	(19) (12)	(KR) (B1)	
(51) 。Int. Cl. ⁷ G02F 1/1343		(45) (11) (24)	2004 01 03 10-0413584 2003 12 18
(21) (22) (62)	10-2002-0027575 () 2002	(65) (43)	00-0000-0000000 0000 00 00 1998 05 02
(30)	JP-P-1995-00058874 1995 (JP-P-1995-00105862 1995 (JP-P-1995-00191341 1995 (04 28	(JP) (JP) (JP)
(73)	가 가 -	가 4-6	
(72)	3550		
	가 가	460	
	가	460	
	1463	-9	
	가 13		
	3550		
	가	9-63	
		19-21	
(74)			
:			

```
가
                                                                        가
                                                                                                (deff),
                                                                      ),
                                                                  (Wc)
                             (Wp),
    (L)
    > 0, 2.8 \mum deff 4.5 \mum
1.2 \times deff Wp L/1.2, 1.2 \times deff Wc L/1.2,
        < 0, 4.2 \mu m deff 8.0 \mu m
1.2×deff Wp L/1.2, 1.2×deff Wc L/1.2
           2
  1
  1
  2
         1
  3
         1
  4
         2
  5
         1
                                         2
                                                               가
  6
         1
  7
         2
               (3-3)
         2
  8
               (4-4)
                                                   (TFT)
  9
               (5-5)
                                          (Cstg)
  10
                                                           가
                                                                       가
                              가
  11
  12(A)
              12(B)
                                (GTM)
                                                   (GL)
                                                   (DL)
              13(B)
                                (DTM)
  13(A)
                                                                          (CL)
  14(A)
              14(B)
                                  (CTM)
                                                     (CB)
                                         С
  15
           (SUB1)
                                  Α
                                          F
  16
           (SUB1)
                                  D
                                         Н
                                  G
  17
           (SUB1)
         가
  18
  19
  20
  21
  22
                                     (CHI)
                                             가
                                                                                         (TCP)
                          (TCP)
  23
                                              (PNL)
                                                                            (GTM)
  24
                                                                                  가
```

(CT)

25

26

19

```
27
         3
  28
                                                     (CT)
                                                                                   가
         3
  29
         28
               30(C)
                         27
                                              Α
                                                                     (CL)
                                                                                     (CB)
  30(A)
  31(A)
             31(B)
                       27
                                            В
                                                                   (CL)
                                                                                   (CB)
                                            С
                                                               (DL)
  32(A)
             32(B)
                       27
                                                                                (CB)
  33(A)
               33(C)
                         27
                                              Α
                                                                     (CL)
                                                                                     (CB)
  34
         3
                             (CB)
                             (CB)
  35
         3
               36(C)
  36(A)
                                                          27
                                                                              Α
               (CL)
                                (CB)
                                                       27
  37(A)
            37(B)
                                                                            В
             (CL)
                             (CB)
                                                        27
                                                                             С
  38(A)
             38(B)
         (DL)
                         (CB)
  39
                             (CB)
         4
SUB1, SUB2:
                        CT:
GI:
         DL:
            POL1, POL2:
PX:
BM:
               LC:
               SD1:
SD2:
GL:
                         ) CL:
DL:
                         ) TFT:
             GT:
Cstg:
FIL:
            AS: i
g1:
         31:
               d1, d2:
AOF:
PSV1:
            AR:
OC:
              PNL:
TCP:
                       SL:
              CTM:
DTM:
CB:
              SHD:
```

, 5-505247 , 63-21907

6-160878 .

```
가
        LSI
                       가
  2
  3
                                                  가
                                                                    가
                                 가
            가
                                                             (vertical smear)'
  4
                    가
                                                    , '가
                                                    (PX)
                                                                   (CT)
  5
                     (CL)
                                                                         가
                                           가
           가
                         (PX)
                                                                 (PX)
                                       AC(
                                                     가
                                                             AC
                                     AC
                                                                              (C)
              가
                                                                     (R)
                                                            25 ,
                       가
     (CL)
                                                                    26
                                                               가
  25
                                                     (CL)
  가
(CT)
(52)
                                                     가
                                           (CT)
                    26
                                                                        (CL)
                                                                                  (50),
      (52)
                          (CL)
                                                     (51)
                                                                        (53)
                                           (CB)
  , AC
                                                                                    (52)
                                                              (103)
                           ( )
(54), E
  (CT)
                                                  (55), F
                                                                        (56) G
D
  26
             D
(57)
                                                                                    G
                                     (CT)
      가
                                                  가
                                                                          (CL)
                         (PX)
                                      (CT)
                                     가
                                                             AC
               (CL)
                                                                                (CT)
                                                (GL)
                                (DL)
                  가
                                       가
    1.
             ( )
                                                                                             (W
                              (deff),
                                                              (Wp),
```

- 4 -

```
c)
                                (L)
   > 0, 2.8 \mu m < deff < <math>4.5 \mu m
2.
             )
                           (deff),
                                                        (Wp),
                                                                                    (W
c)
                                (L)
   < 0, 4.2 \mu \text{m} < \text{deff} < 8.0 \mu \text{m}
3.
                      가
   4.
                                                           가
         가
                                                                                    1/
2
   5.
    4
                                가
                                                                                 )
   6.
   5
   7.
   5
   8.
                                                          가
         가
                  가
   9.
   8
   10.
   8
   11.
                                                           가
         가
 가
                                                                  가
   12.
                                                          가
         가
가
```

10-0413584

, 2 13. 12 5 2 14. 가 가 가 가 1 2 2 2 15. 2 14 2 16. 15 가 6 , 17. 가 가 가 18. 17 19. 17 18 20. 17 18 1 가 가 , 가 가 . 2 가 가 가 가 3 가 , 가 가

