

(19)  
(12)

(KR)  
(A)

(51) 。 Int. Cl.<sup>7</sup>  
G02F 1/1333

(11)  
(43)

10-2004-0041724  
2004 05 20

(21) 10-2002-0069577  
(22) 2002 11 11

(71) . 20

(72) 1145 640-1204

469-325/2

(74)

:

(54)

가가 3

가

가

9

, , , , 가

1

2a

2e

1, 2



(36)

가

(Borosilicate glass) (soda lime glass)  
 $Na_2O$  0.1wt%  $Na_2O$  0.1wt% 1wt%

(Thin Film Transistor:TFT)

가

가

(off)

가

(I<sub>off</sub>)가 가

가

가 CRT(Cathode Ray Tube)

CRT

가

가

가

가

가

가

가

3

가

가

가

(SiO<sub>2</sub>)

'Effect of Silicon Oxide Coating on the Out-

Diffusion of Alkali from Soda-Lime-Silica Glass'

가

가

450

500

가 (SiO<sub>2</sub>)

(strain point, 510 )

가

가

(250 )

(BCB)

(Na<sup>+</sup>)

(SiO<sub>2</sub>)

(Na<sup>+</sup>)

가

(SiNx)

(SiO<sub>2</sub>)

가

가

가 ; 가 1 ;  
 가 ; ; 400  
 ; 2 ; 가  
 ; ;  
 1 2 Na<sub>2</sub>O 1wt% , 1,  
 2 Na<sub>2</sub>O 1wt% ,  
 (Acrylate), (Polyimide), (Polyolefin), (Benzocyclobu  
 tene), (Poly oxaxol), (cardo epoxy), (cardo acrylate)  
 (silane) (Acrylate), (Polyimid  
 e), (Polyolefin), (Benzocyclobutene), (Polyoxaxol), (card  
 o epoxy), (cardo acrylate) (Polyoxaxol), (Polyimid  
 -polymer) (hybrid co

; 가  
 ; ;  
 가 ;  
 ;

BM 가 , BM 가 ,

; 가  
 ; ;  
 가 ;  
 ;

1  
 1 , 400 (SiO  
 2)

1 2

2a 2e

2a butene), 2 (Acrylate), (Poly oxaxol), (50) (Polyimide), (cardo epoxy), (55) (Polyolefin), (Benzocyclo (cardo acrylate) (silane) (hybrid co-polymer)가

2b (Al) (AlNd) (55) (50) 1 (60) (65)

2c (70a) (a-Si) (70b) (70)

2d (75, 80) (70) (70) 2 (75, 80) (70a) (70b) (75, 80) (60), (70), (75, 80)

2e (80) (ITO) (90) 가 (75, 80) (85) (95)

3a 3c (SiO<sub>2</sub>)

3a (100) (Black Matrix : BM (Cr)/ (CrOx) , 105)

3b BM(105) (100) (Proximity) 가 (110b, (110a)

3c (110a, 110b) (100) (SiO<sub>2</sub>)(115) (SiO<sub>2</sub>)(115) 가 CVD(Chemical Vapor Deposition), (sol/gel) (SiO<sub>2</sub>) (115) (ITO) (IZO)

400 (evaporation) (120)

( )

4

4 1 (100, 50)

(T)가 (50)

(55) (T) (95)

(110a, 110b) (110a, 110b) (100) (100) BM(105)

(SiO<sub>2</sub>)(115)

400 (SiO<sub>2</sub>)(115)

2a 2e

5 4 1 (100) (SiO<sub>2</sub>) BM

(100) (SiO<sub>2</sub>)(105) 4

5) BM(105) (110a, 110b) BM (100) (SiO<sub>2</sub>)(11

(120)

6 4 2 (SiO<sub>2</sub>)

) (SiO<sub>2</sub>) (112a, 112b) (100) (100) B

M(105) (SiO<sub>2</sub>) (100)

2

7 2

1

(Cr) 7 (430) BM(433) (430) BM(433)

(435a, 435b, ) (435a, 435b, )

(430) (440) (Acrylate), (Polyimide), (P

olyolefin), (Benzocyclobutene), (Poly oxazol), (cardo epoxy),

(cardo acrylate) 2 (silane)

가 (440) ITO IZO (hybrid co-polymer) (445)

(447) ( )

8 7 1 ,

33) (535a, 535b, (540) (545) (530) BM(5)

2

3

T array) 3 가 COT(Color filter on TF

9 3 COT

(Acrylate), (Polyimide), (Polyolefin), (630) (Benzocyclobutene),  
(Poly oxazol), (cardo epoxy), (cardo acrylate)

(silane) (hybrid co-polymer) 가 BM(633) ITO (640) IZO

(645)

COT (650) 1

2 (655) (650) (655) (660) (660) (670a) (670b)

