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(24)

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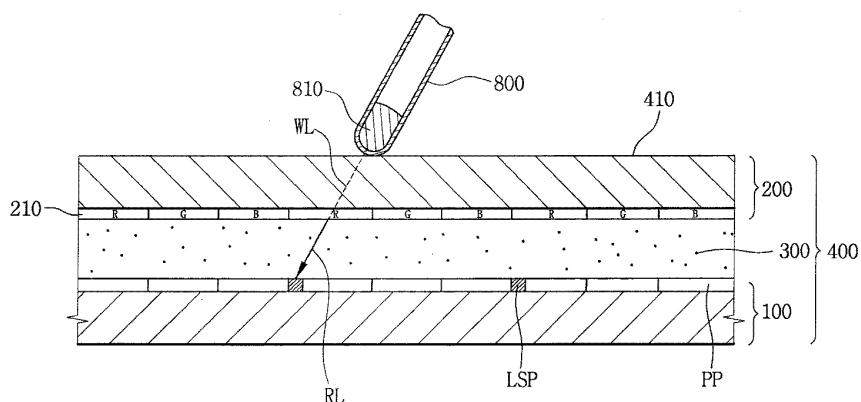
(21)	10-2003-0021877	416
(22)	2003 04 08	(72)
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(56)	JP11326954 A*	643 505
	JP07325319 A*	
	JP08179888 A	155-801
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(54)

(57)

1 . . 1 , 2 1 2 R R ,



1

1 R

1 ;

1

2

1

1

,

R

R

2 ;

1

2

,

,

1 ;

1

2

;

1

1

2

;

2

2

1

2

3

2

1

R

600 ~ 700nm

3

1

G

B

4**5****6**

1

2

1

,

3

7

6

1

8

1

3

2

2

9

8

2

10

1 ;

1 , 600 ~ 700nm

2 ;

1 2 ,

,

1 ;

1 2 ;

1 ,

1 2 ;

2 2 .
3**11**

10 , 1 ,

R G B ;

12

11 , R ,

R

[0017]

[0018]

[0019]

[0020]

[0021]

1 , 1 2 , 2 , 1 2

[0022]

[0023]	,	1	2	,	1	2	,
[0024]	,			.			.
[0025]				1	,	2	1
	2						
[0026]	1	1	R		.	2	1
		2			R		
R							
[0027]	,			,	1	,	2
	1		2				
[0028]	2	1	,				600 ~ 700nm
			,				
[0029]	,	,	2		1	R	,
	R						
[0030]	,	,	,				.
[0031]	1			,	2	1	
	,	3	1				
[0032]	1	3	,		(100)	,	(100),
	(100)		,	(200)		(200)	
	(300)				(100)		
					(400)		
[0033]		(100)					(PP)
	(300)	(410)					
	(LSP)						
[0034]	,	(100)			(LSP)		(PP)
		,		(LSP)		(PP)	,
	(100)			(PP)		(LSP)	
[0035]	,		(LSP)		(400)		
[0036]	1	2	,	(200)	R(Red), G(Green), B(Blue)		
	(210)		,				
[0037]	R	G	,	G	B	B	(200)
	,	B	R	,	R		
[0038]	(210)	R		(LSP)			,
	(400)	(410)		(VL)	R		
	(LSP)						
[0039]	,	R		(RL)	600 ~ 700 nm		(RL) 600 ~
	660nm						
[0040]	,	(VL)		(400)		(800)	

