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10-2004-0084208  
2004 10 06

(21) 10-2003-0019105  
(22) 2003 03 27

(71) . 20

(72) PhilipsLCD Group  
208-1101

(74)  
:

(54)

(front light unit) :  
1 :  
, TFT , TFT  
, TFT TFT  
; TFT ; TFT  
:  
: / 2 : .

3

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1

4

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TFT

5	4	A-A'	.
6	4	B-B'	.
7			2 .
8			2 TFT .
9	8	C-C'	.
10	8	D-D'	.
11			3 TFT .
12	11	E-E'	.
13	11	F-F'	.
14			4 .

< >

100, 300, 700, 1400...

110, 310, 710, 1410... 1

120, 320, 720, 1420...

121, 321, 721, 1421... TFT

122, 322, 722, 1422...

123, 323, 723, 1423...

130, 330, 730, 1430... /

140, 340, 740, 1440... 2

326, 727... 327, 726...

328, 728... TFT 420, 820, 1120...

430, 830, 1130... 500, 900, 1200...

410, 810, 1110... 510, 910...

520, 920, 1220... 530, 930, 1230...

540, 940, 1240...

be)가 가 , 가 ( CRT:Cathode Ray Tu  
 , 가 가 가  
 , 가 가 가  
 가 가 가  
 가 , , ,  
 , 가 , , (dual display)  
 , 1 , 1  
 1 , ( ) ( )  
 ht unit)(100) , 1 (110) , (120) , / (130) 2 (140) (front lig  
 FT (121) (123) (120) TFT (121) (123) , T  
 , (122)  
 , (wave guide) (100) (100) ( )  
 ) ( ) (110)  
 (130)  
 2 , 2 (a)  
 가 , (b) 가  
 , 2 (a) 가  
 (100) ( ) 1 가 (110) y  
 , / (130) (120) x  
 / (130)가 , x  
 , / (130) x , x  
 2 (140)  
 , (120) 가  
 'Normally Black Mode'가 ,  
 'Normally White Mode'가 .  
 , 2 (b) 가

(100) ( ) 1 (110) y  
 , y (120)  
 , y (130) / (130) /  
 (130)가 /  
 , y / (130) (120) 가  
 (110) , (100) 'White' 가 1  
 'Black' 가 / (130)  
 , 2 (a) (100)  
 (120) (120) TFT (121) (120) 가  
 (123) (122) (123) , TFT (121)  
 ) 가 TFT (121) TFT 가 , TFT  
 (120) (100)  
 , (120) 가  
 'Black' 가 (120) TFT  
 'Black' 가  
 CR(Contrast Ratio)

, TFT CR(Contrast Ratio)

' 가 가 '

TFT ,

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TFT ;

TFT ; ,

TFT TFT ,

(front light unit) :

1

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

2 :

/  
 TFT ,  
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 TFT ;  
 TFT ; ,  
 TFT TFT ,  
 TFT . ,  
 ' ,

(front light unit) :

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: ,  
 ' TFT , TFT ,  
 TFT TFT ; TFT ; TFT TFT  
 ; ;  
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/  
 (front light unit) ;  
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TFT 가 TFT , TFT , TFT ;

/ ;

/ 2 ;

, TFT

(front light unit) ;

1 ; TFT

TFT

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, TFT

CR(Contrast Ratio)

가 가

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2 (340)

(F/L)(300) , 1

(310) ,

(320) ,

/ (330)

(323)

,

TFT

(321)

(323)

(320) TFT (321)

(322)

(300)

(300)

( )

0)

(130)

(wave guide)

( )

(11

/ (330)

/

(320)

가

, 2

'Normally Black Mode'가

'Normally White Mode'가

(320)

