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2002 09 14

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(71) 가 가

가 4 6

(72)

868

414 - 1 - 101

(74)

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(54)

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2 가 .

3 1 - .

4 1 - .

5 .

6A 6D .

7 .

8 7 - .

9 .

10 9 - .

11 .

< >

SUB: GL:

DL: GI:

AS: TFT:

SD1: SD2:

Cadd: SHL:

PSV: BM:

FIL: OC:

, , .

Y , Y X 가 , X

, , () ()가 ,

가

()

가

가

1.

《 가 》

2 가 . ,

, SUB1 , SUB1 SUB2

SUB1 (GL) Y , X X Y (GL) , (DL) , (AR)

, (TFT) (GL) () (TFT) (PX)

, (PX) (Cadd)가 (GL) (Cadd) (TFT)가 (GL) (OFF) , (PX)

(PX) , (SUB2) (CT)() ,

(GL) () (SUB1) (DL) (SUB1) (GDRC) (GTM)가 , (SUB1) (DDRC) (DTM)가 .

(GDRC, DDRC) , , 가 (SUB1) , COG()

(GDRC, DDRC) (SUB1) (GTM2, DTM2) (SUB1) 가 , 가 (GTM3, DTM3)

(SUB2) , 가 (SUB1) , (SUB1)

, (SUB1) (SUB2) , (SUB2) (SEAL) (SL) , (SL) (SUB1, SUB2)

, COG , TCP , TCP

가 (SUB1) , 가 (SUB1)

《 》

1 (SUB1) , 2 (A)

3 1 - , 4 1 -

1 (GL) (SUB1) X Y

(GL) (A1) (陽極)

(GL) A1 (SHL)

(SHL) (DL) 가 (SHL)

(DL) " L"

(GL) (DL) 가 (SHL)

(TFT) (DL) (SHL) 가

SiN (GI) Si(a-Si) AS 가

(TFT) (GL) (GI)

AS (SD1), (SD2) (TFT)가

(SD1) (SD2) (DL)

(DL) 가 (GL) AS (DL)

(SHL) (GL) AS (AS)

(SHL)

Y , X (DL)

(DL) (GL) AS

(DL) (TFT) (AS)

(TFT) (SD1)

(SD1) (TFT) (SD2) (PX)

(SD1), (SD2) AS

가

AS (SD1)

(SD2)

, (DL) (DL)((SD1), (SD2)) (SUB1) ,
(DL) SiN (PSV1) .
(PSV1) (TFT) ,
(TFT) (SD2) (CH) .
, (PSV1) (Cr) (A1)
(PX) . (PX) 가 ,
(SUB2) (LC) (PX) , (SUB2)
() .
(PX) , (TFT) , ,
. ,
, (DL) (DL)
(PX) ,
(GL) (DL) , (P
X)
, (GL) (DL) , (PX)
, .
(PX) , ,
(SHL) (SHL) (PX)
. ,
, (PX) , (PSV1) (CH) ,
(TFT) (SD2) .
, (PX) (SUB1) , (PX)
(SiN) (PSV2) . (PSV2) (PX)
, .
, (PSV2) , (ORI1) . (ORI1)
, 가 (ORI1) (LC) ,
(ORI1) (LC) .
, (SUB2) , (TFT) (BM)
가 (1).
(BM) , (TFT) 가 ,
, .
, (BM) , (GL) (DL) ,
, , (PX) 가 ,
. ,
, (SUB2) , (BM) , (FIL)가 .
(FIL) , Y 가 , X
(R), (G), (B) 가 .

B1) (FIL) (SHL) 가 (FIL) (DL) (SHL) (SU)
 (1 5) (SUB1) (FIL)가 (SUB2) (FIL) (SHL)
 (BM) (FIL)가 (SUB2) (FIL) (BM)
 가 (OC) , (OC) ITO (CT)
 (CT) (PX) () ,
 (LC) (CT) (SUB2) , (CT) (OR2)
 (OR2) (OR2) , (OR2) (LC) 가
 (SHL) (SUB2) (PX) , (PX)
 (SUB1) (SUB2) (SHL)
 (SHL) (AS) (SHL)
 (AS) a - Si (AS) (SHL) (AS)
 (PX) (DL) (GL),
 (PX) (DL)
 (GL) (GL) (PX) (PSV1)
 (Cadd)가 (PX) (GL) (Cadd)
 《 》
 6A 6D , 6A 6D ,
 1 -