- 6 -

```
4
                                                                                              50
%
                                 100%가
                                     가
    5
                                                      가
                                    가
                                                                                       가
    6
                                                                                          가
    7
                                                                      가
                                                   5
                                                                                               가
                                          가
                                                                                         가
                                                                               가
                                                            가
    10
                                                     7
    11
                                                                                               가
    12
                가
                           가
    13
                                                    12
                                                                        가
                               (GT)
    14
                                                       (GL)
                                                                      (CT)
                                                                                                (
CL)
                                                                              (CL)
                                                               (DL)
                                        (SD2)
                                                                               (CL)
                                                                              (GT),
                                                             2
    15
                          14
(GL)
                                                         (SD2) 2
                                                                                             (SD
                   (DL)
2)
                                                           (GL)
                                                                 (CL)
                                         가
    16
                                                15
                                                                              (PX)
         (GL)
                                   (CL)
                                           (CL)
(52)
(CT)
가 .
    17
                                                                가
            20
                                                                              (CL)
                                                               (CT)
                                                                          가
       (CB)
                                    (PX)
                                                                                            (CL)
             (CL)
                                                       (CL)
                                                                                     가
            (CB)
                                                  (CB)
                                                                    (GL)
                                                                                      (DL)
                                               가
                            (CB)
                                                                                         가
      , 2
[
                           ]
        1(D)
  1(A)
                                                                                       1(A)
     7, 1(B)
7, 1(D) 7, (GI)
7, (MAX1) , (MAX2)
7, (BM) , (FIL)
7, (ORI2) , (LC) (
                                            가
                                                             , 1(C)
                                                             , (SUB1)
                                                                       (SUB2)
                                                                              , (POL1) (POL2)
                                           , (DL)
                                                             , (PX)
                                                            , (RDR)
( ,
                                                                                       , (EDR)
                                                                                          ),
                                            , (OC)
(ORI1) (ORI2)
```

```
, (POL2), (BM), (FIL), (OC) (SUB1) (SUB2) , (LC) (POL1), (ORI1), (SD2), (PX), (CT),
                                                                                   (ORI2
) 2
                                                                                     (SUB
1)
가
                           (LC) (SUB1)
, (LC) (RDR)
                                                              (RDR)
          1(C) ,
1(A)
                                                                                 (ORI1) (
                                                              (RDR) (CO) (POL1) (MAX1)
ORI2)
               (MAX1)
1(D)
                                          (MAX2)
                                 (POL2)
                                                                     )가
        1(B)
                                (SUB1)
                                                              (EDR
SUB1)
                    (CT)
                                                   가
                                                                     (SUB1)
                                  (PX)
                    (LC)가
         가
                                   가
                                                )(GL),
                                                                            )(CL) 2
                                  )(DL)
                                                        (4
가
                                (TFT),
                                               (Cstg),
                                                            (PX)
                                                                          (CT)
                               (CL)
                    (DL)
                                                                                      (PX)
             (TFT)
                                        (CT)
                                                          (CL)
2
                                                  (DL)
                                                                                    (CL)
      (DL)
                  2
                                                        (CL)
                     (CL)
            (CT)
      (PX)
                                                               (CT)
                   (CT)
                                                   (PX)
                                                                                      (LC
                                                          (CT)
)
                                              (PX)
     가
      (PX)
                   (CT)
                              (CL)
                         (CL)
                                             가
                  (CL)
             (CL)
                                                                               (CL)
                                                             (DL)
           가 25%
                                       (DL)
                                                          (CL)
               가
                                                                                      가
                                                                     2
        , (24)
                                              (SD2)
(DL)
                          (DL)
                                                         , (31)
                                                                               (CL)
   (DL)
                   , (32)
                                     (GL)
                                                                                   (GT)
                                                                    , (33)
      (PX)
                                                 (DL)
                                                                   (CL)
                                                                                    (31)
                                                                (CT)
                                                 (SD2)
                                                                                      가
                               (GT),
                                              (GL)
                                                                 (TFT)
                                 (SD2)
                                                                 (SD2)
                                                                                     (DL)
         (24)
                                    (GL)
                                                                                       (SD
                                                (SD2)
                                                                 (GL)
              (GL)
       가
                                                                     (GL)
  6
                                     )(32)
                                               (SD2)
   가
              (GT)
                     2
                                                (CL)
                                                               (SD2)
                                             가
                                                                    (TFT)
         (SD2)
                           (GT)
   (GL)
                                       (PX)
                    2
                                                                              2
                                      (PX)
                                                             (TFT)
         1
```

```
(SD2)
                        (SD2)
                                              (DL)
                                                                               (GL)
                 (PX)
                        가
      가
              (P)
                                               2
                                                                         (CL)
              (CT) (0)(
                                            (PX) (P)( )
1
                                                                         0=P+1
                                   0=3, P=2).
                                                                        (PX) (DL)
           (CT)
                                 (DL)
                                         (DL)
. (CT) ,
                  (CT)
                                                                           (CT)
          가
                                   가
                                                                                     (CL)
(PX)
          가
                                                                (CT)
                                                                                     (DL)
  가
                                                                      (DL)
                                                       (PX)
                              (PX)
                                            (DL)
                   (Vs)
                                               가
                   (CT)
                                         6\mu\mathrm{m} ,
                         (Wp), (Wc)
                                                                            4.5 \mu m
                          , 20%
                    가
   5.4 \mu \mathrm{m}
                                               가
                    (CT) (Wp),(Wc)
                                                      (PX)
         (PX)
                                                                       (CT) (L)
                                                      (PX)
                                         20%
          가
                                                                    (CT)
                                                                              (L) 7.2 \mu m
                     가 640×480
                                                                 가 110μm
                                               10.4
  (L)
        7.2 \mu \mathrm{m}
                                                    (L) > 7.2 \mu m
                   7\mu\mathrm{m}
               (L)
                   ,μιι
8μm ,
           (DL)
                                                  (PX)
                                                            (CT)
                     , (DL)
                                      (CT)
                                               1\mum
                                                                               (DL)
                                                                   (DL)
                    (CT) 2
          (DL)
                                                   (DL)
                                                             1/2
          (DL)
                                                   (CT)
                (DL)