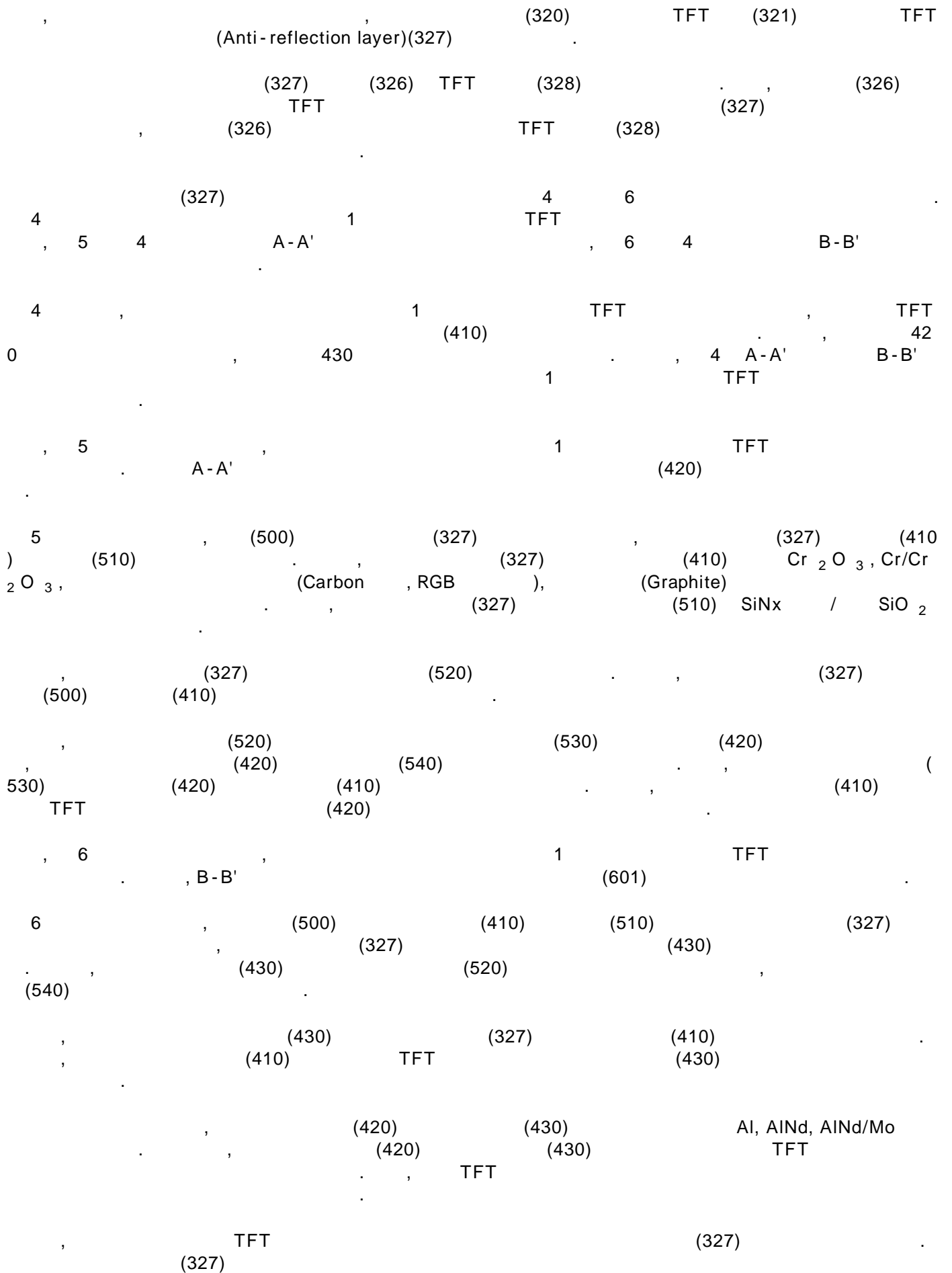
'White' 가

가

(300)

/ (330)

'Black' 가



(420) TFT (327) TFT (500) (430)  
 (410) TFT (500)

(327) TFT  
 'black' 가  
 CR(Contrast Ratio)

< 2 >  
 7 2  
 7 2 ( )  
 ( ) (F/L)(700) 1 (710) (720) / (730)  
 2 (740) TFT (721) (723) (720) TFT (721) (722) (723)

