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PhilipsLCD

(74)

(54)

3

1

2

3  
4 TFT  
5 4 A - A'  
6 4 B - B'  
7 9 TFT  
10 TFT  
  
>  
00, 300... 110, 310... 1  
20, 320... 121, 321... TFT  
22, 322... 123, 323...  
30, 330... / 140, 340... 2  
26, 501... 327, 502...  
28... TFT 503...  
04... 505...  
06... 601...  
01... 801, 901, 903... SiNx  
02, 904... SiO<sub>2</sub>

가 가

가 ,

, , , , , 1 , 1 , (dual display)

1 , (100) (110) , (120) , (120) / (121) (130) 2 (123) (140) ,  
 ght unit)(100) , 1 (110) , (120) TFT (121) (123) (122) ,  
 TFT (121) (123) (122) ,

, (wave guide) (100) (100) (110)  
 . . , ( ) , , , , ,  
 (130)

2 , 2 , 2 (a)  
가 , (b) 가

2 (a) (100) (130) / (130) / (130) (140) 1 (120) (110) x x y x x

가  
'Normally Black Mode'가  
'Normally White Mode'가

2 (b) (100) , y , y (130) 가 (110) (120) (130) y / / . . . .

, , , , / (130) (120) 가  
y y 1 (110) (120) 가  
'White' 가 . . , (100)  
'Black' 가 . . ,  
.

, 2 (a) , (100)

(120) , (120) , (120) TFT , (121) (120) (123) ,  
 TFT (121) TFT (100) 가 , TFT (122) .  
 , , (120) , (120) TFT  
 'Black' 가 (120) , 가 , (120) TFT  
 'Black' 가 .  
 CR(Contrast Ratio)

TFT , CR(Contrast Ratio)

, , 가 가

TFT ,  
 ;

;

TFT ;  
 ;

TFT ; ,  
 ;

TFT  
 TFT

, ,  
 : (front light unit) :

1

, , TFT , TFT ; TFT ; TFT ;  
 ; TFT ;  
 / :  
 / :

2 :

,  
 :





, 9 (501) SiO<sub>2</sub> (901), SiNx (902), SiO<sub>2</sub> (903), SiNx (904), (Al) (701) SiO<sub>2</sub> (901), SiNx (902), SiO<sub>2</sub> (903), SiNx (904) . . , 0.2 μm (701) 6.0%

TFT 10 . 10

10

10 , (Al)  
, (N9) 0.9μm SiNx

$\times$  (O<sub>2</sub>N<sub>2</sub>O<sub>2</sub>N<sub>2</sub>) , SiO<sub>2</sub> , SiNx , SiO<sub>2</sub> , SiNx  
 $0.2\mu\text{m}$

(N<sub>3</sub>O<sub>2</sub>N<sub>2</sub>O<sub>6</sub>N<sub>4</sub>) , SiNx 0.3μm, SiO<sub>2</sub> 0.2μm, SiNx 0.2μm, SiO<sub>2</sub> 0.6μm, SiNx 0.4μm .

Contrast Ratio) . . . . .

(57)

1

TFT

TFT TFT TFT

2.

1 ,

TFT

3.

2 ,

SiNx / SiO<sub>2</sub>

TFT

4.

1 ,

(mono-layer)

(multi-layer)

TFT

5.

1 4 ,

TFT ;

TFT

;

TFT

;

6.

(front light unit) ;

1

;

1 4 ,

TFT , TFT

,

;

/ ;

/

2 ;

7.

6 ,

1

2

90

8.

6 ,

/ 2

1

,

1

90

9.

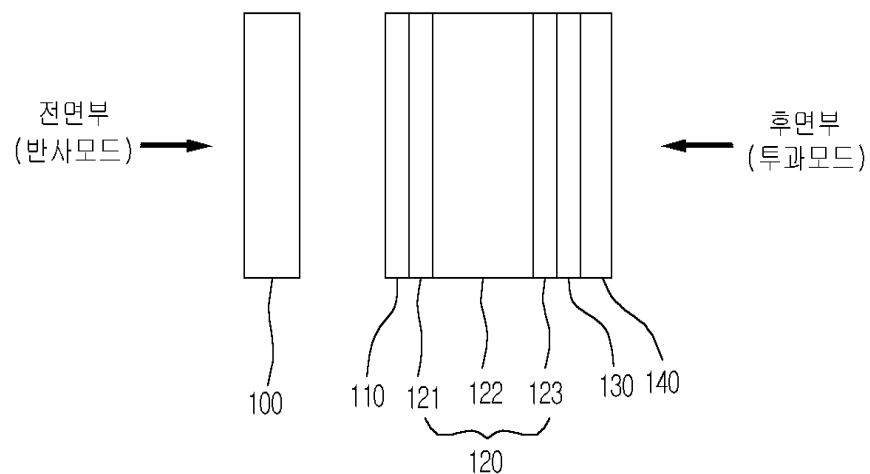
6 ,

;

