440)

(420) .

1) (420), (440) (450) (460) (400) - - (41)

(460) 가

(440) (411) - - (411)

(460) (400)

(460) - - (411)

(440) (450) (450)

(420) (420) (440) (411) (450)

(460) - - (411)

(450) (411) (411) (460)

- - (411)

(411) (411) - - (411)

(460) (411)

(411) (460) - - (411)

2 (520) (521)가 (520) (521) (520) (510)

(521)가 2 (520) (521) (521) (520) ( )

(522) (521) (521) (510)

(521) Cr Cr

가 Cr

1 (410) 2 (520) (460) (521) (400)

(520) (522) (521) (521)가 (400)

(211) (210) (260)

(211) (270) (221) (222) (220)

(260) (240) (250) (211)

(222) Cr (221)가

가 - - Cr (211) (221) 가 가 (260) 가 (221) (222)

(460) (400) (460) - - (411)

(400)

1 (410) (460) 2 (520) (521) (540) 1

(410) 2 (520) (400) (460)

6 (460) (400) (520) (521)  
 (400) 가 (460) (521) 가 (400)

- -

가

가

Cr

가

(57)

1. 1 2

1 ; 2 ; 1 ;

2. 1 2 1

1 ; 1 2 1

3. 2 가 1 가 , 1

2 가 1 가 , 1

4. 2 1 1

2 , 1 1

5. (GND) (GOE) (Vcc) (Vgh), (GSP), (Vgl), (Vcom), (GSC)

1 (GND) (GOE) (Vcc) (Vgh), (GSP), (Vgl), (Vcom), (GSC)

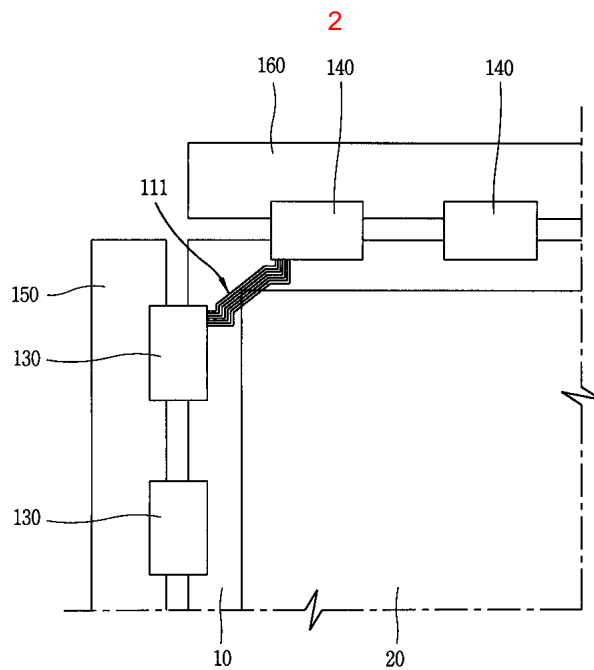
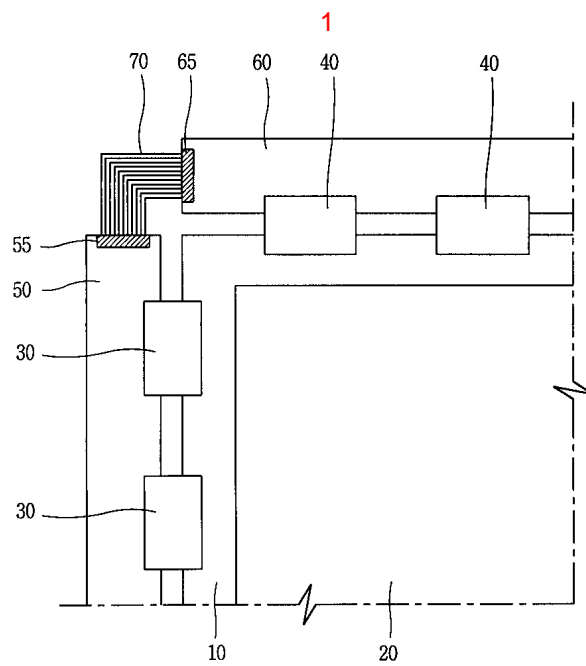
6. 1

1 , ,

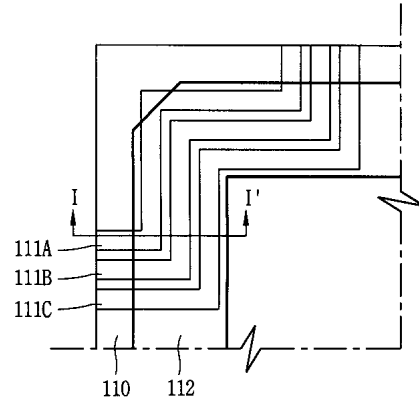
6 7. , (BCB), (SOG) - (photoacryl)