                            (4\mu m)
                                                              1/2
가 .
                                                     (CT)
                              (DL)
                                      (GTM)
          (GL) ,
                                                                    (GT)
                                                         (CL) ,
                                                                                  (CB)
                    (CT)
(CT)
                                            가
      )
                                          16µm가 .
       2 ( )
2 (3-3)
, 9
[
                                  , 8 2 (4-4)
(Cstg)
(SUB1)
(FIL)
                                                                                   (TFT)
                        (5-5)
                                                                          9
         (LC)
                                                            (TFT),
                                                                         (Cstg)
                        (SUB2)
                                                                            (BM)
                     (SUB2) ( (LC) )
(SUB1) (SUB2)
          (SUB1) (SUB2)
                                                                            (ORI1),(ORI2)
[TFT
             (SUB1)(TFT )
```

```
[
         (TFT)]
                            (GT)
                                   가
                                                (GI),
                      (TFT)
                                    (GT),
        ,
(a-Si)
                                    (AS),
                                                                 (SD2)
                                                (SD1)
     (GT)]
(GT)
                      (GL)
                                           (GL)
                                                                            (G
(GT)
T) (TFT)

(AS)
(g1) , , ,
(AOF) .
[ ( ) (GL)]
 ( ) (GL)
T) (g1)
Vg)
                                                       (AS)
                                           (GT) (GT) (g1)
                                                              (g1)
                                             (GL)
                                                                          (G
                       (g1)
                                                          (GL)
                                                                    , (AOF)
                                            (GL)
                       (GT)
            (DL)
                                        2
     (CT) (GT) (AOF) フト フト フト
    (CT)]
                                               (g1)
(AOF)
가,
                              (GL)
                                        (CT)
                                                             (DL) 가
    (Vcom) (CT) 가 (Vcom) (Vdmax) , (field-through) (Vs) 가 AC( )
                                                                (TFT)
                                                            가 .
                                               AC( )
          (CL)]
                   (g1)
          (GL)
                                               (CL)
                                                                (g1)
                                                                            (G
                   (GT) (G1)
T),
                                              (CT)
          (CL)
                  , (AOF)
                                                                            (C
                           (Vcom)
                                                                      (GL)
     가
                   2
    (GI)]
                (TFT)
(GI)
가 1200 2700 (
(AR)
(GI) (GL),
                                           (GT) (AS)
    (GI)
                                    (GT)
                                                                            (GI)
                                           2400 ) `
           (GI)
                                                              (DTM),(GTM)가
                                           (CL) (DL)
                            (GL),
       (AS)]
                                           200 2200 ( 2000 ) . i (AS)
                (P) N(+)
(d1),(d2)
(GL),
i
                                    200 2200 (
,
,
(CL) (DL)
(AS) (GL),
i
                                                                 2000 ) . (
        (AS)
d0)
i (AS)
                           N(+)
                                                                 (CL)
 (DL)
(SD1),
(SD1)
(d2)
(d1)
                 (SD2)]
                  (SD2) N(+) (d0)
                                                          (d1)
        (GZ) (Cr) , 500 1000 (
Cr 7 7 7 7 2000 .Cr N(+)
, (d2) N(+) (d0)
, (MoSi 2, TiSi 2, TaSi 2 WSi 2) .
   (d1)
600 ) . Cr
    (d0)
```

```
가 3000 5000 ( 4000 ) (d2) AI 가 , (SD1), (SD2)
                                                               . Al Cr
                                             (DL)
GT) i (AS)
                                              (
                        (d1) (d2) N(+)
           (d1) (d2)
                                                  (d0)
                                                                        (AS)
                                                               , i
         N(+) (d0)
             (d0) (d1) (d2)
N(+) (d0) i
                                             (AS)
       (DL)]
                             (SD2)
              (SD1)
(DL)
      (DL)
                                              1
                                                    (d1)
                                                            2
                                                               (d2)
      . 가,
                              (SD2)
      (PX)]
            (SD1) (SD2)
(PX) (SD1)
     (PX) 가,
                                                   (d1)
                                                           2
                                                                (d2)
      (Cstg)]
[
                                                        (CL)
(PX)
                     (TFT)
     (PX) ,
                                          (PL2)
)(Cstg)
(GT)
  (PL1)
                                                      . (Cstg)
                     (CL)
            (TFT)
 2
                                  (Cstg)
                                                  (CL)
                                                            (g1)
            (Cstg)
                  (GI)
                                                             )
                                             (
    (PSV1)]
             (TFT)
    (PSV1)
                                                               (TFT)
                                            (PSV1)
                                                               CVD
                                              1 \mu \text{m}
             (AR)
                                                          (DTM),(GTM)가
    (PSV1)
           (PSV1)
                             (GI)
                                                                   (PSV1) 가
                                  (GI)
                                    (SUB2)(
                                                   )
     (BM)]
                                    (CT)
          (SUB2)
                             (PX)
                       (
                                                 (BM)(
                                                                 )
          (BM)
                                    (AS)
                                                                       (TFT)
                                                          (GT)
          (AS)
                                    (BM)
  2
              (BM)
                                    (BM)
                                                                        (A)
                                               3
                                                                  3
                                           가
                                                    (DL)
                                                                         (CT
)
                                    (PX)
    (BM)
                                               (CT)
                                                                   가
                        가
    (BM)
                                                               1.2\mu\mathrm{m}
                  (PX)
                             (CT)
                                                  가
                                                                       가
    가
    (BM)
                              (BM)
                                                                       , i
    (AS)
                              2가
    (BM)
                                        (SL)
                            (BM)
                                                가
                                                                  (BM)
                                                                          (S
```

```
UB2) 가
                   0.3 1.0mm
                               , (SUB2)
     (FIL)]
      (FIL)
                                                                            (FIL)
    (BM)
                                            (SUB2)
                                                                        가
      (FIL)
                                              가
       가
                                               (R)
        (G)
                    (B)
       (OC)]
       (OC)
                   (FIL)
                            가
                                 (LC)
                                                                     (FIL) (B
                                              (OC)
M)
[
     ]
                                 ( ) 0.081(20 589nm)
      (LC)
              , 13.2
                                                                     ( n)
                             ) 0.053(20 589nm) ( n) ( s) , 2.8\mum 4.5\mum .
       -7.3
                              ( )
0.32μm , 가
              (n \cdot d) \quad 0.25 \mu m
                                          0.07
                                                    0.09
                        (
                                                                       ( n)
                                         ( ) 4.2µm 8.0µm 가
                                        (n \cdot d) \quad 0.25 \mu m \quad 0.32 \mu m
     가
                                                           0.04
                                                                  0.06
     n)
                                   가
                                         (RDR)
                                                             (EDR)
                                                                   45 °
                       가
         ( )
      (LC)
                                                         가
                                        ( )
                 ( n)
[
     ]
                                               가
    (ORI)
                                                         (EDR)
                                                                    75°
                 (RDR)
                 (EDR)
      (RDR)
                                                                )
                                                                      45° 90
                                         0°
                                                45 °
                               )
    ]
  18 가
           (POL)
                             G1220DU
                                               (POL1) (MAX1) ,
                                                                          (RDR)
                  (POL2)
                             (MAX2)
                                                . 18
                   가
                           ( (PX)
                                              (CT)
                                                              가
                                                              (AR)
  10
                     (SUB1)
                             (SUB2)
                                                 (PNL)
                  11 ,
                                                        (GTM)
    가
                  가
            가
                                                    가
                                             10 11
               (SUB1)
                       (SUB2)
                                             (LN)
                                                             2
                                 (SUB2)
                                              (SUB1)
                                                                            (Tg),(
    (CTM)가
                                                          (Tg),(Td) ,
Td)
     (GTM),
                                (DTM)
                                                           (CHI)
       (TCP)( 22 23)
                                                         (DTM),(GTM)가 (TC
                                                  (PNL)
P)
                 (TCP)
                                                             (CTM)
                                                          (CL)
                                                                           (GTM)
      (CT)
                                                (CB)
                                                                           (CTM)