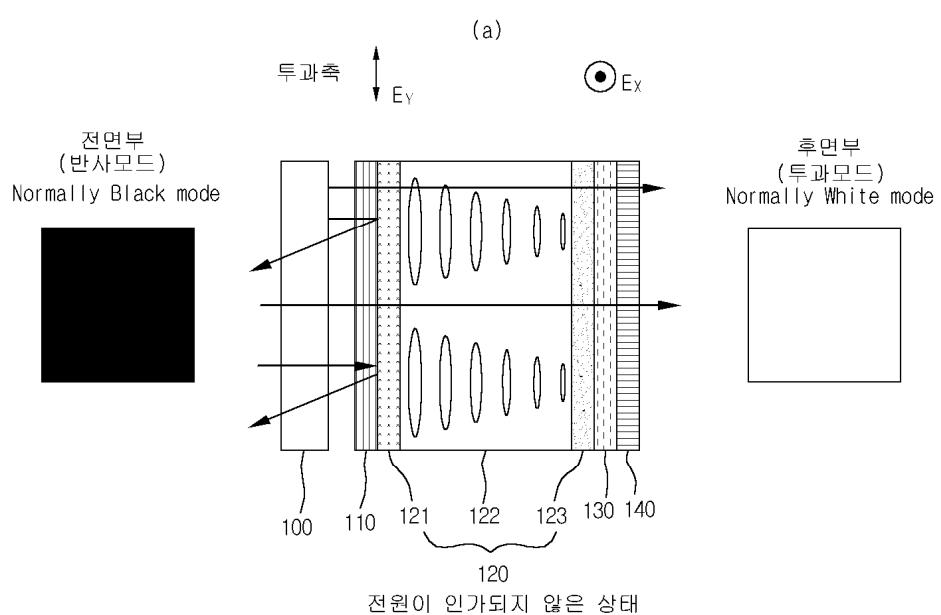
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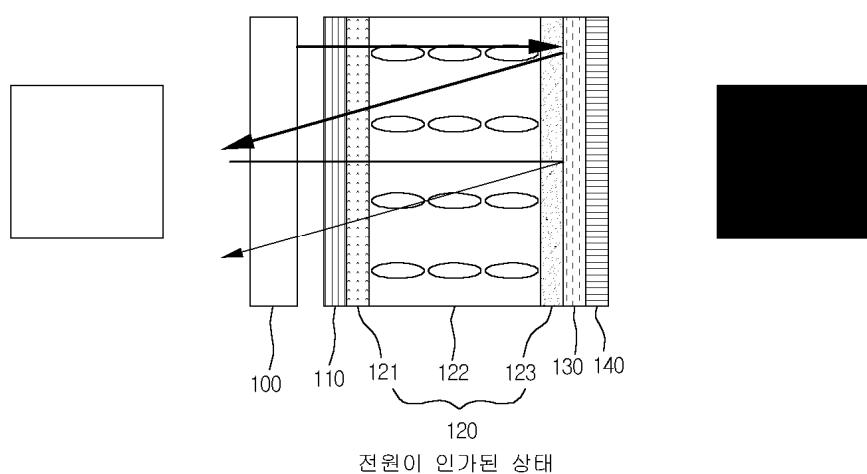
1



