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(12)

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(B1)

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(24)

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10-0449569
2004 09 10

(21) 10-2001-0065234 (65) 10-2002-0033054
(22) 2001 10 23 (43) 2002 05 04

(30)

JP - P - 2000 - 00328666 2000 10 27 (JP)

(73)

가 가 가 4 6

(72)

가 가 460

1-5-1

1-36-20

(74)

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(54)

가

1 , 3 - ,
 2 가 ,
 3 ,
 4 3 - ,
 5 3 - ,
 6 ,
 7 6 - ,
 8 ,
 9 ,
 10 ,
 11 ,
 12 11 - ,
 13 11 - .
 ()
 SUB
 GL
 DL
 TFT
 Cstg, Cadd
 GI
 PSV1 ()
 PSV2 ()
 CND1 1
 CND2 2

K.Tarumi, M.Bremer, and B.Schuler, IEICE TRANS.ELECTRON., VOL. E79-C N
 O.8, 1035-1039, AUGUST 1996

, x y
 y x ,
 가

[illegible]

(SUB2) 가 (SUB1)
 (SUB1) .
 (SUB1) (SUB2) (SUB1) (SL)
 (SL) (SUB1, SUB2)
 , COG , TCP TCP
 가 (SUB1) , 가 (SUB1)
 << 3 >>
 , 2 (A)
 1 , - 4
 5 (PX) (CT) (SUB1)
 가 가 (ORI) (POL) P), (PX) (CT)
 (SUB1) (GL) x (GL)
 (GL) Cr (DL),
 (GL) (CL) (GL) (CL) Cr
 (CL) 2 (GL) (CL) (G
 L) (GL) (CL) (SUB1) (GL)
 SiN (GI) (GL), (GI) (CL) (1, 4, 5). (DL)
 Cstg) (GI) (TFT) 가 (GL) Si(a-Si)
 (AS) (AS) (TFT) (SD1) (SD
 2) (GL) MIS 가
 (AS) (TFT) (DL) (GL) (CL) (DL)
 (GI) 가 (SD1) (DL) (SD2)
 (PX) (GI) y (DL) , 가
 (AS) (SD1) (DL)
 (SD1) Cr y x (CL) (DL)
 3) (PX) (PX) (CL) (DL)
 Cr 가
 (PX) (TFT) (PX) (AS)
 (SD1) (TFT), (DL), (PX) (SUB1)
 (PSV2) (TFT) SiN (PSV) (PSV1) (1, 4, 5). (PSV)
 (PSV) (TFT) (LC) (PSV2) (PSV2)
 (PSV) (PSV) (PSV)

1) 가 , (PSV1) , (PSV2) , (PSV)
 (SUB1) 가 ,
 , (PSV) () 가 ,
 T) , (CT) y x (2) (C
 (CT) ITO(Indium - Tin - Oxide) (PX) 가 IZO(Indium - Zinc - Oxide)
 (CT) (CL)
 (TH) , (PSV)((PSV2), (PSV1))
 (TH) (CL) (CL) 가 (TH
) (PX) (TH)
 , y (CT) () y)
 , - (y) 0 ° , 45 ° (y) 5 ° 30 °
 (PX) (CT) 가 , x
 (PX) (CT) (PX) (CT)
 , (DL) (DL)
 ND1) (DL) 1 (CND1) (DL) , 1 (C
 (SUB1) (CND1) (CT) ITO IZO
 , 1 (CND1) (CT)
 1 (CND1) , ITO
 (DL) (PX) (CT) (SUB1)
 , 가 가 가 가 가 가
 1 (SUB1) 가 가 가 가
 1 (CND1) (DL) (DL)
 , 1 (CND1) (DL)
 1 (PX) (CT) (DL) 1
 1 (CND1) (PSV) (DL) 1 (CND1
) (PSV2) (DL)
 , (PX) (TFT) 가 가 (CT)
 , (DL)
 , 1 (CND1) , (CT)
 (PX) (CT)
 , 가 (CT)
 () (DL) ()
 (PX) (SUB1) (PX) (ORI1)
 (ORI1) (LC) (LC) (ORI1)
 , (DL)
 , (SUB1) (POL1) , (ORI1)
 , (SUB1) (LC) (SUB2)
 (BM)가 (BM) (TFT)