1  
 TFT 2 (Anti-reflection layer)(726) (720) TFT (721)

(726) (700) (726) (727) TFT (728)  
 (726) (728) TFT (700) TFT

8 9 8 (726) 2 8 10  
 TFT TFT  
 C-C' 10 8 D-D'

8 2 TFT TFT  
 0 830 (810) C-C' 8 TFT D-D'  
 TFT

9 C-C' 2 (820) TFT

9 (910) (900) (726) (726) (810) (726) (810)  
 ) 2 O<sub>3</sub> (910) (910) SiNx / SiO<sub>2</sub> Cr<sub>2</sub>O<sub>3</sub>, Cr/Cr  
 (726) (726) (900) (810) (810)

(900) (920) (920)  
 940) (930) (820) (820) (820) (810)  
 (810) (930) TFT (820) (820)

10 , D-D' , 2 (830) TFT .

10 , (900) (810) (910) (726) .  
 , (830) (900) (920) , (830) (940)

, (830) (726) (810) (830) .  
 , (810) TFT

, TFT (726) .  
 (726)

, (820) (726) (900) , (830) (726) .  
 ) (700) (810) TFT TFT TFT

, (726) TFT .  
 , CR(Contrast Ratio) 'black' 가

< 3 >

11 , 12 11 E-E' 3 TFT , 13 11 F-F' .

, 2 .

11 , 3 (1110) TFT , TF  
 T 1120 , 1130 , 11 E-E' F  
 -F' 3 TFT

, 12 E-E' , 3 (1120) TFT .

12 (1110) Cr<sub>2</sub>O<sub>3</sub>, Cr/Cr<sub>2</sub>O<sub>3</sub>, (1200) (1110) , ,  
 (1110) (1110)

, (1200) (1220) , (1220)  
 (1230) (1120) , (1120)  
 (1240) , (930) TFT (820)

(1110) (1120) (1110) TFT

, 13 , F-F' , 3 (1130) TFT .



가

1 4 , TFT

CR(Contrast Ratio)

1 4 , 가가

(57)

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TFT ;

TFT ;

TFT

TFT

TFT .

2.

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,

, Cr<sub>2</sub>O<sub>3</sub>, Cr/Cr<sub>2</sub>O<sub>3</sub>,

TFT .

3.

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,

SiNx / SiO<sub>2</sub>

TFT

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TFT

TFT .

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TFT ;

TFT ;

TFT ;

6.

(front light unit) ;

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1 4 TFT , TFT ;

TFT ;

/ ;

/ 2 ;

7.

6 ,

1 2 90

8.

6 ,

/ 1 , 1 90

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TFT ;

TFT ;

TFT ;

TFT ;

TFT ;

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10 ,

, Cr<sub>2</sub>O<sub>3</sub>, Cr/Cr<sub>2</sub>O<sub>3</sub>, TFT ;

12.