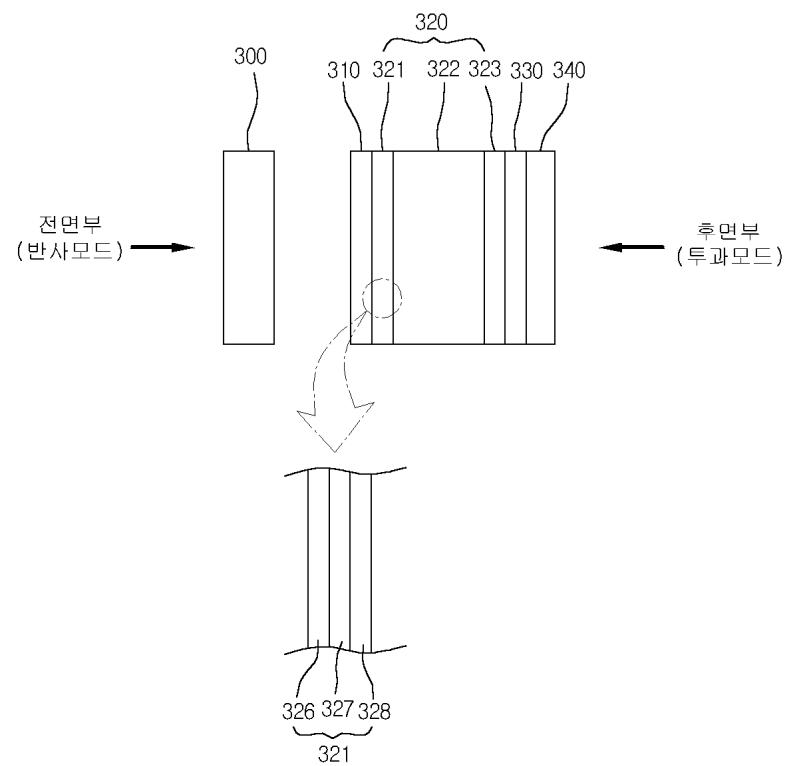
2



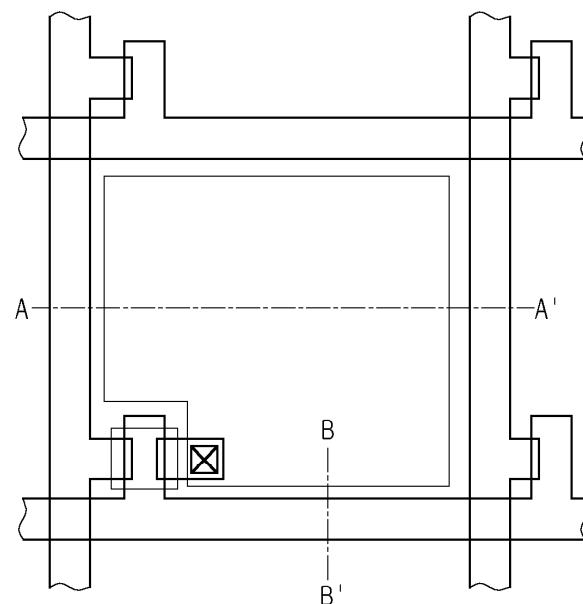
(b)