             )
```

```
(SUB1) (SUB2) (LC)
                                         (INJ)
                                                            (SL)
(ORI1) (ORI2) (SL)

B1) (SUB2)

ORI1) (ORI2) (SL)

(SUB1) (PSV1)
                                                            (SU
                                        (POL1) (POL2)
                                        (LC)
                                                           (ORI1)
                    (SUB1)
(SL) , (LC) (SL)
                                           (SUB2)
, (SUB2)
                                           (SUB1)
                                                              (SUB2)
                                             , (INJ)
(INJ)
[ ]
12(A) 12(B)
                            (GL)
                                                (GTM)
, 12(A)
                   , 12(B) 12(A) (B-B)
                  (描畵:
(AO)
                   ,
(AO)
                                                                   (AO)
AOF)
            (GL)
               Al (g1) Al _2 O _3 (AOF)
               가
               (AI) (g1)
                                              가
              (g1) ,
(g2)
1400 ) (
                                    TCP(
       (GTM)
                                (g2)
(ITO):
                                                             가 1000 2000
                                               (g1)
                                                            (d1)
              (d2)
                                 (g2)
              (d1)
                                                            (d1)
                                  (g2)
                                               . (d2)
              (GI)
(GTM)
                                               (PSV1)
 (GL)
                                 12(A)
                                         12(B)
         (Tg)( 10)
(SHg)( )
, (ORI1)
                                                  (SHg)
[ (DTM)]
13(A) 13(B) (DL)
, 13(B) 13(A) B-B
                               (DTM)
                                                            13(A)
                                                 19
                                (SUB1)
(TSTd) ,
         (DTM) 가
          (DTM)
                                        10
                                                           (Td)(
         , (SUB1)
                                (SHd)( )
         . (TSTd) 13(A)
                               13(B)
                                                           (DL)
         (DTM) 1
                                                (GI)
                        (g2)
                                                        (GI)
                                       ,
(AS)
DL)
              (GI)
                                                        (PSV)
                        (DTM)
                                      (PSV)
                                                        , (PSV)
               (DTM)
                                                            (PSV)
(BTM)
(g2) (DL
(SL) 7

[ (CTM)]
14(A) 14(B) (CL)
A) , 14(B) 14(A) B-B
                         (DL)
                                       (d1),(d2)
                                         (d2) ,
                                                                , 14(
                                         (CTM)
                                                        19
```

```
(CL)
                           (CB)
                                                     (GM)
                                                                               (d2)
                                                             (CL)
 (CB)
                                                        (DL)
 (CT)
                                                                                      가
                                                                                (CB)
(g1)
           (d1)
                     (d2)
                                                                                (g1)
  (GI)
          (CTM)
                           (g2)
                                     (g1)
                                     (g1)
              (g2)
                                                                      (g2)
                                                 (CB)
                         (d1)
                                    (d2)
                                               (CB)
                                                                         가
   , 5
              17
                                                 (SUB1)
                                           Ζ
  12(A)
            12(B)
                                                                          В
                                                                                 D
   ΑI
                    )
A( 15)
AN635 ( )
                                       (SUD1) Al-Pd, Al-Si, Al-Ta, Al-Ti-Ta
  가 3000
                    (g1)
                                                            (GT),
                                                                           (GL),
                                                                                       (CT),
                                  (GTM),
                                                          1 ,
(SHg)
                                                  (CB)
           (CL),
                    (PL1),
                                                                            (CTM)
           (GTM)
                                   (SHg)(
   B( 15)
                                    , 3%
                          (AO)
                                                                    pH6.25 \pm 0.05
                      1:9
                                                           (SUB1)
0.5mA/cm <sup>2</sup>
                                                           AI_2O_3
                                ).
    125V
                                                                                       ).
 (GT), Al <sub>2</sub> O <sub>3</sub> (GL),
                                                                   (g1)
                                                      (PL1)
                                            (CL)
                           (CT),
                                                                   가 1800
                                                                                        (AO
   C( 15)
   가 1400
               ITO
                                (g2)
                                                     (GTM)
                               (g2)
                 2
     (CTM)
   D( 15)
     CVD
                                                            가 2200
               CVD
                                                      가 2000 i
   CVD
                                                가 300 N(+)
   E( 16)
                        가
                               SF 6 CCI 4
                                                     N(+)
              , i
                        (AS)
   F( 16)
                       가
                               SF<sub>6</sub>
   G( 17)
                               (d1)
(d2)
                      가 600
                                                                 Al-Pd, Al-Si, Al-Ta, Al-Ti-
                      가 4000
Ta
                                 (d2)
                                                                                      (d1)
                (DL), (SD1), (SD2),
(DTM) (SHd)(
                                        (SD2),
                                                       (PX),
                                                                (PL2),
                                                                              (CB)
                                                                                       2
                                                                                       CCI
   SF<sub>6</sub>
                     N(+)
                                                                 N(+)
                                                                               (d0)
   H( 17)
      CVD
                                                            가 1μm
                         SF<sub>6</sub>
                  가
```

```
(PSV)
가 ]
       , (AR)
(DL)
   , (X)
                                                           가
                                                                           (G
                         , G, B R
                                                                   . (Y)
    , 1,2,3,..., end
       (Y)( )
                             (V)
                                                     (X)(
                                                                              (H)
(SUP) 1
                  )
                          CRT( )
                                                TFT
 20
                                            Vch Vcl 2
                                                              AC(
                                                           2
                                                                    , Vg1h Vg11
                       Vg(i-1)
                               Vg(i)
                                            1
                                                                          가
                   1/2
        DC(
                                , AC
                                                    가
[
     (Cstg)
              ]
                                           (TFT)
      (Cstg)
                               (
                                                     가
        .
가
                                                                      가
     (Cstg)
  ( Vg)
                                                (Cstg)
                                                                (Vs)
 Vs={Cgs/(Cgs+Cstg+Cpix)}\times Vg
                                                               , Cpix (PX)
    Cgs (GT)
(CT) , Vs Vg
( Vs) (Lc) 가 DC
(LC) 가 DC , (LC)
                              (GT)
                                          (SD1)
                                                                 (feed - through)
                                                          (Cstg) 가
                                              (AS)
                                       i
                          (GT)
     (GT) (SD1)
( ) (Vg)
                                                        (Cgs) 가 ,
                                            가
                                                                             (Vs)
가
                                       가
                                                        (Cstg)
    (CL)
                      (CB)
                                       ]
  27
                                                                  (SUB2),
(SUB1)
   (120)가
(100), (102),
(SUB2)
                      (120)가
                                                        (SUB1),
  (102),

(SUB1) (120)

(DL)

(102) , (GL)

(120)

(CL) (CB)
                                     (104),
                                                         (103)
                                                                                 (G
                                                                   (DL)
                                    (GL)
                                                       (120)
                                                                                 (D
                                            (104)
                                   (CL) (GL)
(103)
(100)
, (DL)
   (104)
                                                    (102)
                                                                          (100)
     (101)
          (104)
                            (100)
                                     (GL)
                                           (SUB1)
                                                         (120)
                                                                   가
                        (CL)
                                     (CB)
                                                                            (CB)
                                                         (CB)
                                                                             (CL)
                                     (CT)
                                               가
                                                                       가
  28
  29
        28
        (CB) (59)
                                 (CL)
                                         (58)
                                                          28
                                                               \mathsf{D},\mathsf{E},\mathsf{F}
            (60)
                                          29
                                                               D
                                                                           (62), E
```

```
(63), F
                                                                                  (64)
                                                                                                             G
                                                                                                                                                          (65)
                                                                                                                                                          (65)

(103

ア

(CT) ア