, (DL) 1 (CND1) 가 ,
 (BM) , (DL) 가 (SUB1)
 (SUB2) , x 가 y (TFT)
 , y (BM)가 (SUB2) y
 (FIL)가 , x (R), (G), (B)
 (BM) (FIL) (OC) (SUB1)
 (OC) (ORI2) (ORI2)
 (SUB1) (POL2) (SU
 B1) (POL1) (PX) Cr
 (CT) 가 ITO IZO
 (PSV1) (PSV2)
 (PSV2) 가 가 가
 (PX) 가 (PX)
 , (PX) p-ITO , Al Al (PX)
 HBr
 (CND1) 2 (CND2) Cr (CT) 1
 2.
 6 6 - 7 (GL) ITO 2 (CND2)
 3 2 (CND2) (GL) (GL)
 2 (GL) (CND2) (SUB1) (GL)
 , 2 (CND2) (CT) (DL)
 가 , 1 (CND1) (CT) (SUB2) (BM)
 2 (CND2)
 (DL) (BM) 가 1 (CND1) (GL) 2 (CN
 D2) 가 (BM)
 (BM) , (SUB1) (SUB2)
 , (GL) 2 (CND2) (TFT)
 (AS) (TFT) (AS) (GL)
 (TFT)
 (TFT) (AS) 가 (PSV)
 (TFT) (TFT)
 가 (TFT)가
 (TFT) 가 (PSV) 2 (CND2)
 (AS) (TFT) (PSV) 2 (CND2)
 TFT)

2 (CND2) (TFT) (

3.

8 , 6

6 (SUB2) (GL) (BM)가

(GL), 2 (CND2), (BM)

(GL), 2 (CND2), (BM)

(BM) 2 (CND2) (SUB1)

(SUB2) y (BM)

2 (CND2)

4.

9 8 (CT) (PX) Cr 8

(CT) (GI) (GI) Cr (CL)

(PX) (GI) (TFT) (SD)

(GI)((PSV))

(GI)((PSV))

가 (DL) 1 (CND1) (GL) 2 (CND2) 8

(SUB2) (GL) (BM)가 2 (CND2), (SUB

2) (GL) (BM)

5.

10 , 9

(DL) 1 (CND1), (GL) 2 (CN

D2) (PSV) (CT) Cr

, 1 (CND1) 2 (CND2) (AR) 가

(CL)

(PX) (GI) Cr Cr

(DL) (TFT) (SD2) (DL)

(PX) ITO (PX) (DL)

Cr (TFT) (SD2)

(PX) (TFT) (PX)

((TFT) 가 (GL) (PX)

(Cadd) 가

(Cadd) (PSV1 PSV2) (Cstg) (GI)

(Cadd) 2 (Cadd Cstg). (CND2) (

(DL) 1 (CND1) (GL) (GL) (BM)가 2 (CND2) 9 (S

SUB2) (GL) (GL) (BM) 2 (CND2), (S

UB2) (GL) (BM)