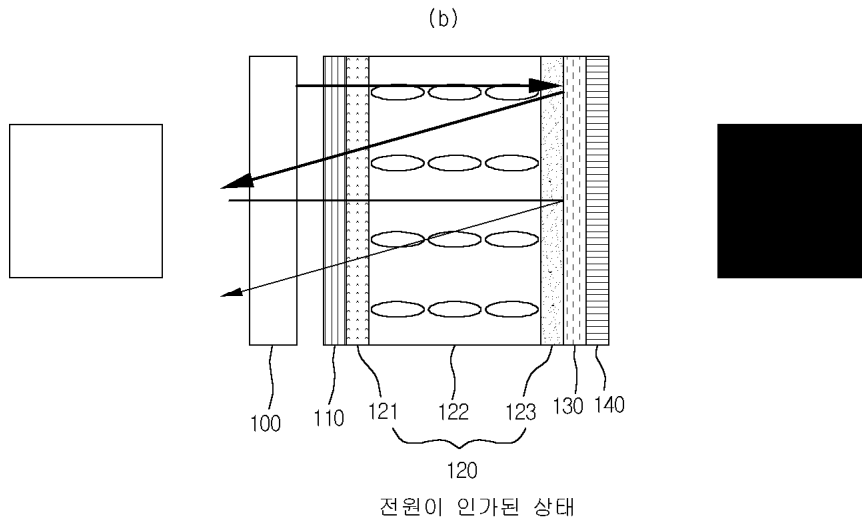
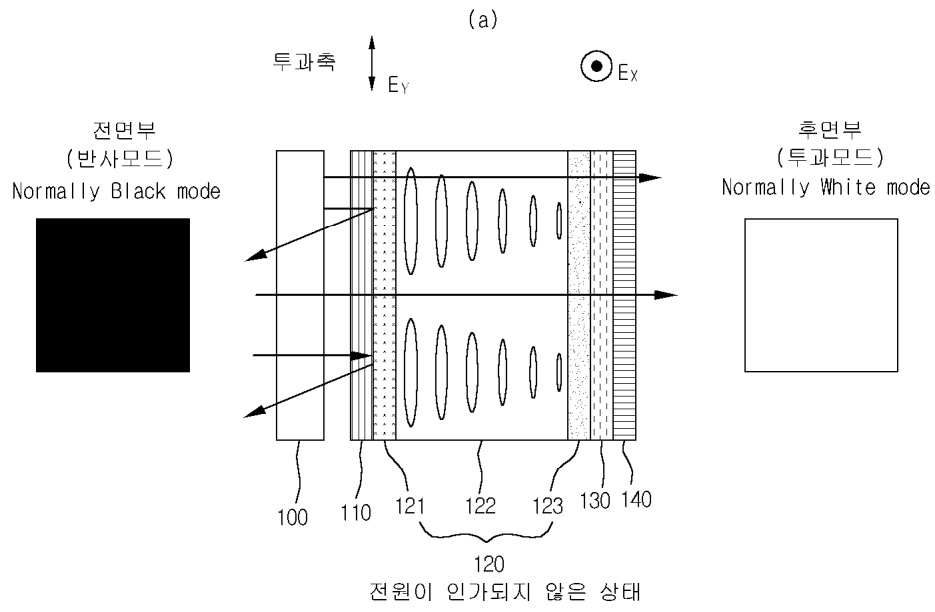
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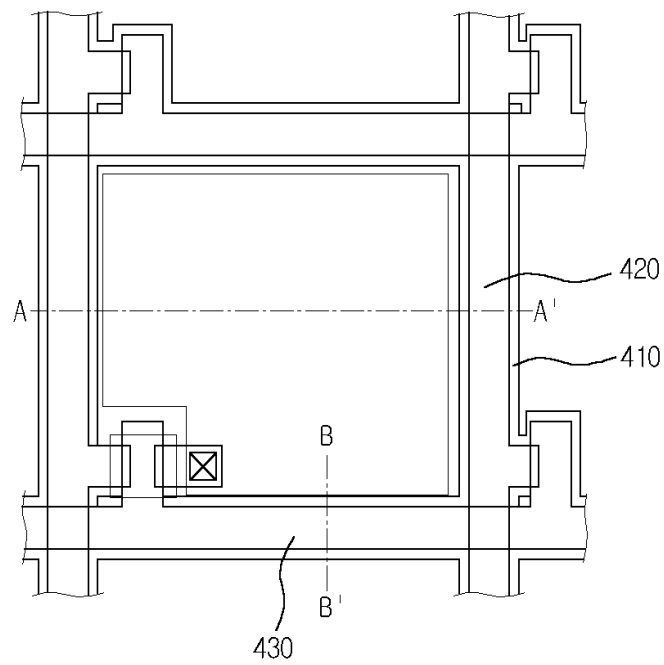
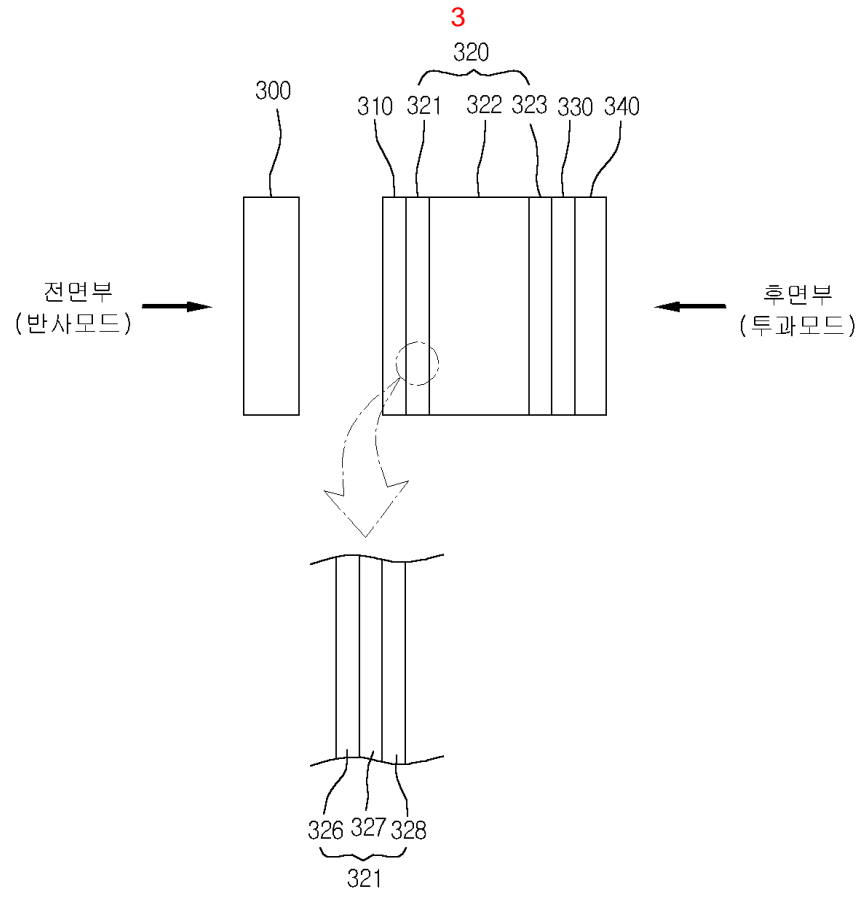
TFT .