ア

(CL)
                                                                                                                                                                                                                       (103)
                                                                                                                                                                                                                                                                                                     (60)
                           , (120)
7;

(CL)
30(C)
30(C)
30(C)
30(C)
30(C)
30(C)
30(C)
30(C)
30(C)
(CHL)
(CHL)
(CB)
(CHL)
(CB)
(CHL)
(CB)
(CB)
(CCL)
(CB)
(CCL)
(CCB)
(CCL)
(C
                                                                          (PX)
                                                                                                                                                                                                                                                                                                                                (
                                                                                                                                                                                                                                                                       (CT)
                                                                                                                                                           (CL) (CB)
, 30(C) 30(A) (H-H')
                                                                                                                                                                                                                              (GL)
, (CL)
                                                                                                                                                                                                                                                                                                                      (CL
                                                                                                                               (CHL) , (GI) (CL) (CHL) , (CHL) (CB) (CL) (CHL) ,
                                                                                                                                                                                                                                                                      (GI)
(AOF)
(DL)
(CB)
                                                                                                                                                                                                                                                                        (GI)
                                                                                                                                                                                                                                                                    (CB) (PSV)
                                                                                                                                                                                                                                                                     (g1)
                                                                                                                                                                                                                                                              (AOF) . (DL)
                                                                                                                                                                                                                                                                                (CL)
                                                                                                                                                                                                                                                                               33(A)
                                                                                                                                                                                                                                                                                                                         33(C
                                                                                                                                                                                                                                                                              (CHL)
                                                                                                                                                                        (CL) (CB)
, 33(C) 33(A) (R-R')
                                                                                                                                                                                                                                                                                    (CL)
                                                                                                                                                                                                                                                                 (GI) , (d2) 2 (CHL)
                                                                                                                                                                                                                                                                 (CHL)
                                    (CB)
(CB)
                                                                                              (CL)
     33(A) 33(C)
                                                                                                                                                                                     (CL)
                                                                                                                                                                                                                                  (CB)
                                , (GL)
   (AOF)
                                                                                                                                                            (AOF)
                                                                                                                                                                                                                                                                 (GL)
                                                                                                             (CHL)
                                                                                                                                                                        가 .
                                                                                                                                                                                                                                      (AOF)
                                                                                                                                                                                             (CL)
가 .
                        , 30(A) 30(C)
                                                                                                                                                                                                                                  (CB)
                       (CHL)
                                                                                                      (CB) (DL) (CB) (CHL) . 가,
                      , 33
                                                                                                                                                                                                                                                                       (CHL)
                                                                                                                                                                                                                                                                                                                                  (
                    (104)
   GL)
```

```
(GL)
                                          (DL)
                                                                                       (C
                                          (CL)
34 35
                                (CB)
       (CB)
                                가
                 27
                                                                     34
      (DL)
                         (102)
                  (DL)
                                (CB)
                                                                                 가
     35
                                (CB)
                                                    (CBA), (CBB)
                                                                         (CB)
        (AD)]
                         (AD)
                                         4
  36(A) 3
(CL) (CB)
                                        27
                                        . 36(B) 36(A) (M-M')
  (CL)
           36(A) (N-N')
        36(A) (N-N')
, 27 A
(GL) (CL)
  36(C)
                                                                           (g1)
  36(A)
(GL)

(GL)

(DL)

37(A) 4

(CL) (CB)

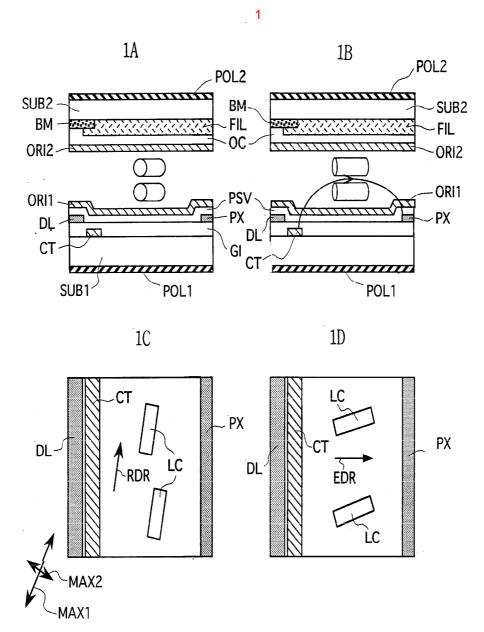
7(A) ,

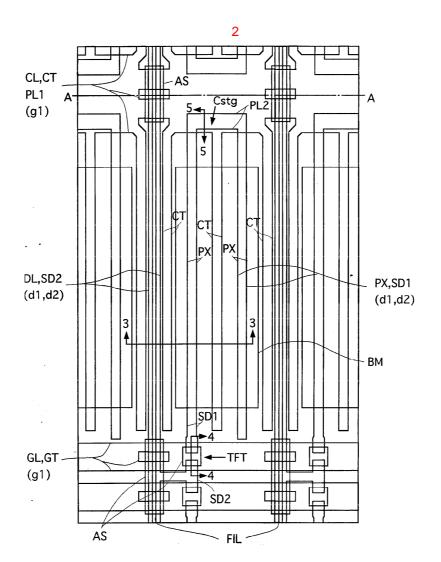
(GL)

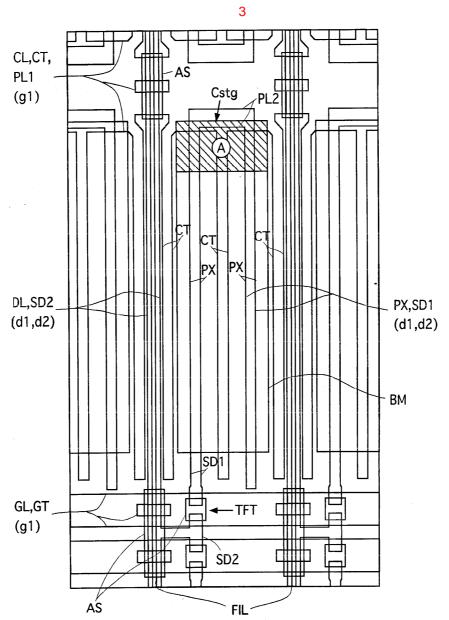
(DL) (AD
                                                        (AD)
                                                                                (AD)
                                                 (GL) (AD) B
                                        (CB)
                                        27
                                               37(A) (O-O')
                                       37(B)
                                                                                        3
                    27 B
                                                                         (g1)
                                     (CB) (AD)
                     (CL)
                                                                       (AOF)
                  (AD)
                                                         (CB)
  38(A) 4
(CB)
                                        27
                                                                                     (DL
                                                         С
                                      38(B)
                                               38(A)
                                                        (P-P')
                        27 C
  38(A)
                                                                           (g1)
        (GL)
                       (CL)
                                                  (GI)
                                                                (DL)
                                                                                  (AD)
      .
(AD)
                              (DL)
                                                                  (DL)
                     (AD)
                                                              (AD)
                                    (CB)
   (CB)
                                                                            가
                                             가
                (CB)
                                                          가
  2
               가
        (CB)
                                                  (CB)
                                                                             39
                                                                      (DMY)
               (CB)
                                       가
        (PNL)
                        (PCB1)]
  21
                         (PNL)
                                                     (H)
                                                                    ) (V)
                                             )
             (PNL) IC (IC) IC
                                                                 IC , 10
(CHI)
                                           5
                                                     (Tape-automated-bonding:TAB)
                 , (PCB1) (TCD)
                                                            (SHD) (PCB1)
         2
                    . (FGP)
                   , (FC)
                                          (PCB1)
                            (FC)
                            (
[TCP
                                      (H)
, 23
  22
                                                            (CHI) 가
           (TCP)
(GTM)
                                                                (TCP)
                                                                               (PNL
                                . (CHI)
( , ) (CHI)
(TTB) (TTM) ( , )
CRT/TFT / (SUP) ,
(TCP) 7h (PNL) (GTM)
(GTM(DTM)) (PSV1) (TCP)
           , (TTB)
                          (CHI)
         (Cu)
                                                                               (PAD)가
(CHI)
            (PNL)
V)
```