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3 (GL) , (GL) (PX) (CT) (PSV) (CL)
 , (PX) (CT) ITO IZO ,
 , (GL) x (GL) ,
 (GL) Cr (GL) (CL) (CL)
 (GL) Cr 가 (CL)
 CT) 가 (SUB1) (GL)
 (GL) SiN (GL) (GI) (12, 13). Si(a-Si)
 (AS) (GL) (AS) (TFT) (DL)
 (AS) (TFT) (DL)
 (GI) y (DL) , 가 (SD1)
 (AS) Cr (SD1) (SD2) (CL) (PX)
 (CL) 가 (SUB1) (T
 FT) (TFT), SiN (DL) (PSV1) (PSV2) (T
 (PSV) (12, 13). (PSV) (PSV2) (T
 TFT) (LC) (PSV) (PSV2) (PSV)
 (PSV) (PSV) (PSV2) (PSV)
 , (PSV) y x 3 (PX)
 2 (CT) (PX) (CT) ITO 가
 , (PX) (CT) ITO IZO 가
 , (PX) (TFT) (TFT) (SD2) ,
 (PSV2, PSV1) (TFT) (PSV2, PSV1) (CT)
 , (CT) (TFT) (PSV2, PSV1) (CT)
 (CL) (PX) (CT) (DL) 1 (CND1) ,
 (DL) 1 (CND1) (CT) (GL) 2 (CND2) ,
 2 (CND2) 2 (CND2) (SUB2) (BM)
 , 2 (CND2) , (SUB2) (BM)

(57)

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가 ,

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Cadd Cstg

21.

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Cadd Cstg

Cadd Cstg

22.

가 ,

가 ,

가 ,

가 ,

가

23.

가 ,

가 ,

가 ,

2

가

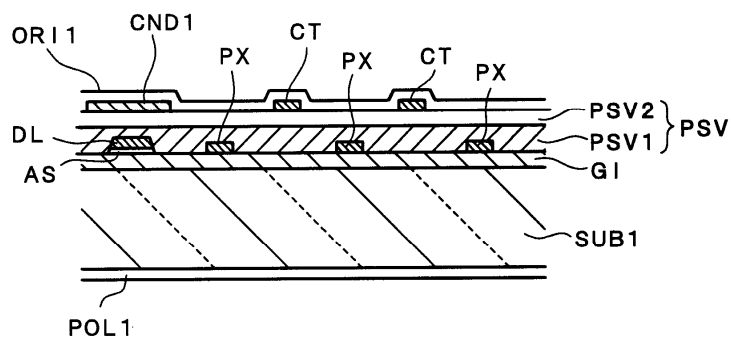
24.

23

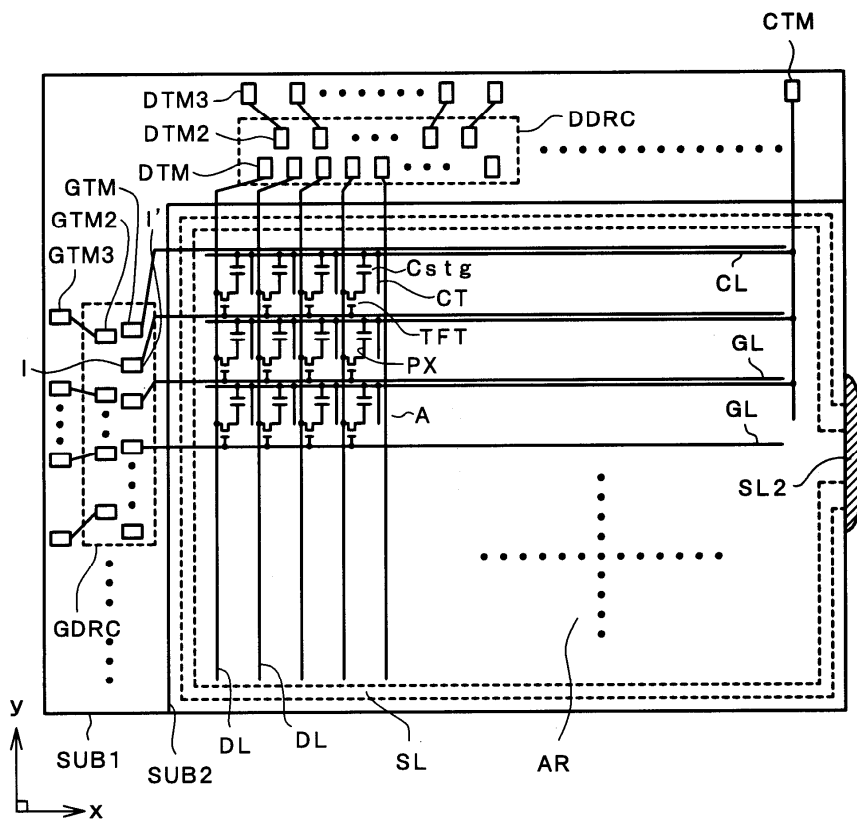
25.

