

(19)
(12)

(KR)
(A)

(51) 。 Int. Cl.⁷
H01L 33/00

(11)
(43)

10-2004-0025834
2004 03 26

(21) 10-2003-0064762
(22) 2003 09 18

(30) JP-P-2002-00276382 2002 09 20 (JP)

(71) 가 가
 가 가 398

(72)

	가	가		398	가		가
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가 가 398가 가

가 가 398가 가

가 가 398가 가

(74)

• •

(54)

가 ()

- 1 ,
 - 2 ,
 - 3 ,
 - 4 ,
 - 5 ,
 - 6 ESCA ,
 - 7 ESCA ,
 - 8 IR .
- * *

101 : 1 102(102a 102c) :

103 : TFT 104 :

105 : 106 :

107 : 108 : 1

109 : 110 :

111 : 2 112 :

113 :

, , 가 , (fluoro plastics)

, FPC(Flexible Printed Circuit) TAB(Tape Automated Bonding) TCP(Tape Carrier Package)가 , TAB TCP COG(Chip On Glass) IC()가 .

, , 가 .

, 가 ,

(110) , 가
 () / () (PEDOT/PSS)
 (1,1,4,4- -1,3- (TPB), 4-
 (DCM1), 6)
 -2- -6-(P- -)-4H-
 (PVK)
 (110) (PVK) 1,3,4-
 (PBD) , 30wt% PBD , 4 (TPB,
 6, DCM1,)
 (110)
 ,
 ,
 2 (111) , 1 , 2 (111)
 가 (3.5eV) , MgAg, MgIn, AlLi, CaF₂, CaN
 , 1 2
 ,
 1nm 10nm , Li 2 (111) , 가 가 ,
 (1nm 5nm) CaF₂, MgF₂ BaF₂ (111) ,
 , 2 (111) , 1nm 10nm (ITO(
), (In₂O₃-ZnO), (ZnO))
 2 (111)
 , 2 (112) , CVD
 (SiNO (N>O) SiON (N<O),
 (, DLC , CN) ,
 112) , 0.1 1μm
 , (113) , , 2 (111)
 (114)
 (113)
 , ,
 , ,
 , (113)
 ,
 , 가 Ar 가 (113) 30sccm(Ar가 (5sccm) O₂ 가)
 , 0.4Pa, 400W, 300 , 1cm² 0.15 6.2W (113) 0.1
 5μm
 가 , 가
 (113)
 , 2 (111) 2 , 2 , 1 , 1
 2 , 2 (111), (112), (213) (214)
 , (213) , , BCB(
 (213) 가 ,

, 3 (315) , 2 , 1 (312), (313), 2 (314)
 , 1 (312) , 1 2 (112) ,
 가 , (213) 2 2 (314) 1 (312)
 , 1 (312) 2 (314)
 (2)
 2 , , Ar 가 30sccm , 0.4Pa,
 400W, 300 , 100nm
 6 , X ESCA(photoelectron spectroscopy for chemical analysis)
 , (F): (O): (C): (Si)=61:<1:38:<
 0
 , 가 , 7 , 30sccm
 Ar 가 , 5sccm O₂ 가 , 6 가
 , 8 , (Fourier transform infrared spectroscopy:FT-IR)
 , CF(1100 1000cm⁻¹), CF₂ (1250 1070cm⁻¹), CF₃
 (1360 1150cm⁻¹) 가
 , CF₂ 가
 (3)
 3 , 4 4a
 , 4b 4a A-A' , 601 (, 605 (seal)
), 602 , 603 (, 604 , 605
 , (605) (607) ,
 , 608 (601) (603)
 , 가 FPC() (609) , FPC , (PWB)가
 , FPC , PWB가
 , 4b (610) (601) ,
 (602)가
 , (601) , n TFT(623) p TFT(624) CMOS 가 ,
 TFT , CMOS , PMOS NMOS
 ,
 , (602) TFT(611) , TFT(612) 1 (613)
) , 1 (613) 가 (614)
 , (614)
 , (614) (614)
 0.2μm 3μm 가 , (614)
 1 (613) , (616) 2 (617) , 1 (613)
 , 가 , , , Zn , Pt

, 3
 (616) . 1 , 1 ,
 .
 , (616) ,
 , (616) 2 () (617) , 가 (Al, Ag, Li, Ca,
 MgAg, MgIn, AlLi, CaF₂, CaN) 2
 () (617) , (ITO(),
 (In₂O₃-ZnO), (ZnO))
 , 2 (617) , (608) FPC(609)
 .
 2 (617) (619) . (619) , CVD
 (SiNO₂ (N>O) SiON (N<O)),
 (, DLC , CN)
 , (619) , (620) .
 (619) , ,
 , - ,
 .
 , (619) (620) (618)
 (618) , (605) (604) (610)
 ,
 , (610), (604) (605) (607) (618)가
 , (605) 가
 ,
 (604) , FRP(Fiberglass – Reinforced
 Plastics), PVF(), (Mylar),
 .
 , (619), (620), (604) (618)
 ,
 .
 , 1 2
 (4)
 , 가 , 가 ,
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 (,), (,), ,
 , (,), , (,)
 , (DVD) , 가 , 가
 , 5a 5h
 .
 5a , (2001), (2002), (2003), (2004), (2005)
 , (2003) .