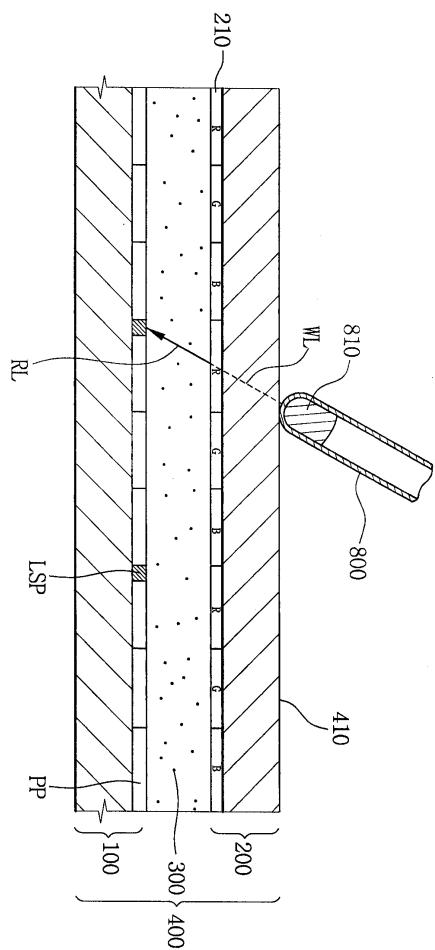
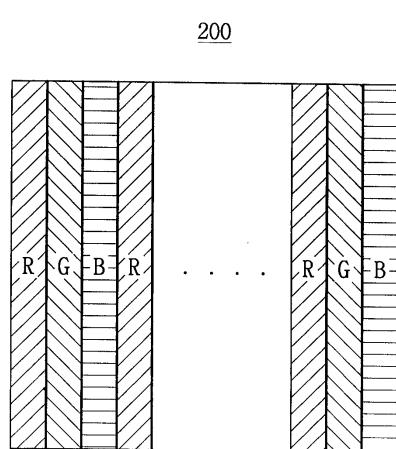
(800) (400) (410) (W)
 (Light Emitting Diode; , LED (810)

- [0041] LED(810) (W) R (RL)
 (LSP) , LED(810) (W) , (W)
 R (RL) (LSP)
- [0042] , LED(810) (W) (RL) , LED(810)
 600 ~ 700nm
- [0043] 4 R G B 4 d65
 (day light) , , d65 6504K
- [0044] , R (spectrum) , G
 , B
- [0045] , 4 x (nm) , y (× 100%)
- [0046] 4 , R G B 400 ~ 500nm , B
 R G
- [0047] , 500 ~ 600nm , G R B
- [0048] 600 ~ 700nm , R G B
- [0049] , R G B 600 ~ 700nm 100%
 , R
- [0050] , R 600 ~ 700nm , , R
- [0051] , (400) (410) (100)
 (LSP) (LSP)
 (Photo Current) 1 (LSP)
- I**
- [0052]
- | | R | G | B |
|-----|---------|---------|---------|
| | 0.872nA | 0.872nA | 0.872nA |
| | 10nA | 14.9nA | 14.9nA |
| LED | 1250nA | 99.4nA | 55.9nA |
| LED | 53.3nA | 67.4nA | 86.8nA |
| LED | | | 10nA |
| | 1410nA | 105nA | 10.9nA |
- [0053] 1 LED (laser)
 (LSP) , , LED LED
 , LED 630nm
- [0054] , (LSP) G B R
 , (LSP)
- [0055] , LED R
 (LSP)

[0056]		LED LED			(LSP)	
[0057]	1		(400) LED		(LSP) R	
[0058]		LED(810) (LSP)		LED(810) (LSP)	R (LSP)	R
[0059]	5	1			6	5
[0060]	5	6	, (400) (200) (100)	(100), (200)	(100) (300)	
[0061]		(200) R G B (210) R (400) (410) (LSP)		(210) (LSP) R	(220) (RL)	
[0062]		(220) (Indium Zinc Oxide; IZO)		(Indium Tin Oxide; ITO) (210)		
[0063]		(100) (PP)	(PP)		(LSP)	
[0064]		(PP) (D2)	1 (DL) (DL), (Thin Film Transistor; TFT)(T1)	(GL) 1 TFT(T1)	1 (DL) (DL)	2 1 (TE) (RE)
[0065]	1 TFT(T1)		(GL) (TE) 1 TFT(T1) (Amorphous silicon, a-si) TFT			(DL)
[0066]		(LSP) (D2) 2 (SL2), (RL) 2 TFT(T2)	1 (DL) 2 TFT(T2)	1 (400) 2 TFT(T2)	1 (SL1), 3 TFT(T3)	2 R
[0067]	2 TFT(T2)	1 3 TFT(T3) (GL)	(SL1)			(DL) (SL1)
[0068]	3 TFT(T3) (SL2)	2 (DL)	(GL) (SL2)		2 TFT(T2) (DL)	2
[0069]		(TE) ITO IZO	1 (CON)	3 TFT(T1 ~ T3) 1 TFT(T1)	1 TFT(T1)	(TE)
[0070]		(RE) (W)	2 TFT(T2)	(TE) (W)	(TE) (RE)	