- 12 **13.** ,  
 SiNx / SiO<sub>2</sub> TFT .
- 10 **14.** ,  
 TFT TFT ,  
 TFT .
- 10 **15.** 14 TFT ;  
 TFT ;  
 TFT ; .
- 16.**  
 (front light unit) ;  
 , 1  
 ;  
 10 14 TFT , TFT ,  
 TFT ;  
 / ;  
 / 2 ;
- 16 **17.** ,  
 1 2 90
- 16 **18.** ,  
 / 1 , 1 90  
 2
- 16 **19.** ;  
 ;  
 , ;
- 20.**  
 (front light unit) ;  
 , TFT 1 ; TFT 가 TFT ,  
 TFT

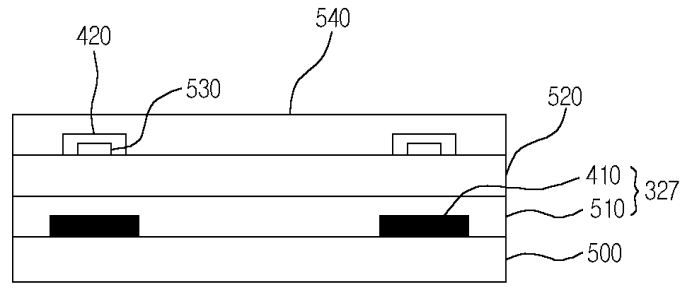


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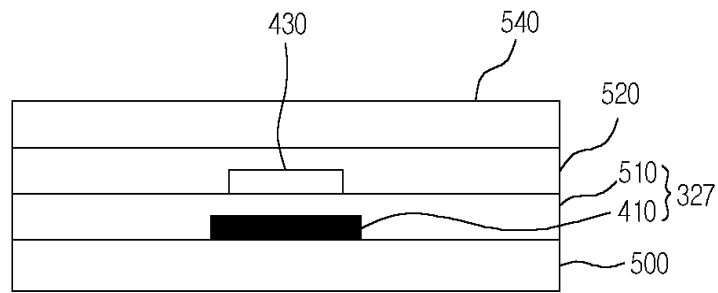