23

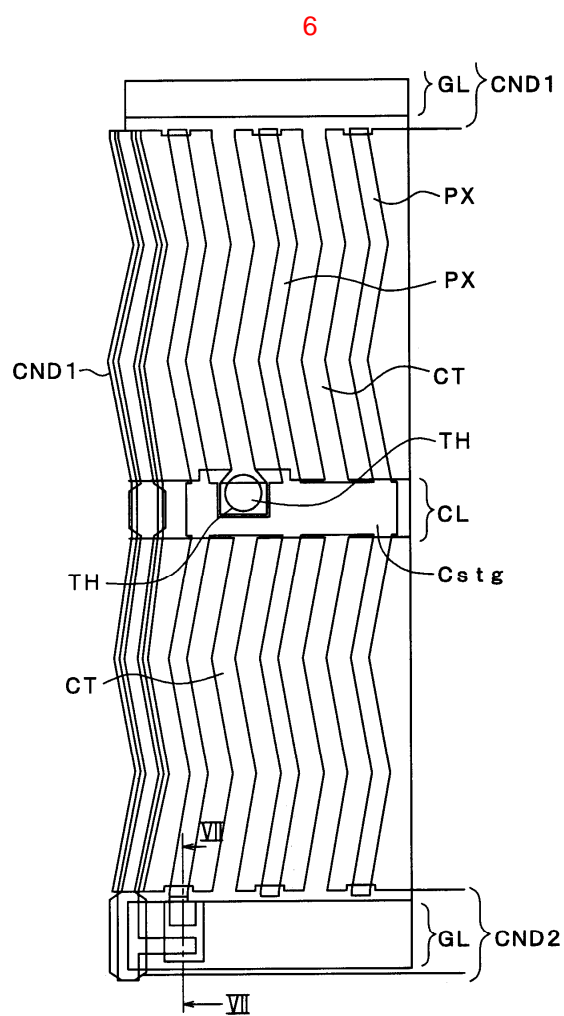
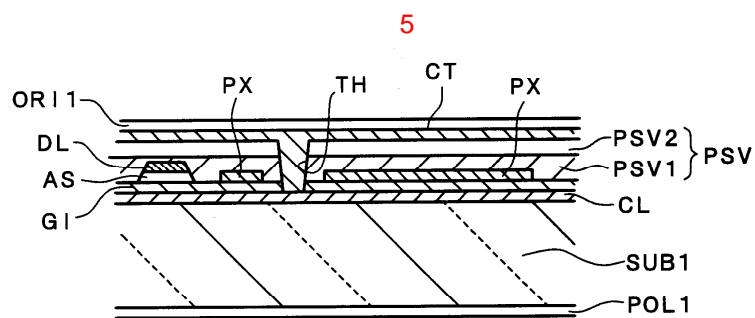
1