(SiNx) (SiO<sub>2</sub>) (665) (670b) (675, 680) (675, 680) (685)

(675, 680) (SiNx) (SiO<sub>2</sub>) (688a, 688b, )가 (685) (685) (680) (690) 가 (690) (690)

688a, 688b, ) (685) (685) (680) (695) (695) (690)

(688) (680)

(647)

4

r filter) 4 가 TOC(TFT array on colo

10 (753a, 753b, ) (750) (753a, 753b, ) (R), (G), (B)

(755) (755) 1

3

(755) (760) (760) (760) (765) (770a) (765)

(760) (770b) (770b) (775, 780) (775, 780)

(775, 780) (785) (760) (785) (780)

(790) 가 (795) (785) (785)

(795) (790) (780) .  
 , 가 (730)  
 , BM(733) ITO IZO (745) (740) .  
 , (747) .  
 , 가

(SiO<sub>2</sub>)

가 .

가가 3

가

가

(57)

1.

가 ;

가 ;

2.

1

3.

2

400

4.

1

5.

가 ;

;

1 6. 5 ,  
 Na<sub>2</sub>O 1wt%

2 7. 5 ,  
 (Benzocyclobutene), (Acrylate), (Polyimide), (Polyolefin),  
 ate) (Poly oxaxol), (cardo epoxy), (cardo acryl

2 8. 5 ,  
 (silane) ;  
 (Acrylate), (Polyimide), (Polyolefin), (Benzocyclobutene),  
 (Poly oxaxol), (cardo epoxy), (cardo acrylate)  
 (hybrid co-polymer)

9. ;  
 가 ;  
 가 ;

9 10. ,  
 , BM 가

9 11. ,  
 BM 가 ,

9 12. ,

13. ;  
 가 ;

가

;

14.

13

,

;

;

15.

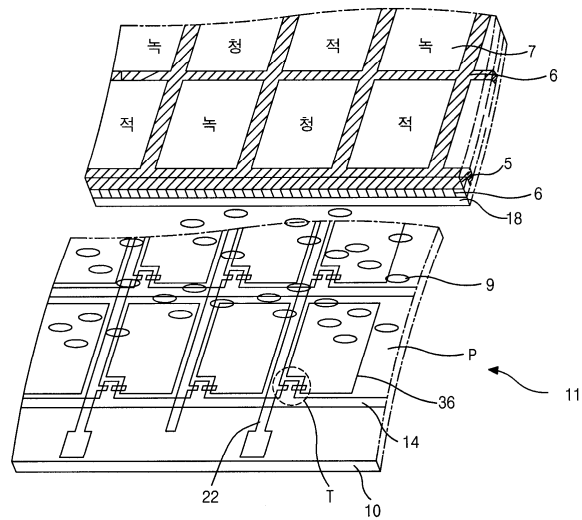
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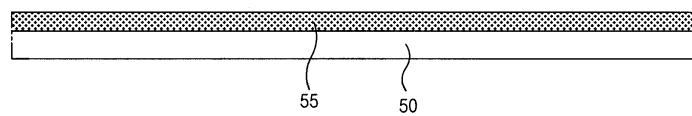
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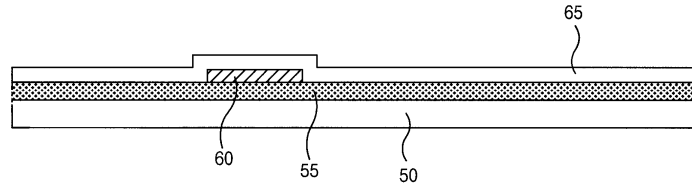
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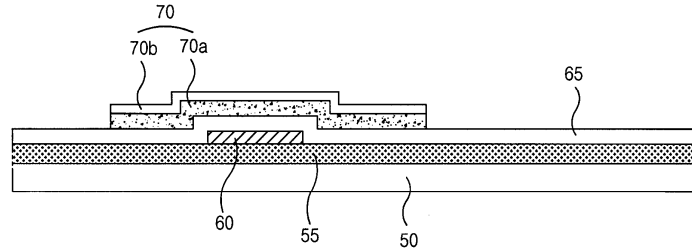
2a