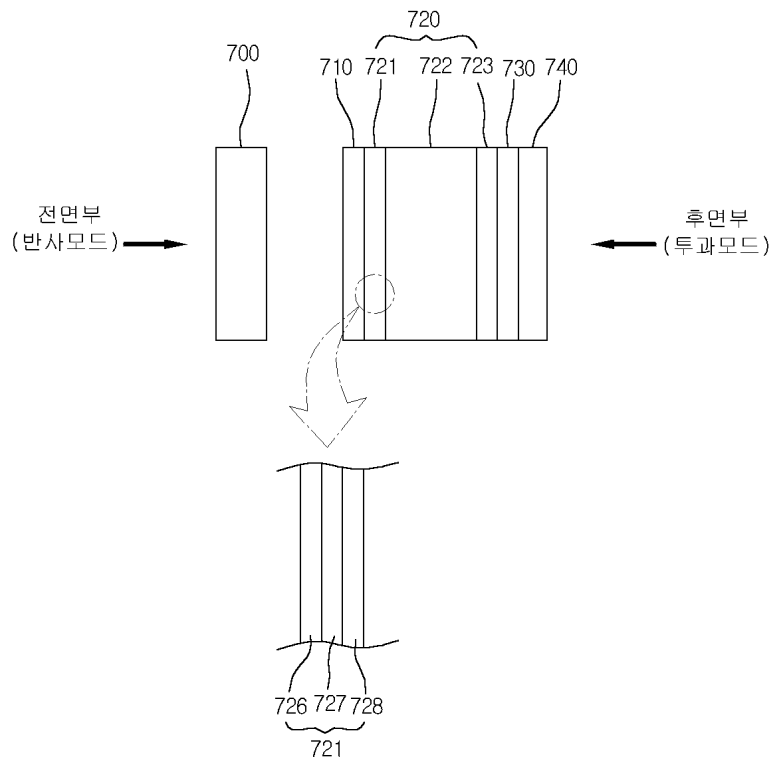
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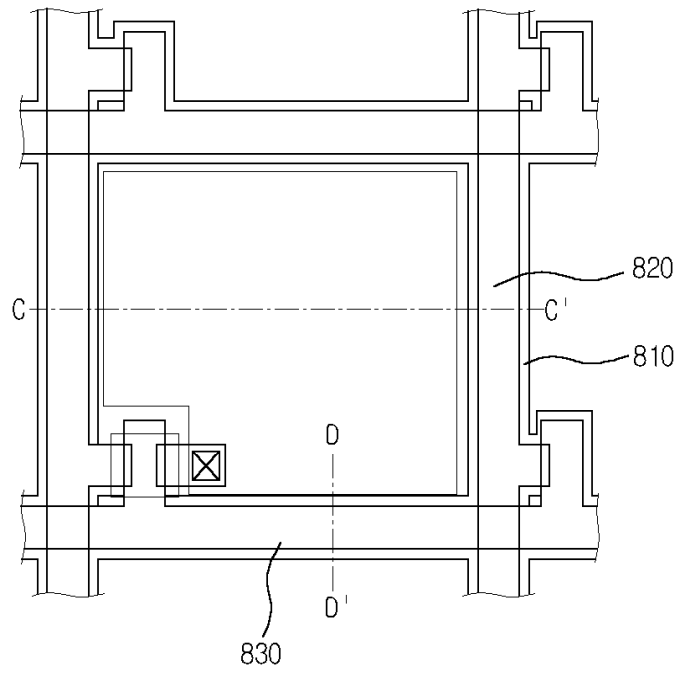
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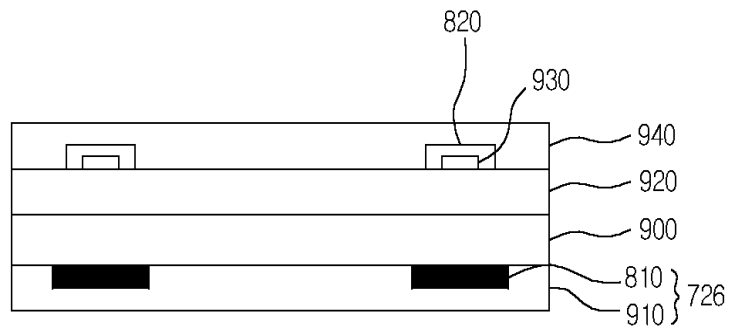
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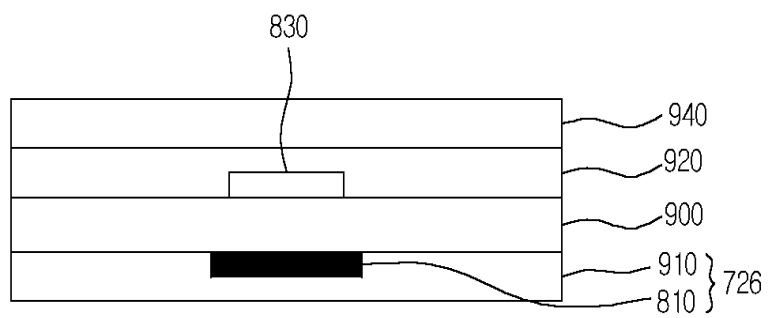