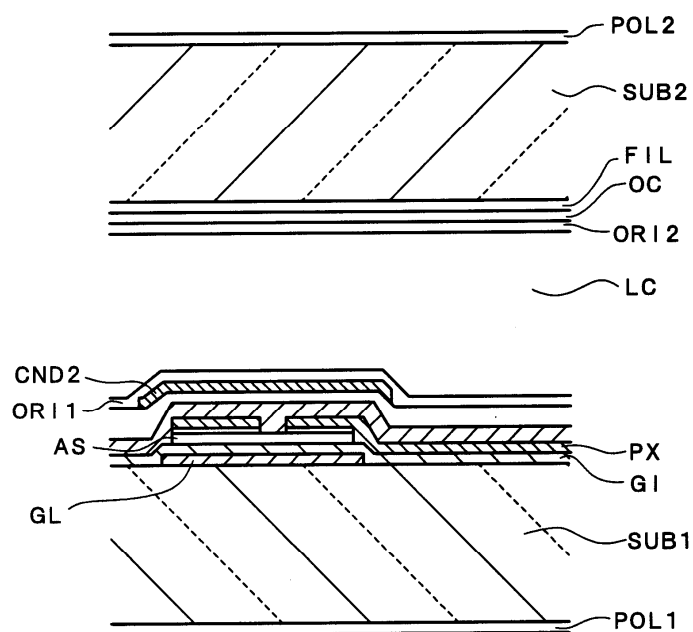
2



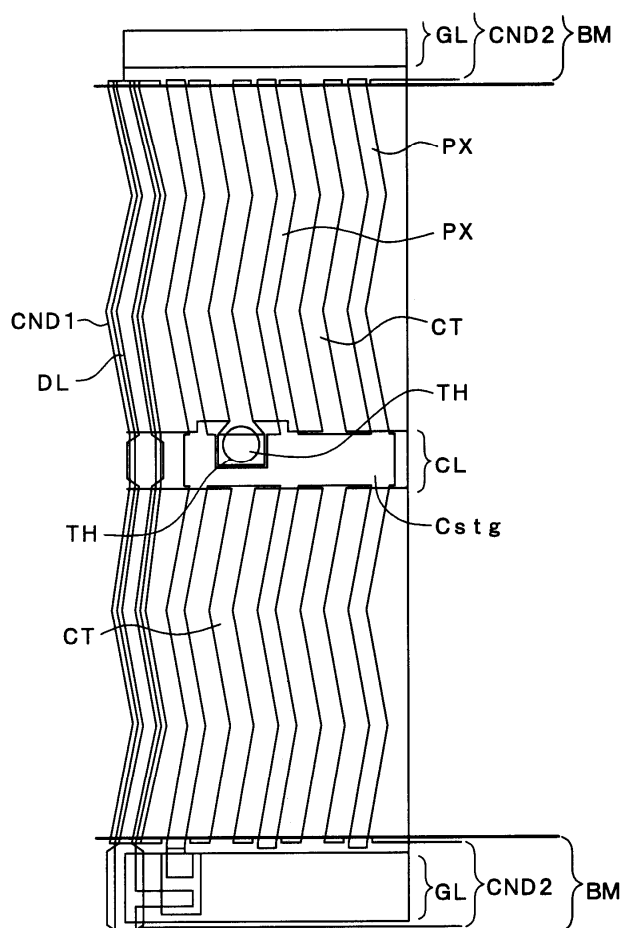




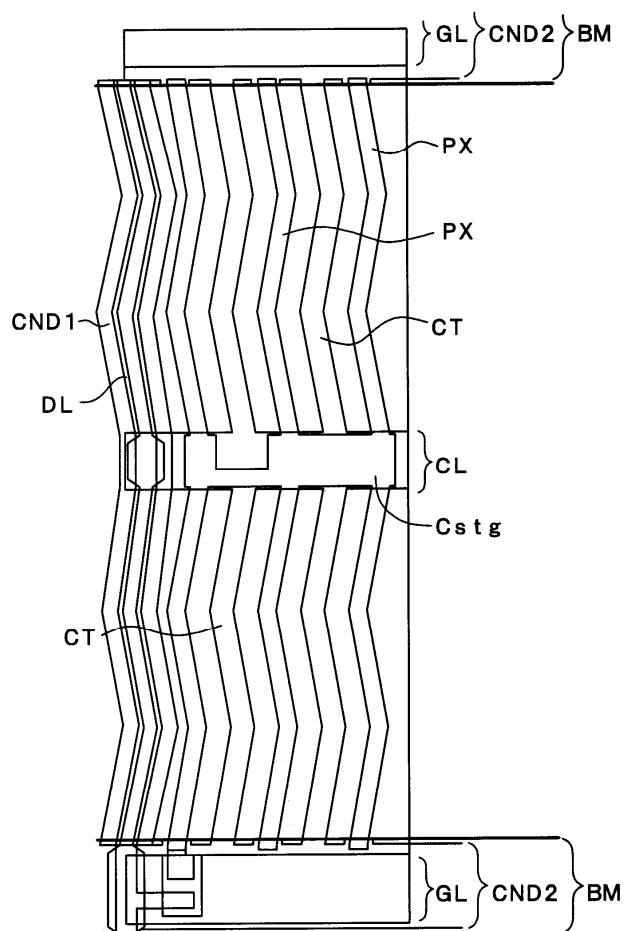
7

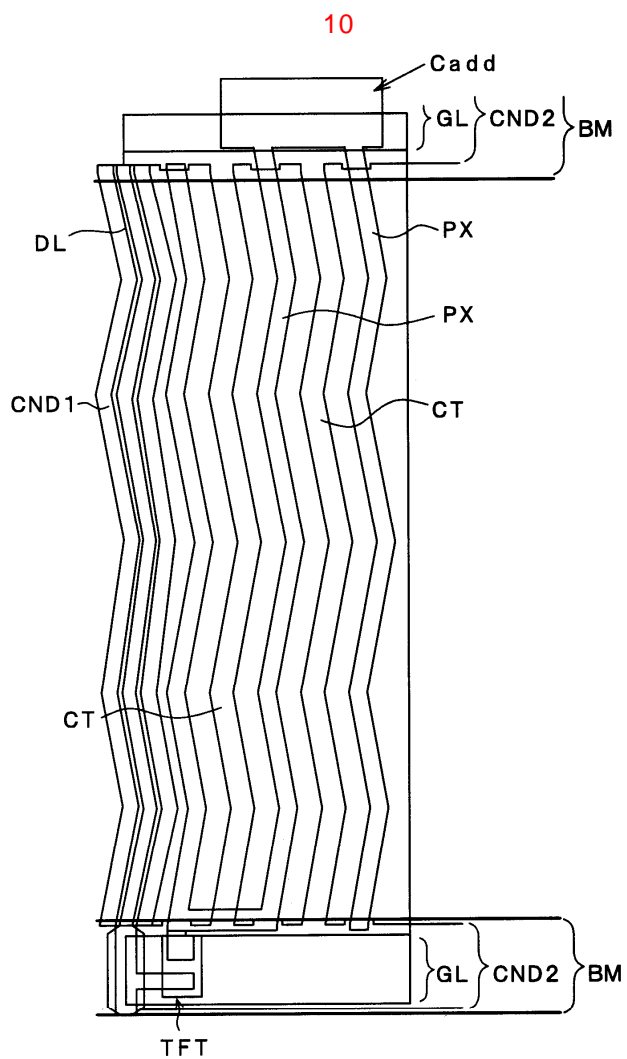


8

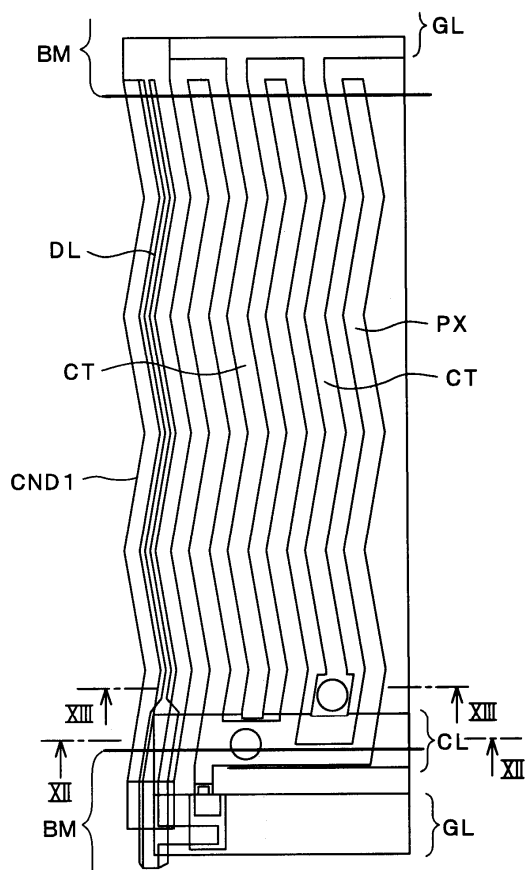


9

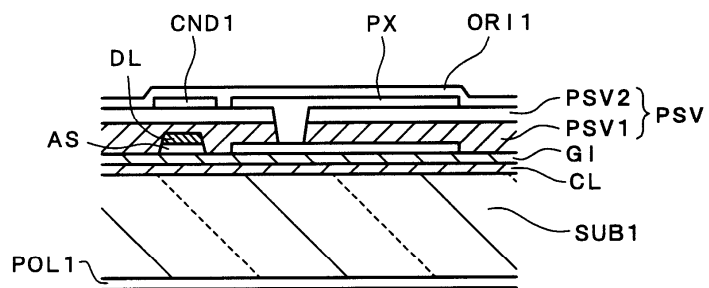




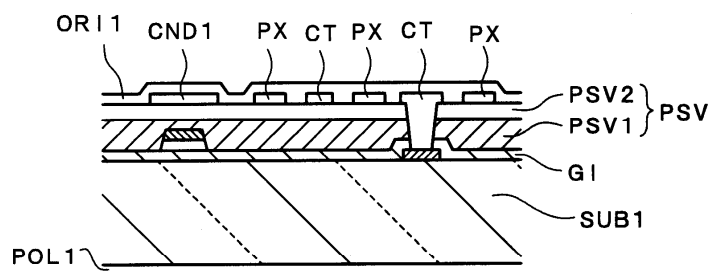
11



12



13



专利名称(译)	液晶显示器		