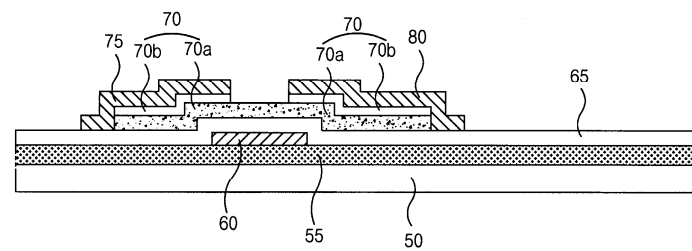
2b



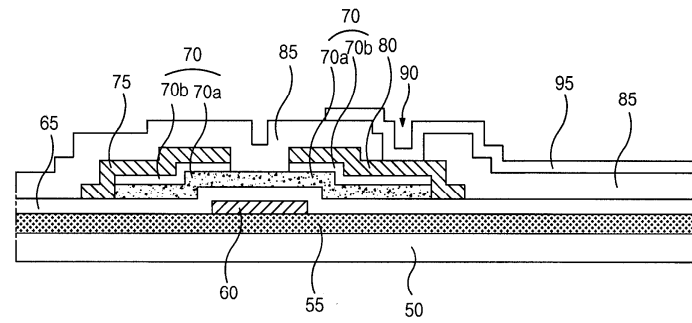
2c



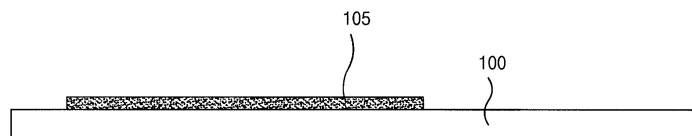
2d



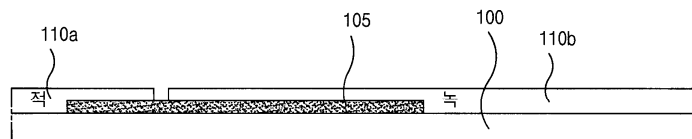
2e



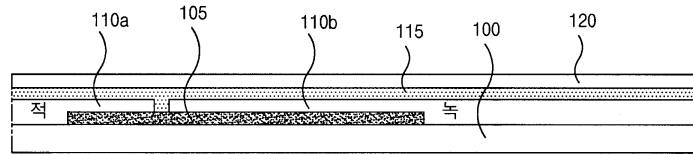
3a



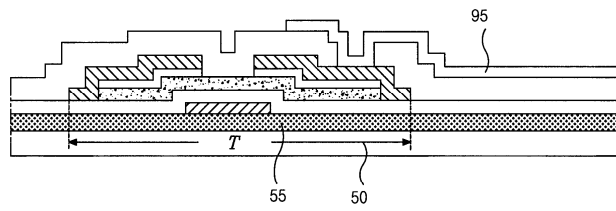
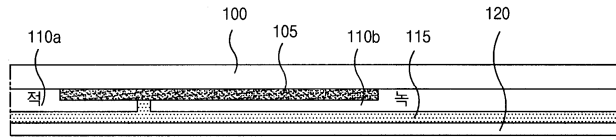
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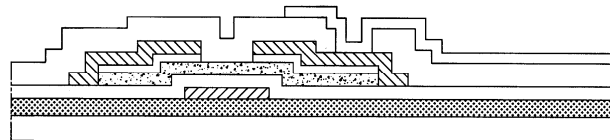
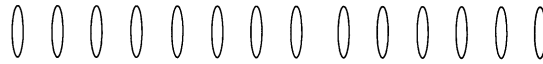
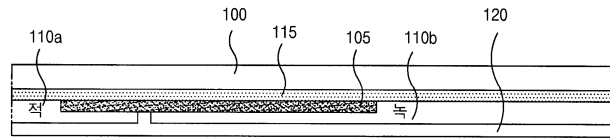
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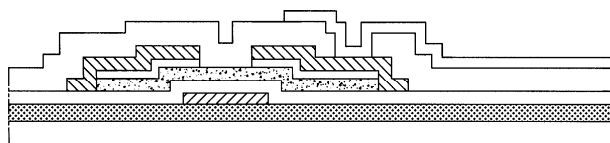
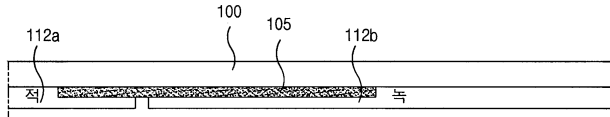
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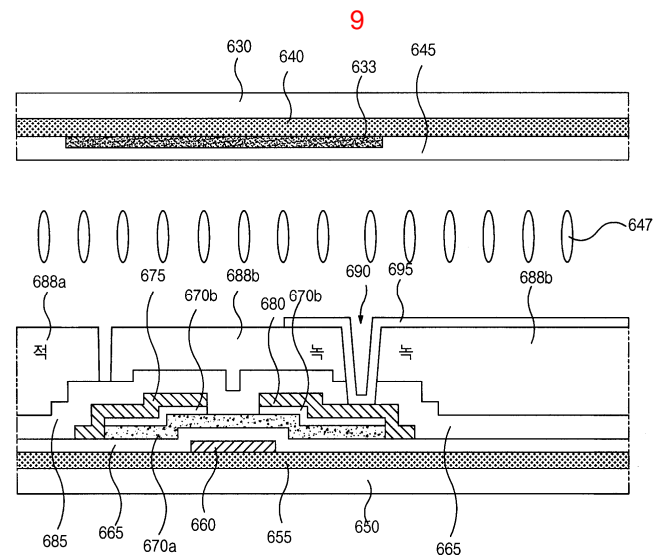
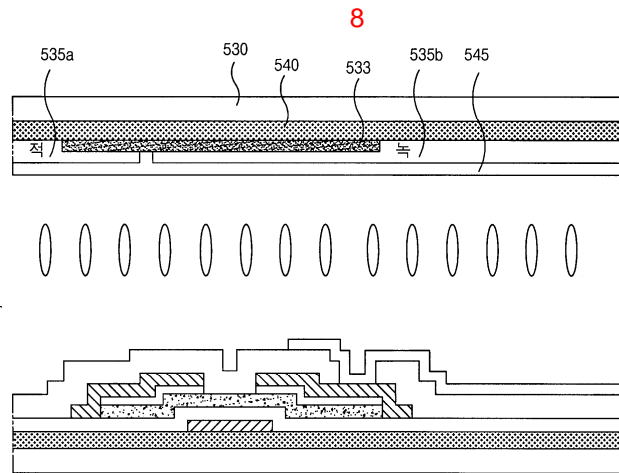
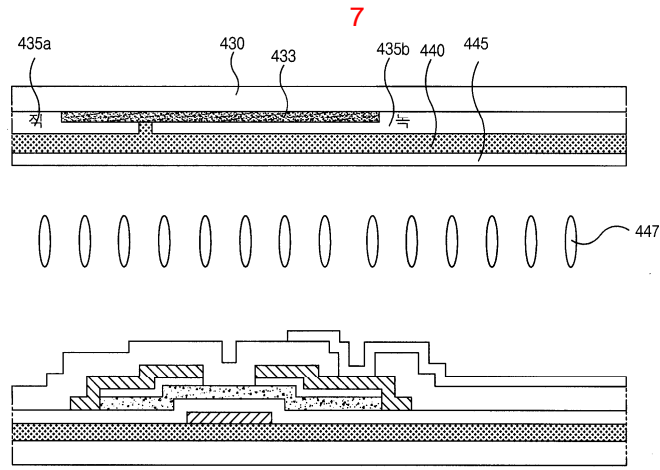