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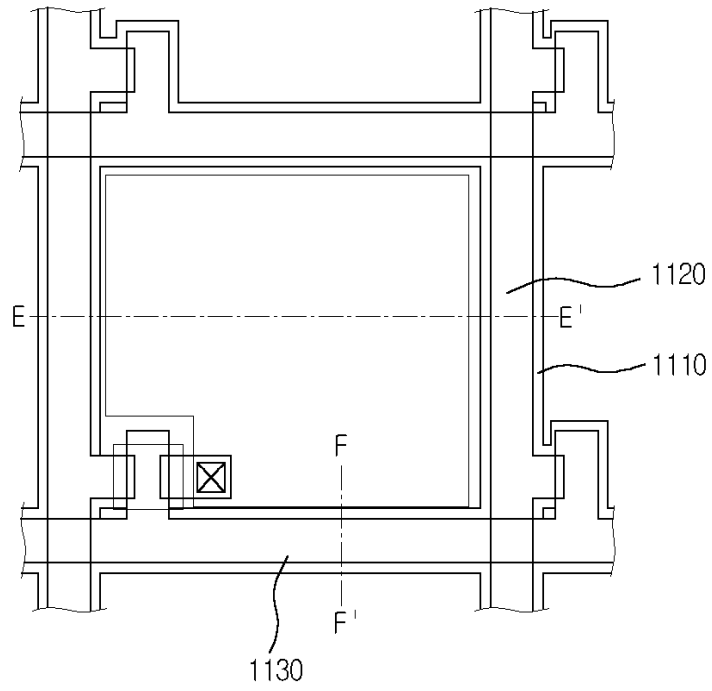
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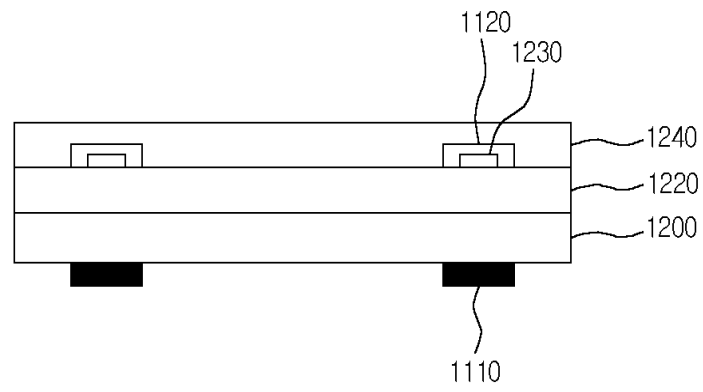
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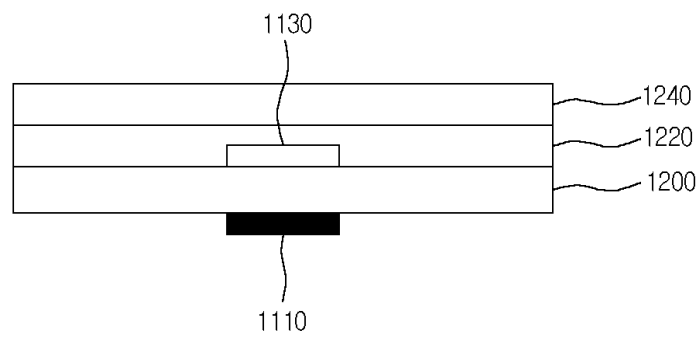
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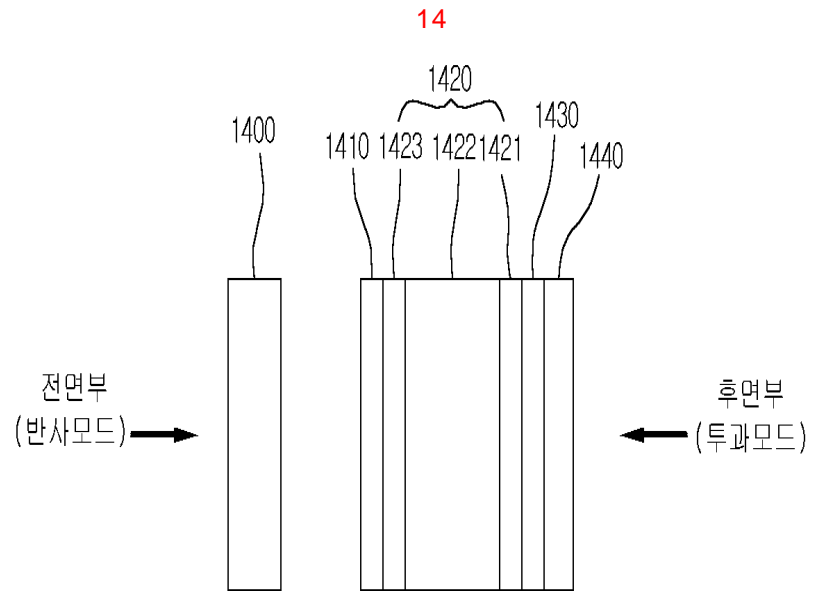