1 8. , 2 ;  
2

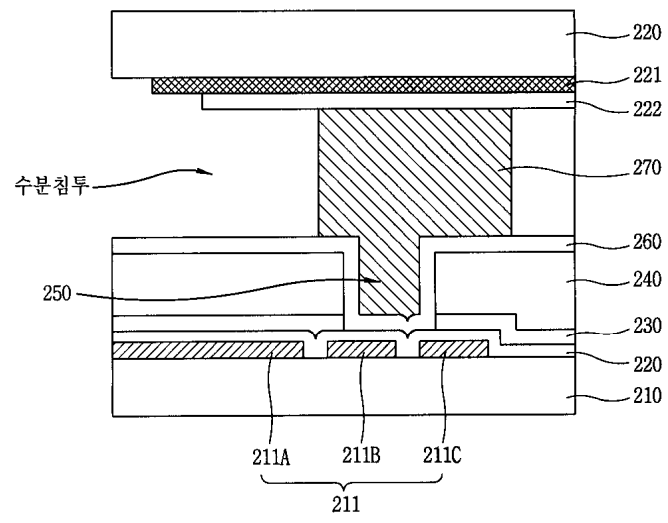
8 9.



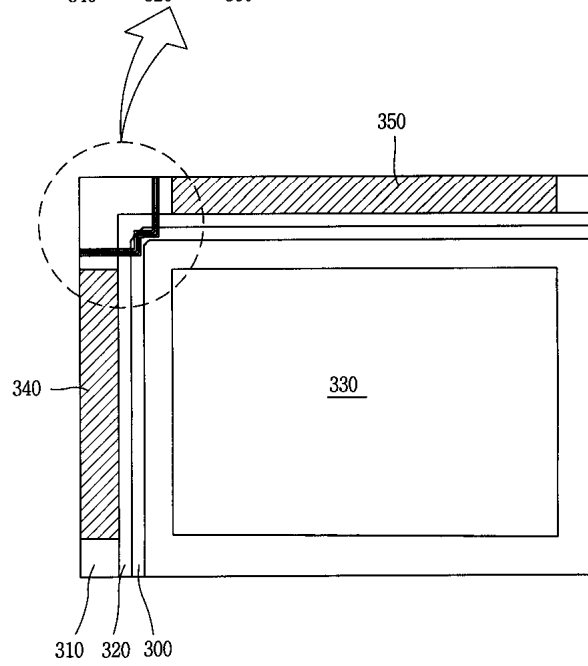
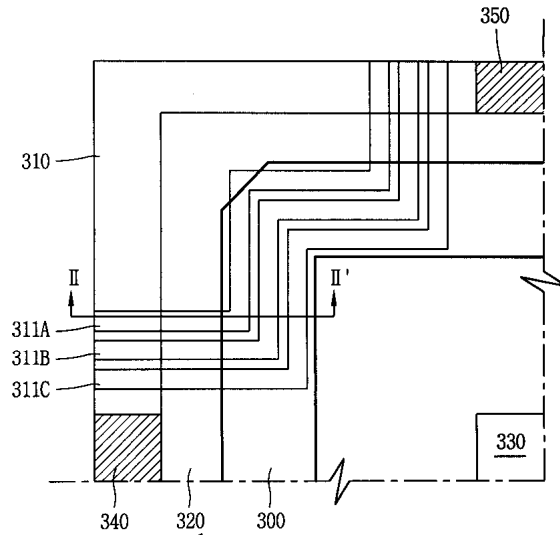
3



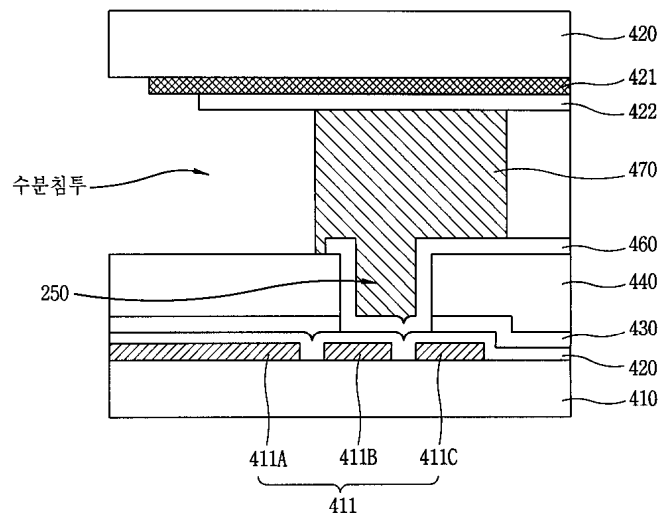
4



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专利名称(译)	液晶显示面板及其制造方法		
公开(公告)号	<a href="#">KR1020040062133A</a>	公开(公告)日	2004-07-07
申请号	KR1020020088460	申请日	2002-12-31
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当前申请(专利权)人(译)	LG显示器有限公司		
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IPC分类号	G02F1/1339 G02F1/1345 G02F1/13		
CPC分类号	G02F2201/50 G02F1/136286 G02F1/13452 G02F1/1339		
代理人(译)	PARK , JANG WON		
其他公开文献	KR100675630B1		
外部链接	<a href="#">Espacenet</a>		

摘要(译)

用途：提供一种液晶显示面板及其制造方法，以防止水分或污染物渗透到像素电极和黑矩阵之间的空间中的电学腐蚀。