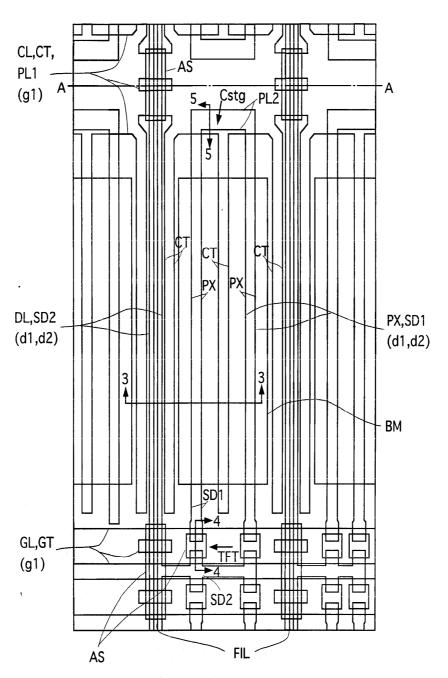
```
(BF1)
                                   , (SRS)
                                (SL)
                                                            (SIL)가 가
           . (TCP)
EPX)
                                 (SUB2)
                                                            (PCB2)
         (PCB2)1
                IC,
         (PCB2)
                                                                        )
. (CJ)
         ) TFT
                                                             (SUP)가
RT(
                           가
         (PCB1) (PCB2) [ (MDL)
                                        (FC)
(الا ), (LCW)
(SPB) , (LCB) , (RM) , (BL) , (LCA)
(MDL) , (MDL) , (pawl) 7
(LCA) (BL), (SPB), (LCB) (RM)
(BL) (PNL)
(BL) (BL)
24
                                                                           , (
가
                                                             , (PNL)
                                                                       (LCB)
                                                            (SPB)
                                                                      가
                                                                   가
(1)
                                 (
                                      )가
                                                          가
(2)
                                            가
                                                   가
,
가
(PX)
          (SD2)
                                                              1
                                    (PX)
                                           가
                                                                   가
(3)
                                  (CB)
             (CL)
                                                            (CB)
(CL)
                                        (52)
                                                              (CT)
                                                 (CT)
                                                       가
              (CL)
                                                                           (CL)
             (CB)
                                            (CL)
(CL)
(4)
         (CB)
                                           (CB)
                                                        (GL)
                                                                        (DL)
                                                        가
                                  (CB)
            가
                                                                       MOS
                    (TFT)
                                                   2
   MIM(
                    : metal - intrinsic - metal)
(57)
      1.
                         1
                                  2
                                                  가 가
      가
```