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专利名称(译)	液晶显示器		
公开(公告)号	<a href="#">KR1020040084208A</a>	公开(公告)日	2004-10-06
申请号	KR1020030019105	申请日	2003-03-27
[标]申请(专利权)人(译)	乐金显示有限公司		
申请(专利权)人(译)	LG显示器有限公司		
当前申请(专利权)人(译)	LG显示器有限公司		
[标]发明人	SHIN HYUNGBEOM 신형범 KIM KYEONGJIN 김경진		
发明人	신형범 김경진		
IPC分类号	G02F1/1333		
外部链接	<a href="#">Espacenet</a>		

摘要(译)

根据本发明的液晶显示器包括第二偏振片：其包括反射阻挡层，在如上所述的图案化吸收膜上形成的TFT阵列，以及在TFT阵列上形成的保护膜并确定穿透性根据穿透LCD面板的光偏振条件的光或不光，其中对TFT阵列有收益的光被如上所述的图案化吸收膜吸收并包括TFT基板，滤色器基底材料和TFT基板和在滤色器基材之间制备的液晶层选择性反射/透射部分：其选择性地透射光对于穿透LCD面板的光偏振条件或包括提供用于图像显示的光的前光单元的反射和选择性反射/透射部分，形成吸收光的材料的吸收膜形成光在第一偏振片上：它将收益的光传输到预偏振光，而基板和基板从前光单元和形成在吸收膜上的绝缘层接收光。TFT基板被阻挡，并且以这种方式防止在基板方向上收益的光在TFT阵列中反射。滤色器基材面对TFT基板并且是准备。