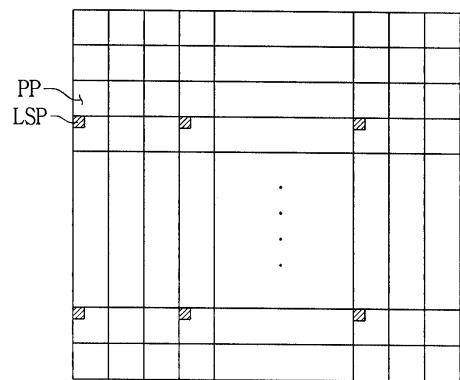
	(Al Nd)		(Al nd)		(M&W)
[0071]		(W)		(400)	1
			(RE)		
	2		(400)	(410)	2
				,	
[0072]		(W)	2 TFT(T2)		(400)
			(W)	R	(RL)
	TFT(T2)		.	.	2
[0073]	,		(RE)	1	3 TFT(T1, T3)
				,	1
[0074]	7	6		.	3 TFT(T1, T3)
[0075]	7	,	(PP)	(GL),	(DL),
		1 TFT(T1)	1 TFT(T1)		(Cl c)
[0076]		(LSP)	1	(SL1), 2	(SL2), 1
	TFT(T2)		2 TFT		2
					3 TFT(T3)
[0077]				,	R
			,	.	
	2 TFT(T2)		.	.	
[0078]		2 TFT(T2)	,	(DL)	2 TFT(T2)
		2 TFT(T2)	.	.	1
				1 TFT(T1)	
[0079]	,	(GL)	2		3 TFT(T3)
	TFT(T2)		1	3 TFT	2
	TFT(T3)		,	2	3
					1 TFT(T1)
[0080]	,		(400)	(LSP)	(400)
		(,)	,		(400)
[0081]			R G B	,	R
		R		.	
[0082]	,		R	,	
[0083]	,	R		.	
	TFT			.	
[0084]		,		.	

[0001] 1
[0002] 2 1
[0003] 3 1
[0004] 4 R G B
[0005] 5 1
[0006] 6 5
[0007] 7 6
[0008] < >
[0009] 100 : 200 :
[0010] 210 : 300 :
[0011] 400 : 410 :
[0012] 800 : 810 : LED
[0013] T1 : 1 TFT T2 : 2 TFT
[0014] T3 : 3 TFT LSP :
[0015] PP : WL :
[0016] RL :