1.(6A)

(SUB1) , A1 300nm
 , (GL) , (SHL)
 , (SHL) (GL) , (SHL)
 A1 , 180nm , A1
 (Short)가 (DL)

2.(6B)

(SUB1) , CVD SiN 240nm (GI)
 Si 200nm , (P) 1% n+ Si 35nm , AS
 , 6 가 (GI) AS
 , AS Si (GI)
 , (GI) 4 ° (Taper), AS 70 °
 , (GI) AS

3. (6C)

(SUB1) , Cr 30nm , A1 200nm
 , , , A1 2 Cr
 (DL), (SD1), (SD2)
 , 6 가 (AS) n+ (Si)
 (SUB1) , CVD 600nm , 6 가
 , 1 (PSV1) (CH)

4.(6D)

(SUB1) , Cr 30nm , A1 200nm
 , , , A1 2 Cr
 (PX)
 (SUB1) , CVD 300nm , 6 가
 , 2 (PSV2)

2.

7 , 1 . ,
7 - 8 .

1 (SUB2) (FIL) .

(FIL) (SHL) (FIL) (FIL) (FIL) (SHL)
, (SHL) (FIL)가 (FIL) .

(FIL) (FIL) ,
(FIL) .

AS (SHL) AS (FIL)
(FIL) 가 , (FIL)
, 가 .

(FIL)((LC))가 , 가 .
(FIL) 가 , 가 .

(SHL) (FIL)
(FIL)가 .

3.

9 , 7 .
, 10 9 - ((SUB1)) .

7 (PX1)(7 (PX))
(HO)가 .

(PX1) (HO)가 .

10 (PSV2) , ITO(Indium - Tin - Oxide)
(PX2) .

(PX2) , (PSV2) (PX1)
(PX1) 가 (PX2) .

(PX1) (HO) (PX2) ,
. .

(PX1) (PX1) (PX1)
(SHL) , .

ITO (PX2) (PSV2)
(GL) (SHL) 가 .

X2) , (TFT) (SD2) , (SD2) (P
 ,
 .

4.

11 , , 4, 8, 10

.

, (TFT) (GI) .

, (GI) , (TFT) , (DL)
 (SHL) , AS , (SUB1) ,

.

, 가 , .

, ,

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, () , .

(57)

1.

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가 .

2.

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5.

1 ,

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6.

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가

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7.

1 ,

가

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8.

1 ,

가

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9.

1 ,

가 ,

.

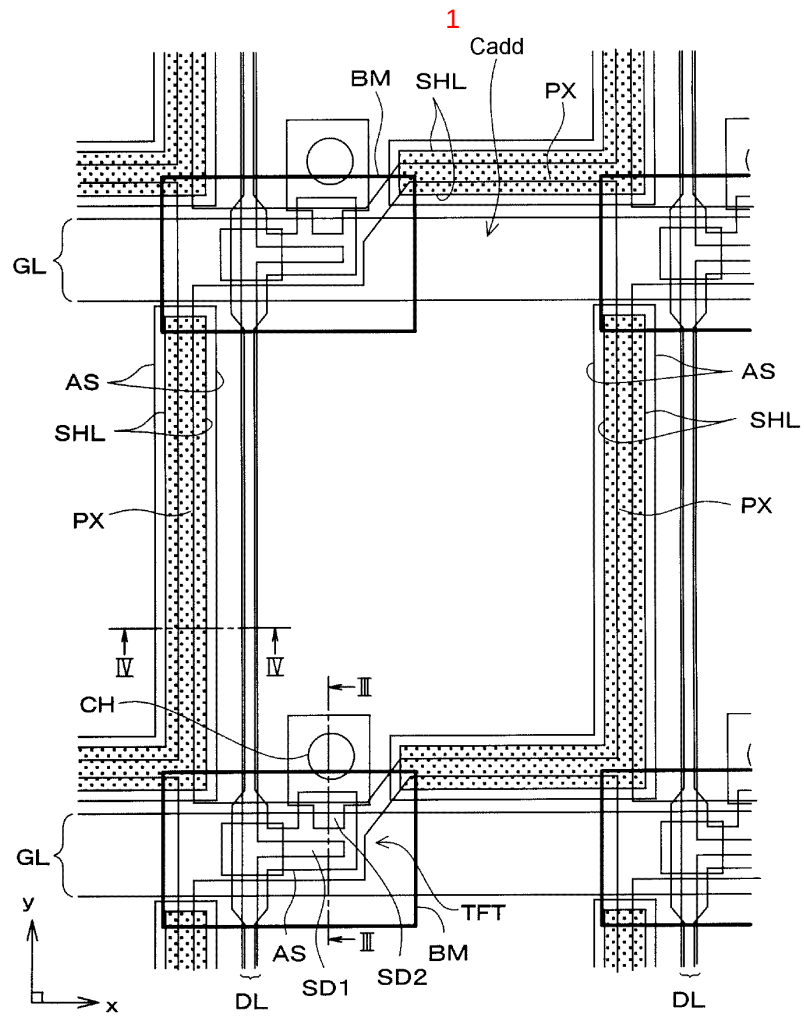
10.