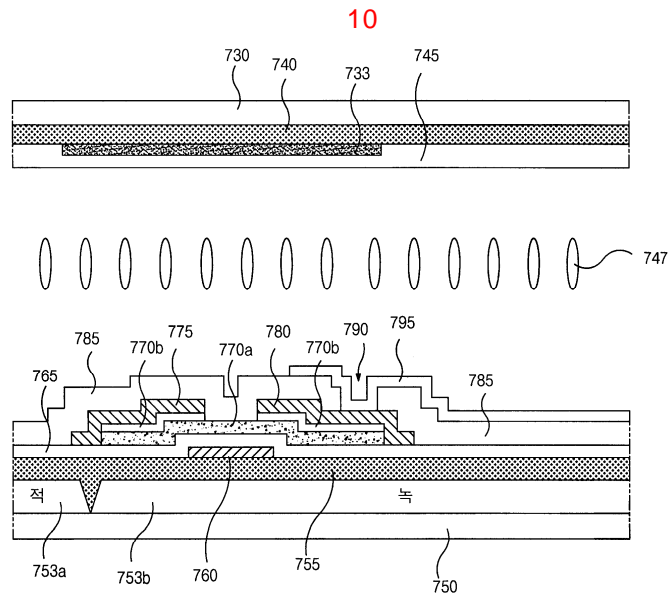
5



6







专利名称(译)	使用钠钙玻璃的液晶显示装置及其制造方法		
公开(公告)号	<a href="#">KR1020040041724A</a>	公开(公告)日	2004-05-20
申请号	KR1020020069577	申请日	2002-11-11
[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	KIM WOONGKWON 김웅권 PARK SEUNGRYUL 박승렬		
发明人	김웅권 박승렬		
IPC分类号	G02F1/1362 G02F1/1333		
CPC分类号	G02F2001/136222 G02F1/133345		
其他公开文献	KR100916602B1		
外部链接	<a href="#">Espacenet</a>		

摘要(译)

至于本发明的液晶显示器，它涉及使用钠钙玻璃制造液晶显示器。在使用钠钙玻璃制造液晶显示器的薄膜晶体管和滤色器上形成能够屏蔽碱离子扩散以防止碱离子扩散污染薄膜晶体管的透明有机绝缘体制成钠钙玻璃后，制成液晶显示器。钠钙玻璃，透明有机绝缘体，碱离子，液晶显示器，降低液晶显示器具有价格竞争力的无碱玻璃比较单元成本3分配降低了低钠钙玻璃的生产成本可以提供使用。