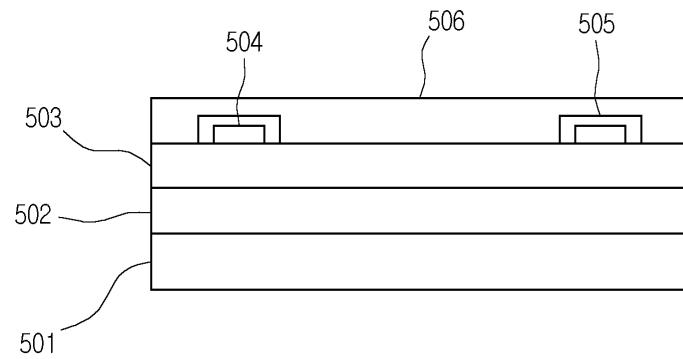
3



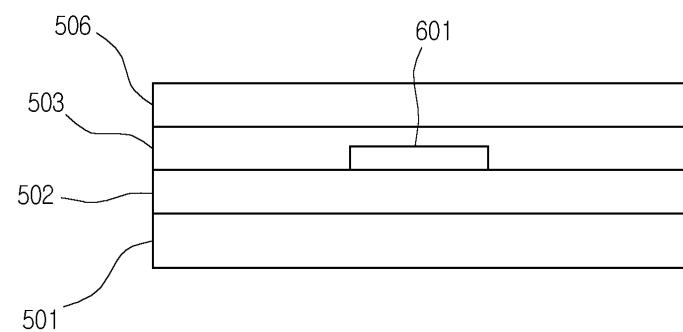
4



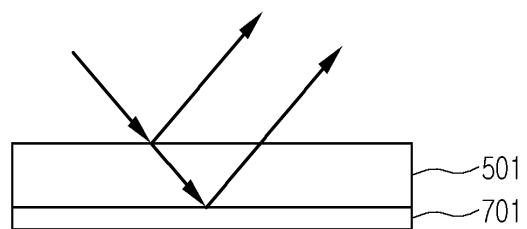
5



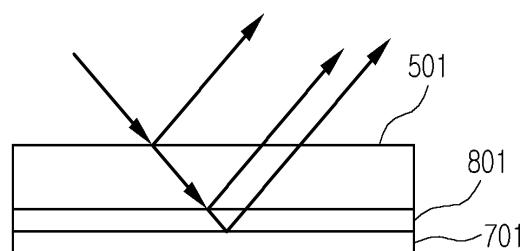
6



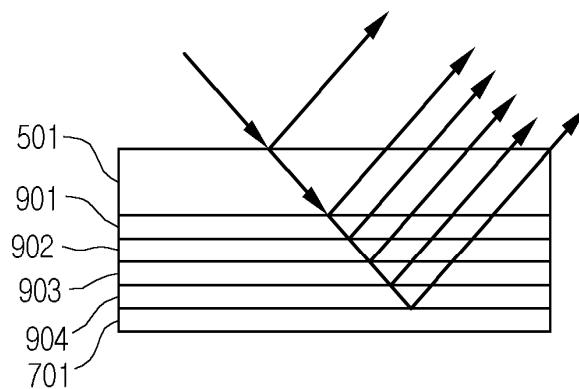
7



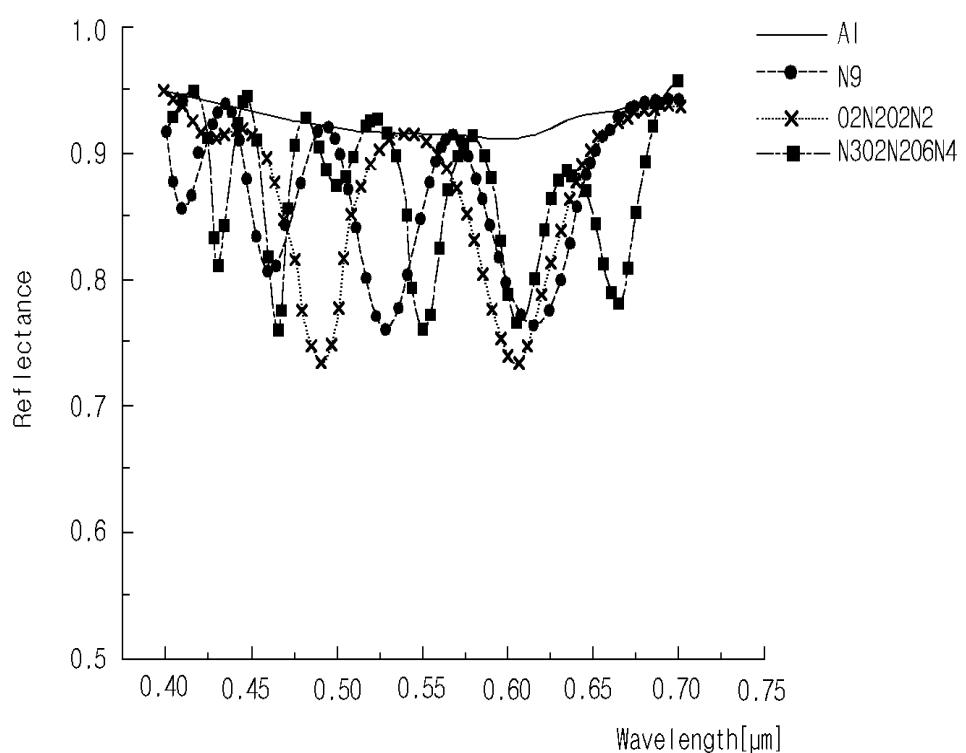
8



9



10



专利名称(译)	液晶显示器		
公开(公告)号	<a href="#">KR1020040084206A</a>	公开(公告)日	2004-10-06
申请号	KR1020030019103	申请日	2003-03-27
[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	KANG HOON 강훈 SHIN HYUNBEOM 신형범		
发明人	강훈 신형범		
IPC分类号	G02F1/1333		
外部链接	<a href="#">Espacenet</a>		

## 摘要(译)

根据本发明的TFT基板包括基板，反射阻挡层，形成在基板上的TFT阵列：形成在反射阻挡层上和形成在TFT阵列上的保护膜。并且它在反射阻挡层中反射的光和TFT阵列中反射的光之间产生相互干涉现象。以这种方式，光具有防止在基板方向上收益的光在TFT阵列中反射的点的特性。此外，根据本发明的液晶显示器包括第二偏振片：根据穿透选择性反射/透射部分的光偏振条件确定光的穿透与否：根据LCD面板和透过LCD面板的透射和选择性反射/透射部分选择性地反射光，包括提供用于图像显示的光的前光单元，第一偏振片：它透射光收入变为预偏振光，它接收来自TFT基板的前灯单元的光：这防止光在TFT阵列中反射，它产生反射阻挡层中反射的光与光之间的相互干涉现象在TFT阵列反射的反射阻挡层上装有滤色器基材，它准备在TFT基板上面对液晶层，在滤色器基座之间制备材料