6, 7, 8, 9 ,

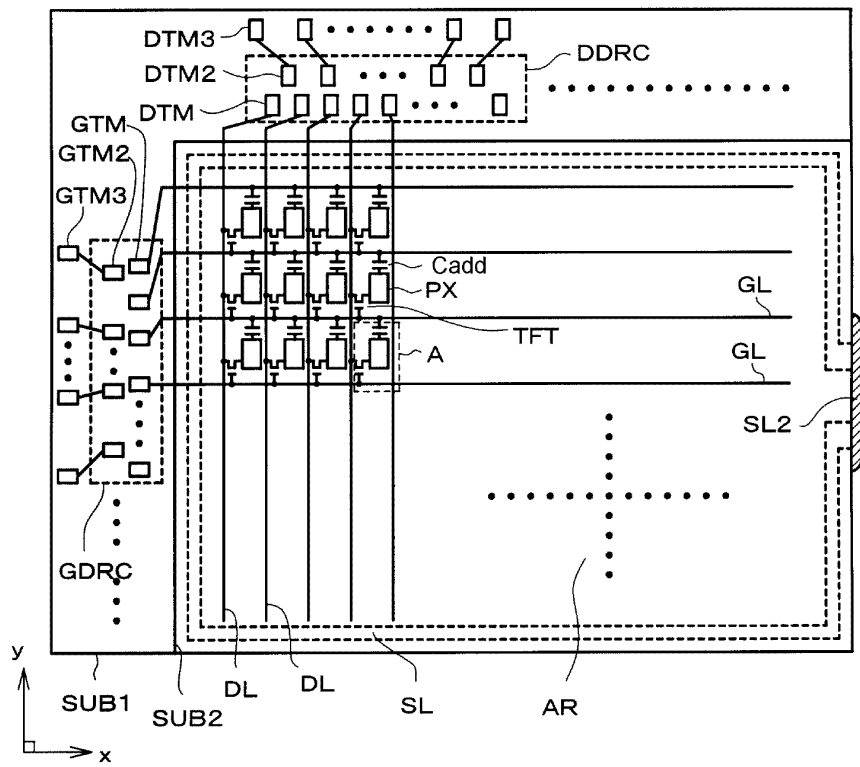
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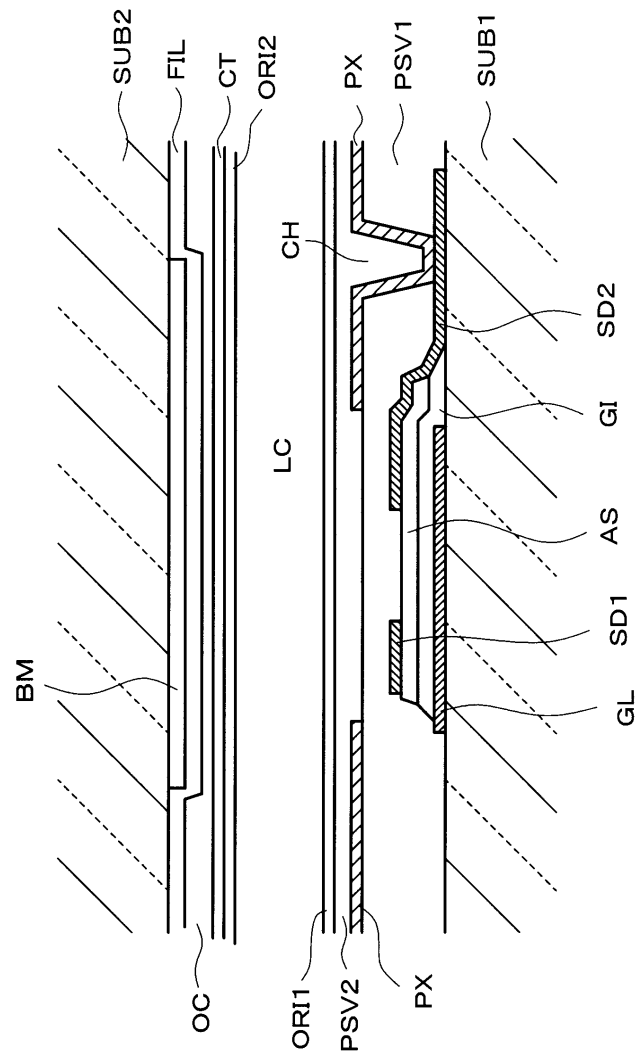
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1 9 ,