				1							
				,				2 ,			
		, ,		,					,		
	2.										
1	, 3.	,	2							•	
1	. ,	,		가							
	4.										
1	, 5.	,									
1	,	,			Ni						
	6.										
1	5		,	1	2			,			
	7										
1	7. 5		,				フ	ት 7.3			
1	8. 5		,		,		가	,			
	(retardation)	0.25	0.32								
1	9. 5						가	,			
·	0.25	0.32	,		,		'	,			
1	10. 5						가				
•	0.07	0.09	,		,		. ,	,			
1	11. 5						가				
ı	0.04	0.06	,		,		71	,			
4	12.					71 71					
1	5		,			가 가					
	13.									-1	
1	5		,	1				,		가	
	14.										
1	5		,					,			
	15.	•									
4	_										

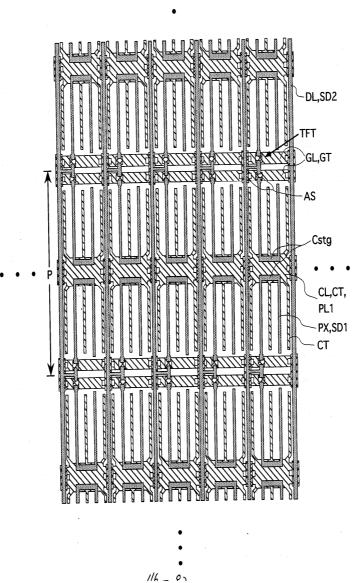


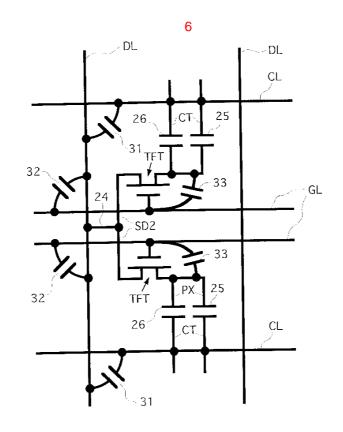


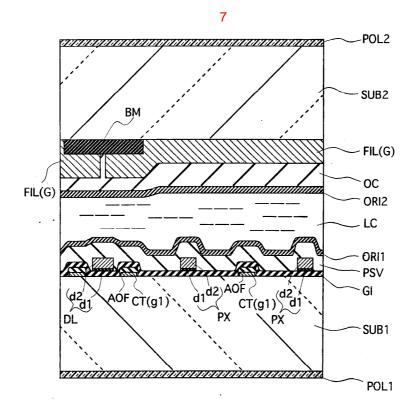


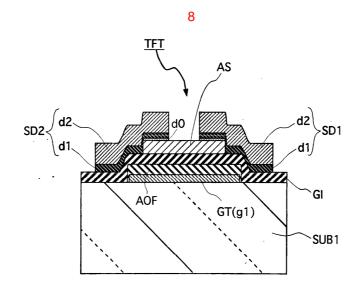


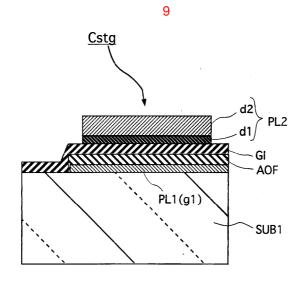


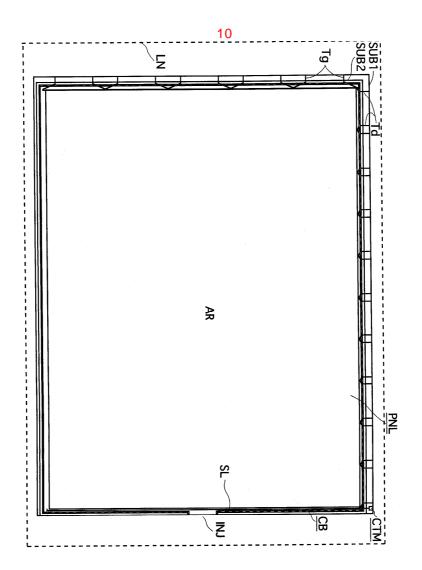


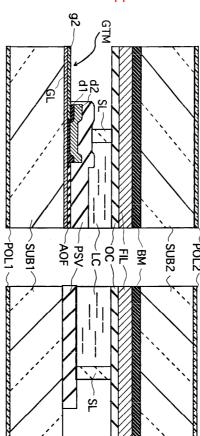


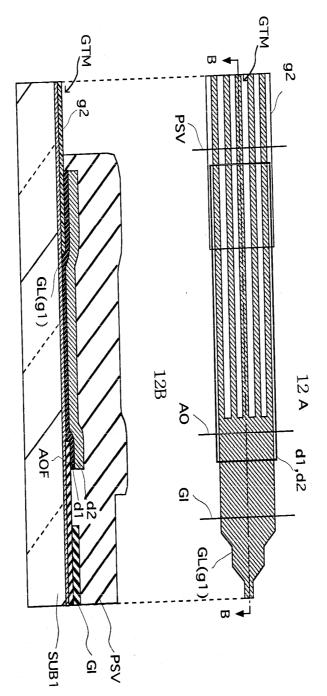


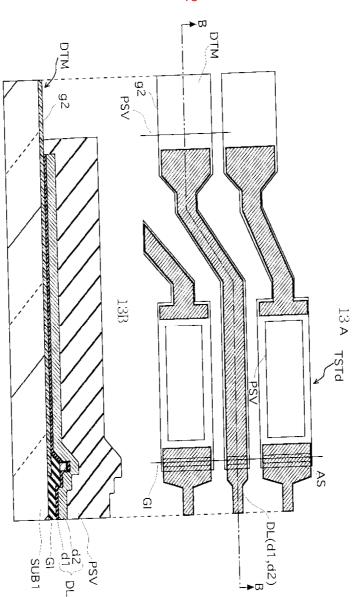




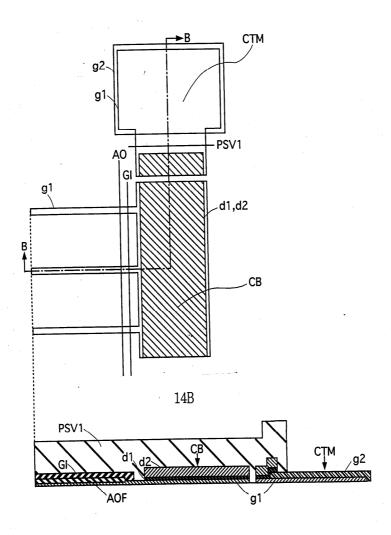


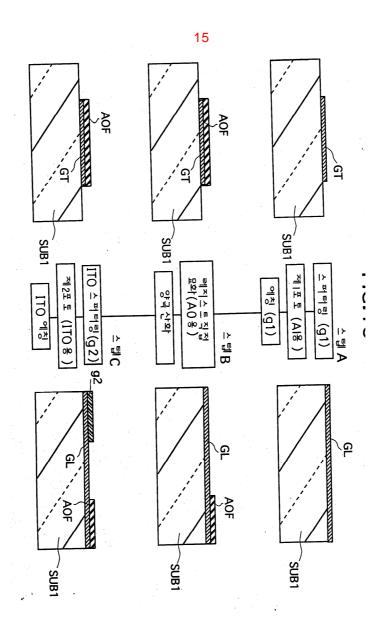


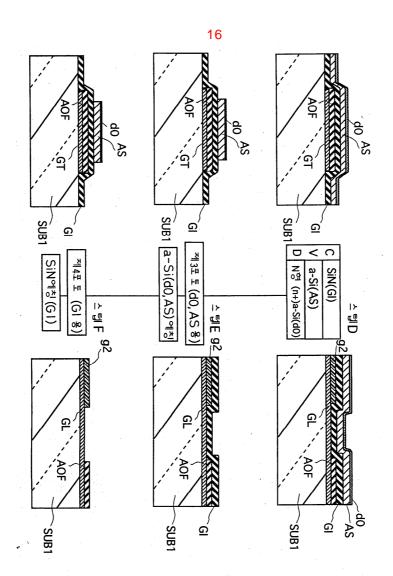


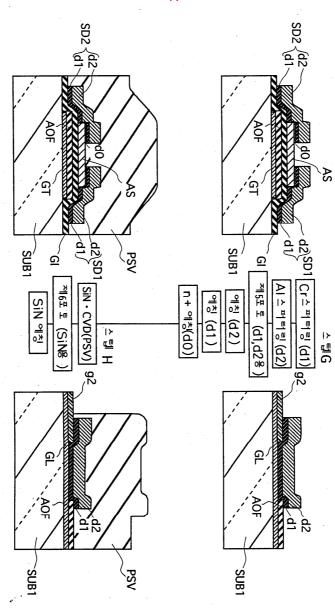


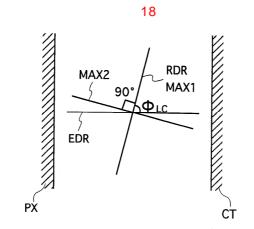
14A

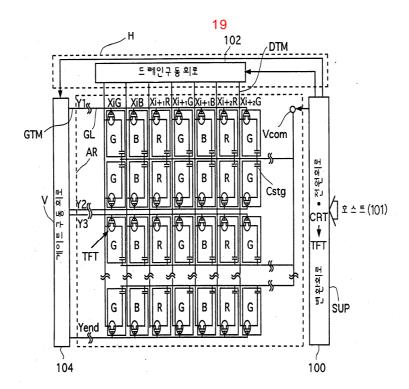


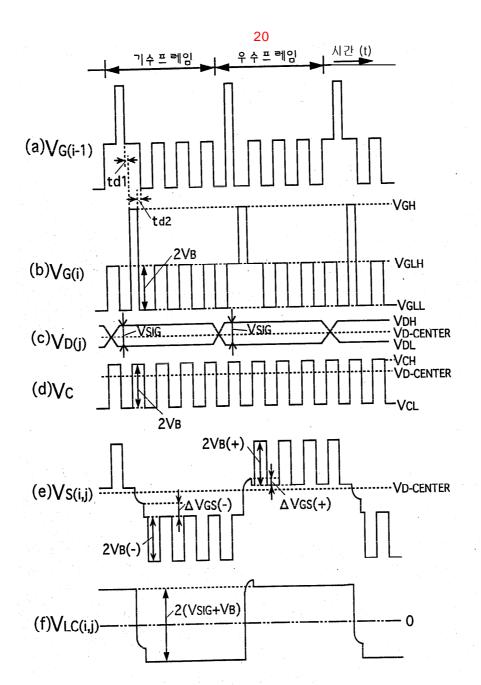


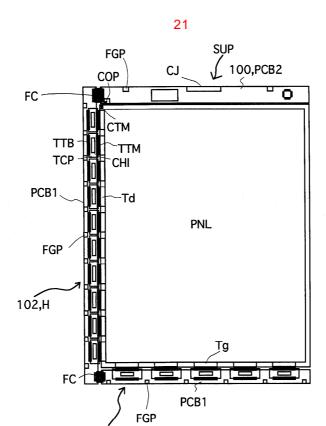






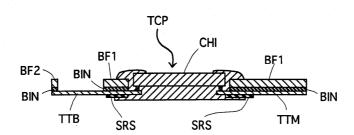




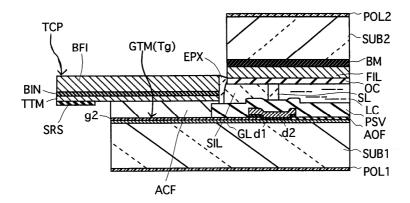


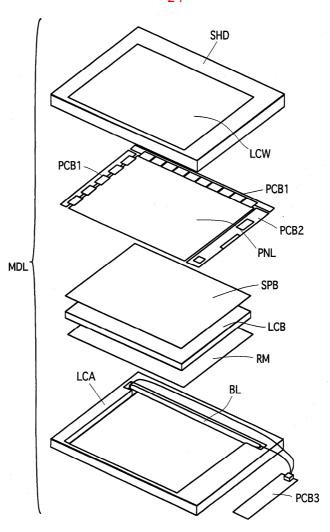
22

104,V

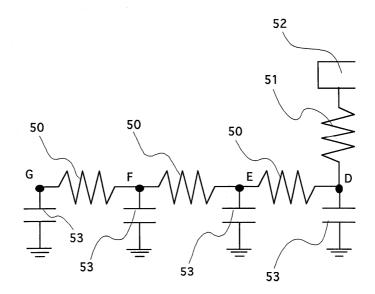


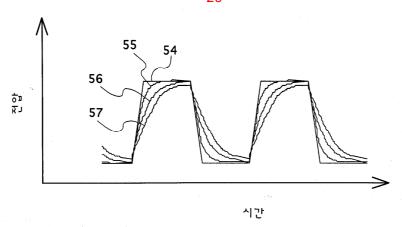
23

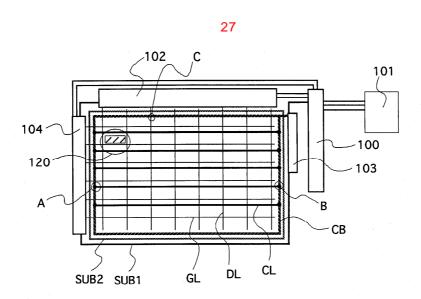


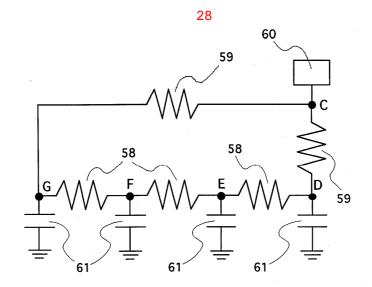




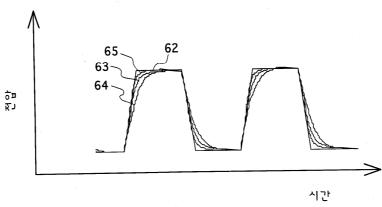




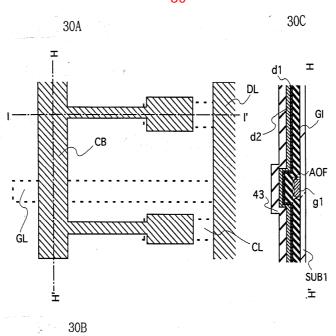


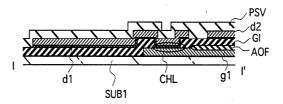