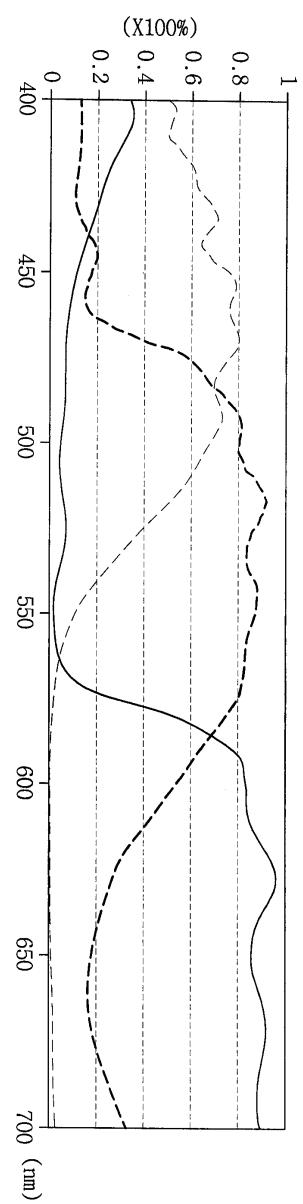
1**2**

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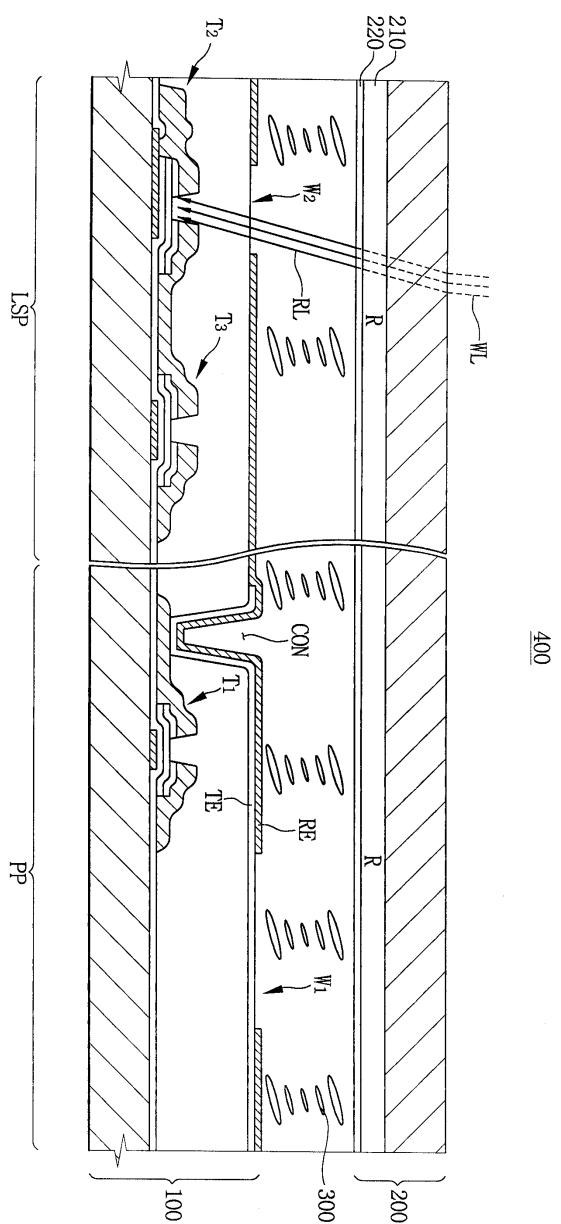
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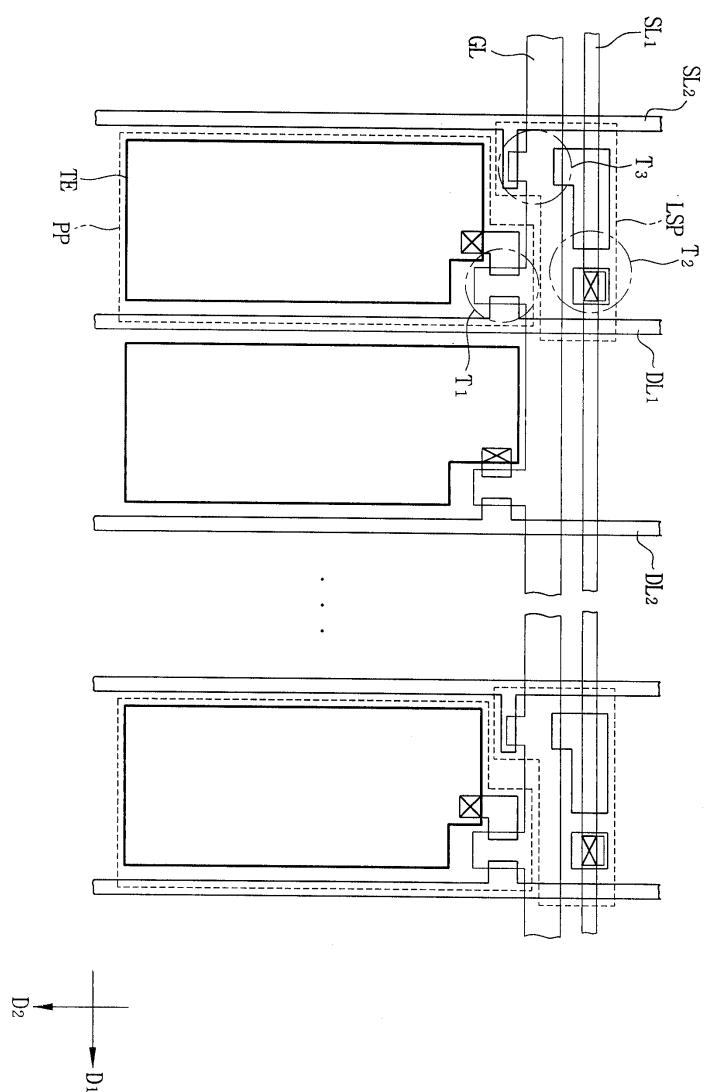
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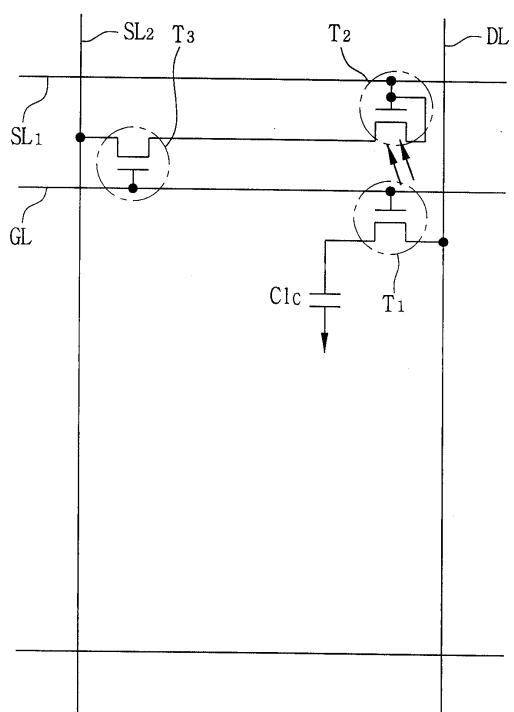
5