公开(公告)号	KR100449569B1	公开(公告)日	2004-09-21
申请号	KR1020010065234	申请日	2001-10-23
[标]申请(专利权)人(译)	日立HITACHI SEISAKUSHODBA		
申请(专利权)人(译)	株式会社日立制作所		
当前申请(专利权)人(译)	株式会社日立制作所		
[标]发明人	KURAHASHI NAGATOSHI 쿠라하시나가토시 ISHII MASAHIRO 이시이마사히로 NAKAYOSHI YOSHIAKI 나카요시요시아키		
发明人	쿠라하시나가토시 이시이마사히로 나카요시요시아키		
IPC分类号	G02F1/1362 G02F1/1368 G02F1/1343 H01L21/336 H01L21/3205 H01L23/52 H01L29/786 G02F1/136		
CPC分类号	G02F2001/136218 G02F1/134363 G02F1/136209		
优先权	2000328666 2000-10-27 JP		
其他公开文献	KR1020020033054A		
外部链接	Espacenet		

摘要(译)

从而防止由于信号线的影响而导致的光泄漏。通过栅极信号线上的扫描信号和通过开关元件的漏极信号线上的视频信号驱动的开关元件被提供给通过液晶彼此相对布置的基板中的一个基板的液晶侧上的像素区域。以及用于在像素电极和像素电极之间产生电场的对电极,其中,对电极通过绝缘膜形成在像素电极的上层上,与对电极相同的材料层,导电层至少在信号线上形成在下层中的漏极信号线和栅极信号线中的至少一个上。1 指数方面 透明基板, 栅极信号线, 漏极信号线, 电容器, ITO 膜, IZO 膜