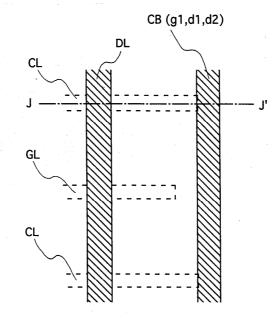


30

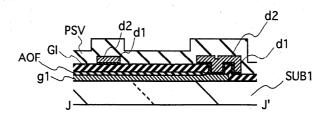




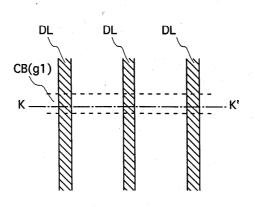


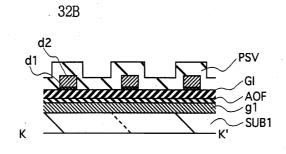


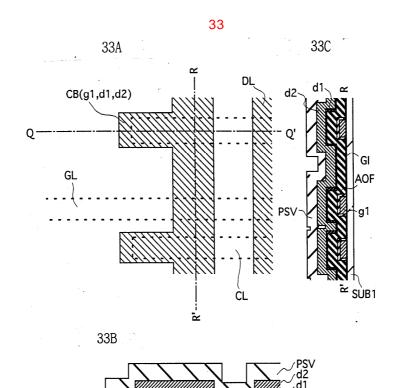
31B



32A

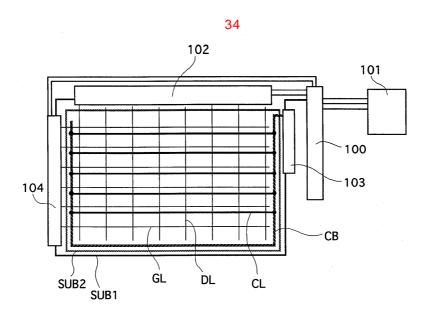


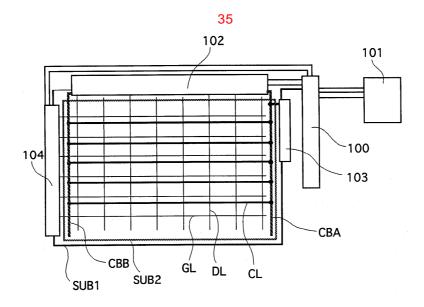


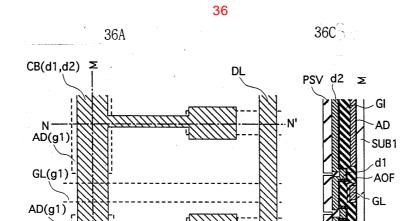


d1 CHL SUB1

Q'

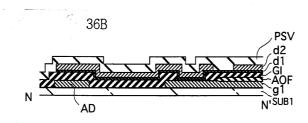


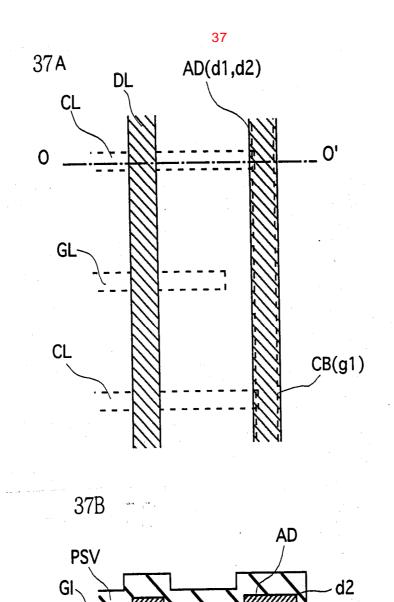




CL(g1)-

Ξ





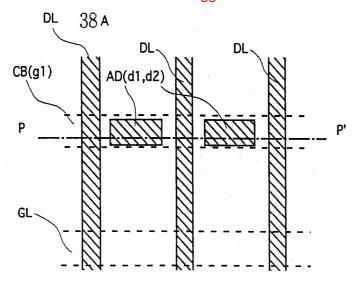
d1

0'

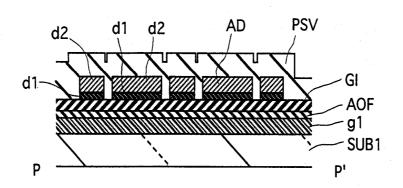
-SUB1

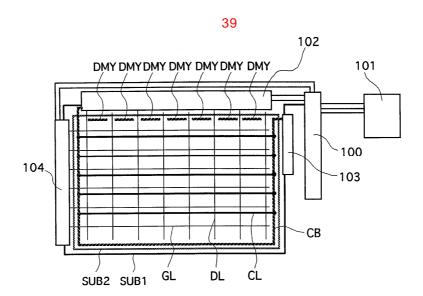
AOF g1

0



38B







专利名称(译)	液晶显示器		
公开(公告)号	KR100413584B1	公开(公告)日	2004-01-03
申请号	KR1020020027575	申请日	2002-05-18
[标]申请(专利权)人(译)	株式会社日立制作所		
申请(专利权)人(译)	Sikki日立制作所株式会社		
当前申请(专利权)人(译)	Sikki日立制作所株式会社		
[标]发明人	OHTA MASUYUKI 오오타마스유키 YANAGAWA KAZUHIKO 야나가와카즈히코 ASHIZAWA KEIICHIRO 아시자와케이이치로 MISHIMA YASUYUKI 미시마야스유키 OGAWA KAZUHIRO 오가와카즈히로 OHE MASAHITO 오오에마사히토 YANAI MASAHIRO 야나이마사히로 KONDO KATSUMI 콘도카쯔미		
发明人	오오타마스유키 야나가와카즈히코 아시자와케이이치로 미시마야스유키 오가와카즈히로 오오에마사히토 야나이마사히로 콘도카쯔미		
IPC分类号	G02F1/1362 G02F1/1343 G02F1/1335 G02F1/133		
CPC分类号	G02F1/136286 G02F1/133512 G02F1/134363		
代理人(译)	SHIN , JOONG HOON		
优先权	1995058874 1995-03-17 JP 1995105862 1995-04-28 JP 1995191341 1995-07-27 JP		
外部链接	<u>Espacenet</u>		
按 邢 (汉)			

摘要(译)

用途:提供一种LCD装置,通过与像素电极和对电极之间的单侧基板平行产生的电场来改变液晶的光学透射率和光学反射率,从而实现令人满意的视角特性和高清晰度LCD。组成:偏振器(POL2),黑色矩阵(BM),彩色滤光片(FIL),钝化膜(OC)和配向层(ORI2)设置在两个透明玻璃基板(SUB1)的一个(SUB2)上,SUB2)。在另一个基板(SUB1)上,设置偏振器(POL1),取向层(ORI1),漏电极,像素电极(PX),相对电极(CT),线和TFT。液晶(LC)通过取向层(ORI1,ORI2)与基板(SUB1)的表面平行排列。液晶(LC)的初始对准(RDR)与偏振器(POL1)的偏振轴(MAX1)几乎相同。另

一个偏振器(POL2)的偏振轴(MAX2)与偏振轴(MAX1)以直角交叉。版权所有KIPO& JPO 2004