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专利名称(译)	液晶显示器		
公开(公告)号	KR100954082B1	公开(公告)日	2010-04-23
申请号	KR1020030021877	申请日	2003-04-08
[标]申请(专利权)人(译)	三星电子株式会社		
申请(专利权)人(译)	三星电子有限公司		
当前申请(专利权)人(译)	三星电子有限公司		
[标]发明人	PARK SANGJIN 박상진 CHO JONGWHAN 조종환 UH KEEHAN 어기한		
发明人	박상진 조종환 어기한		
IPC分类号	G02F1/1333 G02F1/133 G02F1/1368 G09G3/36		
CPC分类号	G09G3/3648 G09G2360/14 G02F1/1368 G02F1/13338 G02F1/13318		
代理人(译)	PARK , YOUNG WOO		
其他公开文献	KR1020040087471A		
外部链接	Espacenet		

摘要(译)

公开了一种能够改善操作特性的液晶显示装置。液晶显示面板包括第一基板，第二基板和介于第一基板和第二基板之间的液晶层。第一基板具有公共电极和在第一表面上包括R颜色像素的滤色器。第二基板包括：多个像素部分，用于在面对第一表面的第二表面上显示图像；以及光感测部分，设置在R颜色像素下方，用于感测通过R颜色像素从外部入射的光。它包括。因此，通过提高光感测部分的灵敏度，可以改善液晶显示装置的操作特性。