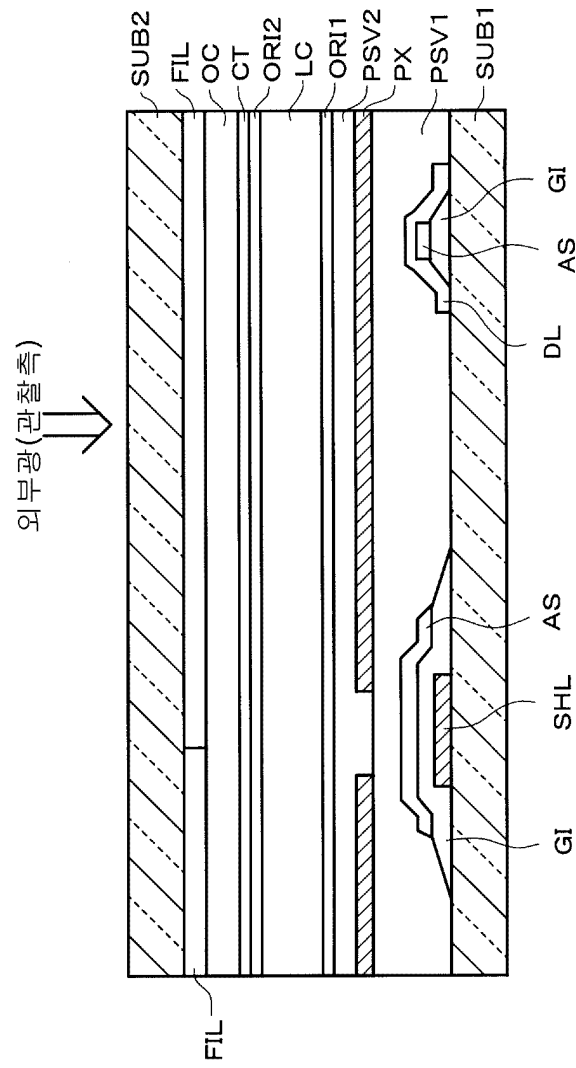


2

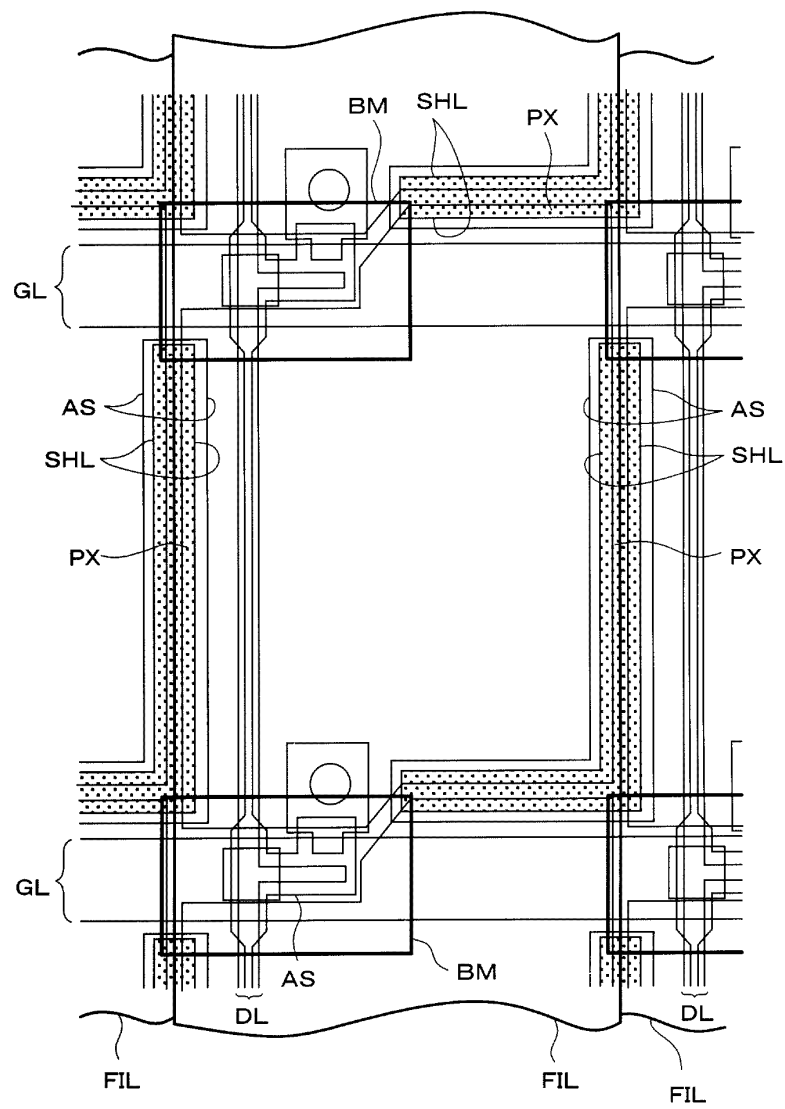




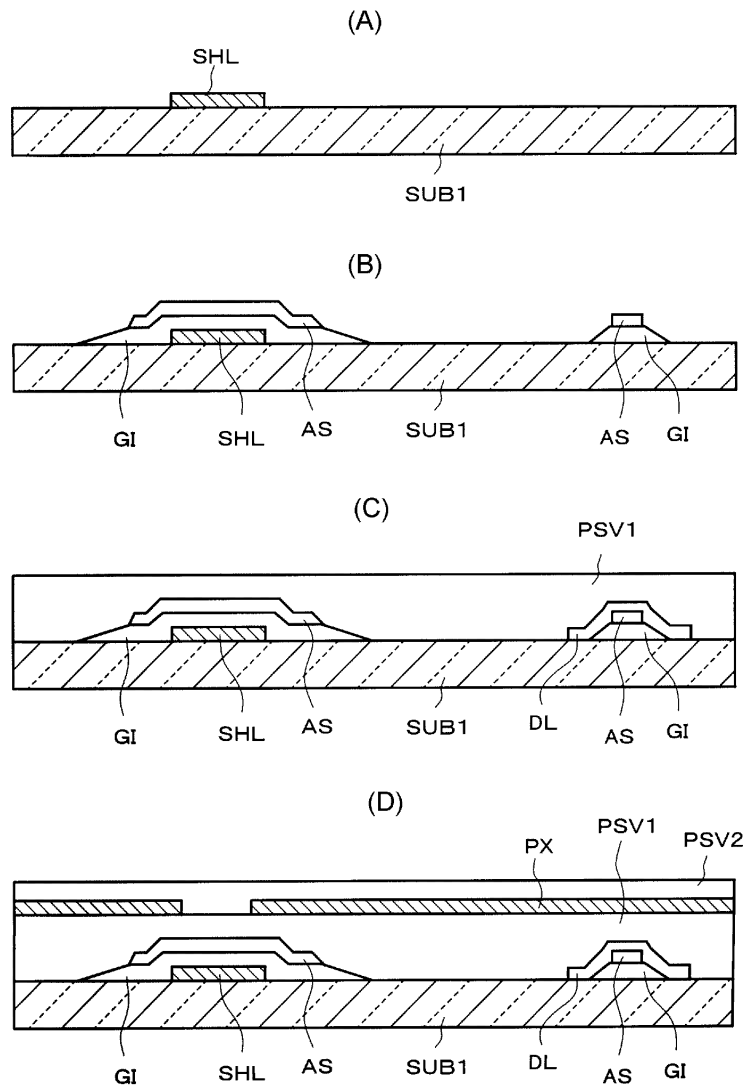
4



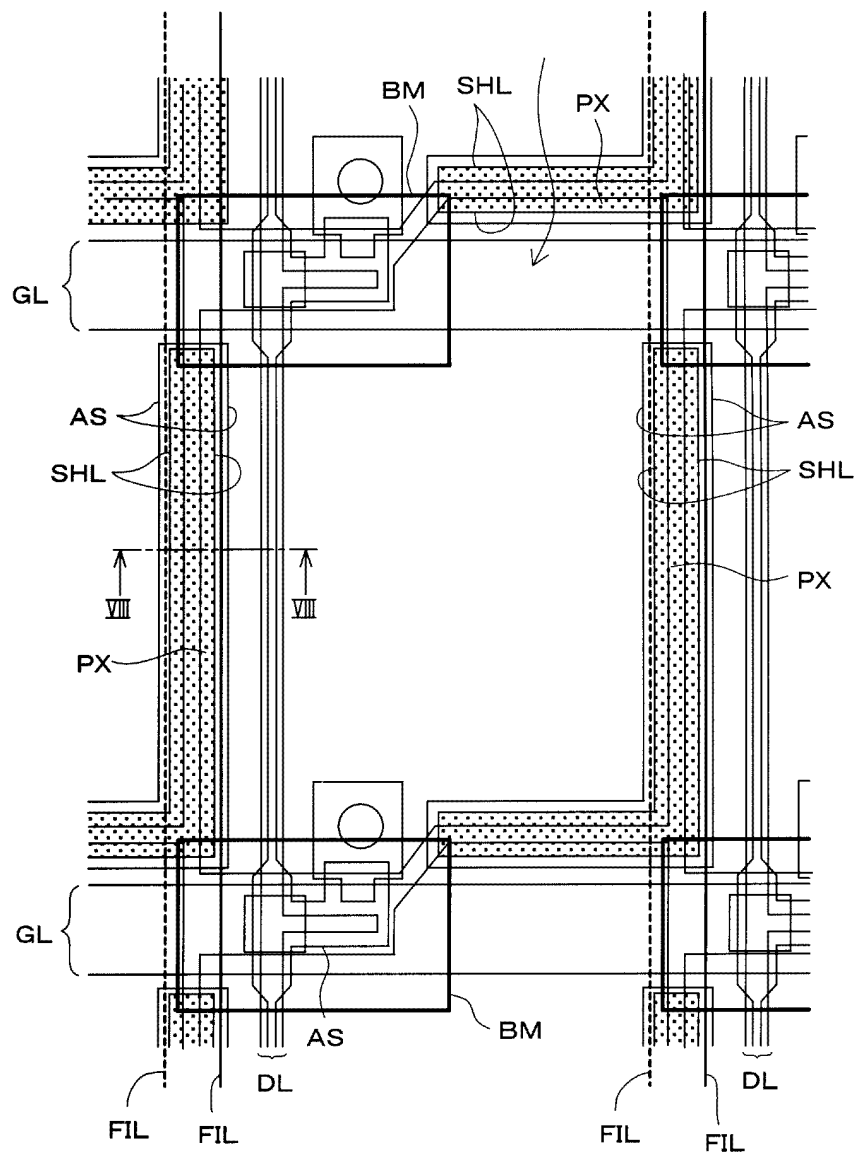
5



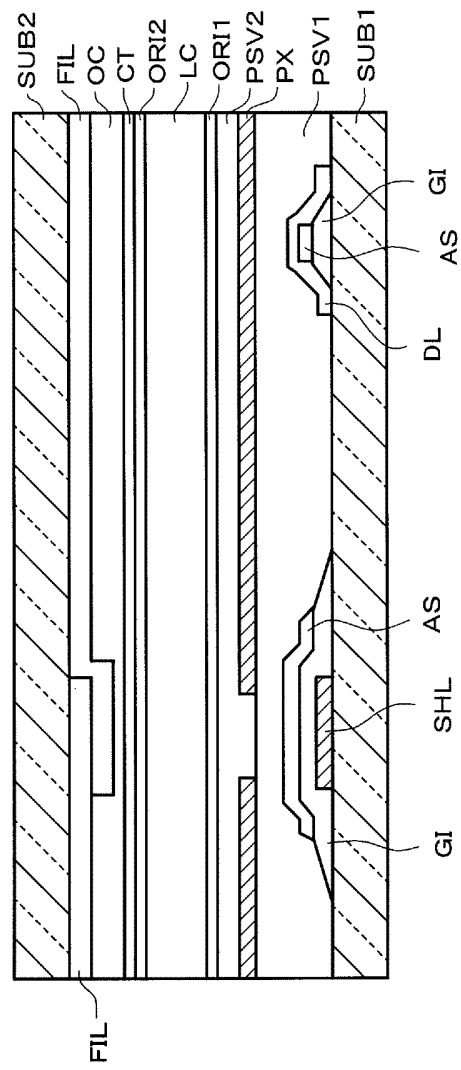
6



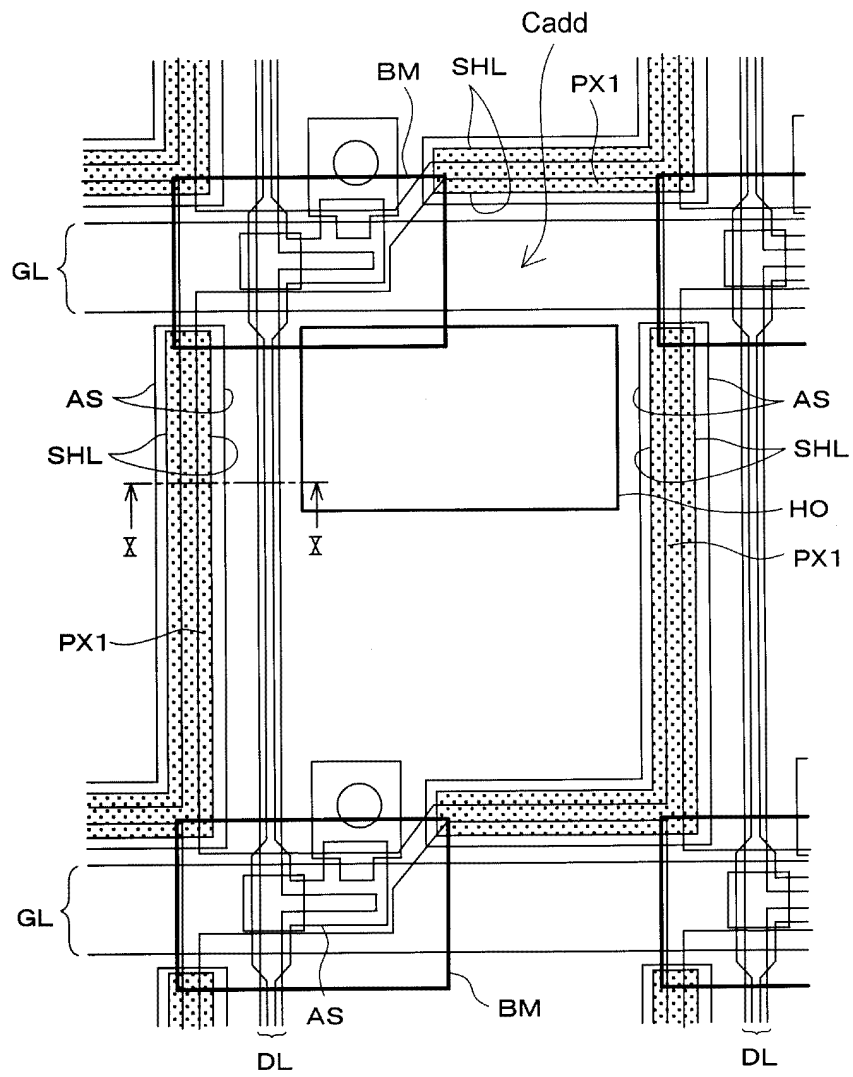
7



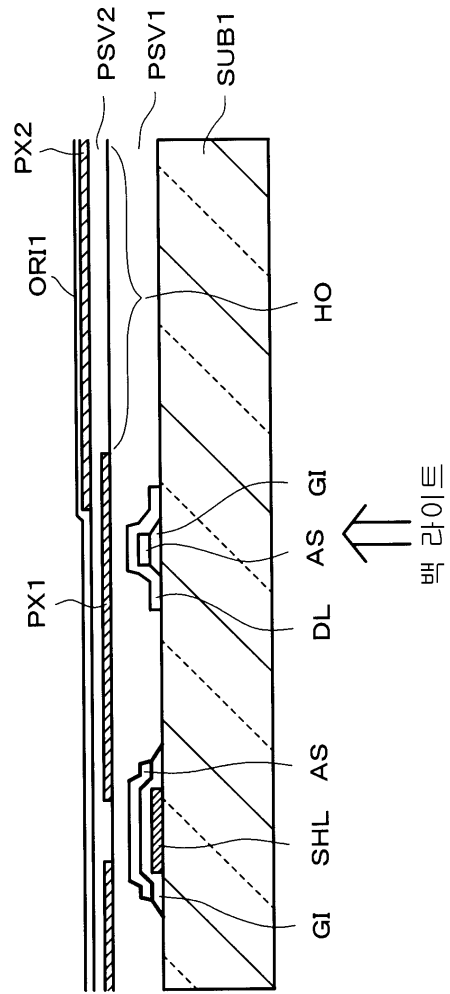
8



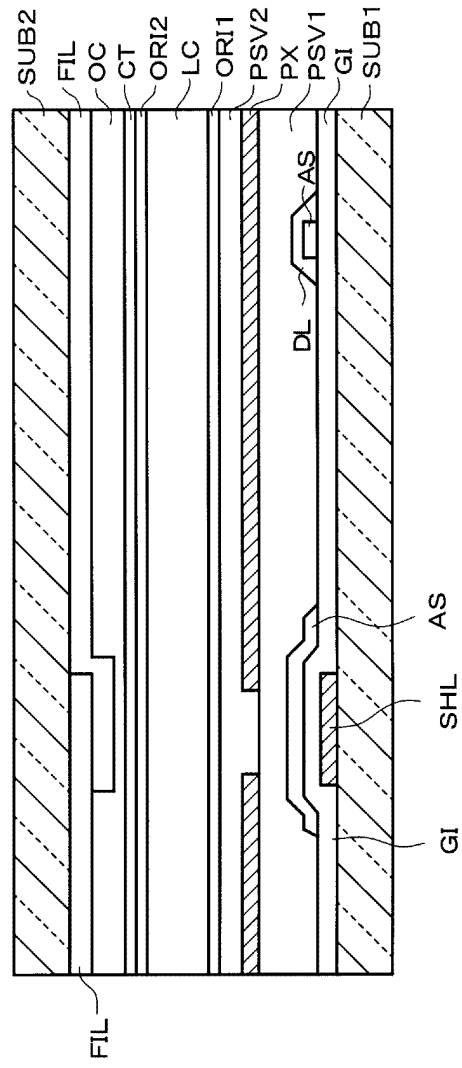
9



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专利名称(译)	液晶显示器		
公开(公告)号	KR1020020072197A	公开(公告)日	2002-09-14
申请号	KR1020020011575	申请日	2002-03-05
[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		
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发明人	안노코우이치 사사키토오루		
IPC分类号	G02F1/1368 G02F1/1362 G02F1/1335		
CPC分类号	G02F1/136209		
代理人(译)	李钟IL		
优先权	2001066574 2001-03-09 JP		
外部链接	Espacenet		

摘要(译)

本发明涉及液晶显示器。并且本发明的目的是消除信号线的光学反射。多条栅极信号线，多条漏极信号线与该栅极信号线交叉并形成，薄膜晶体管连接到由这些信号线包围的像素区域到栅极信号线和漏极信号线，以及反射电极连接到该薄膜晶体管包括在内。它在与反射电极相邻的另一个像素区域处的反射电极与周围重叠，并且提供了形成半导体层和光屏蔽层的顺序层叠的技术。为了实现该目的，在绝缘基板上形成多条栅极信号线。