, TV , 가 , 가 . , ,

5b (2106) , (2101), (2102), (2103), (2104), (2105),
(2102)

5c (2206) , (2201), (2202), (2203), (2204), (2205),
(2203)

5d , (2301), (2302), (2303), (2304), (2305)
(2302)

5e (, DVD) , (2401), (2402),
A(2403), B(2404), (DVD) (2405), (2406), (2407)
A(2403) B(2404)
A, B(2403, 2404)

5f () , (2501), (2502), (2503)
(2502)

5g (2606), , (2601), (2602), (2603), (2604), (2605),
(2607), (2608), (2609), (2610)
(2602)

5h (2706), , (2701), (2702), (2703), (2704), (2705),
(2707), (2708)
(2703)

, 가 ,
가

, CATV()
가

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, 가 , 4 , 1 3

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(57)

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4.

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6.

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8.

1 , 1 2 ,

2 1 ,

1 ,

2 ,

2 .

15 ,
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 .

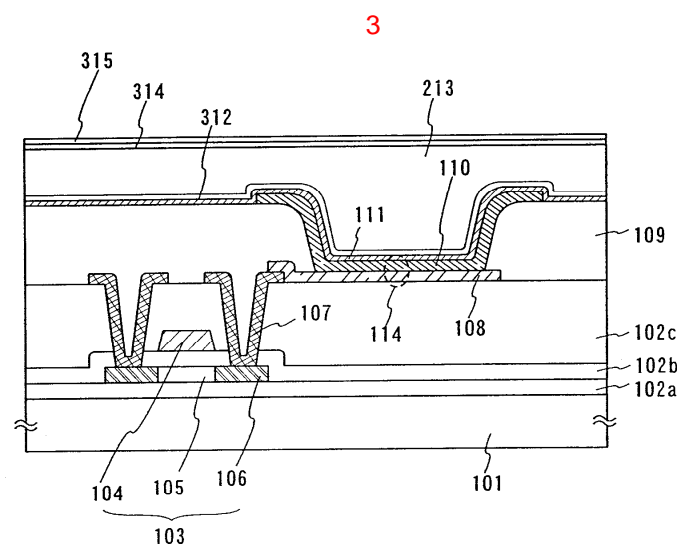
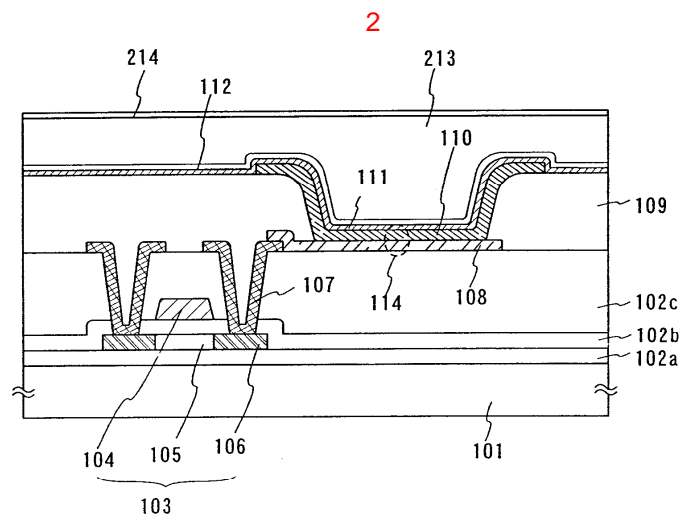
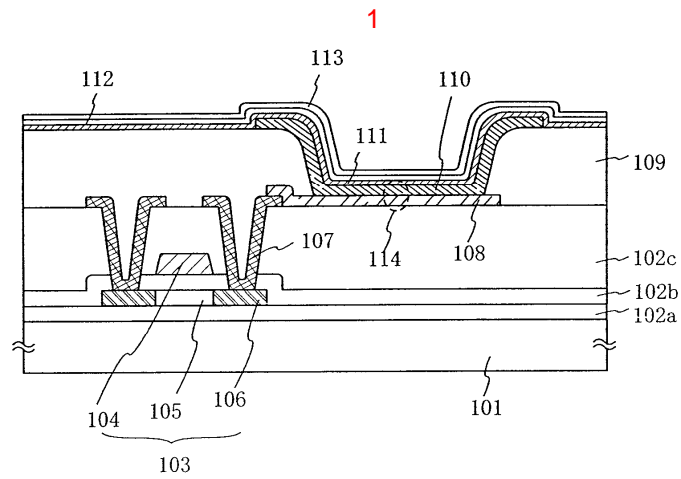
15 18.
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19.
 TFT 1 , 1
 2 ,
 2 1 ,
 1 ,
 2 ,
 2 .

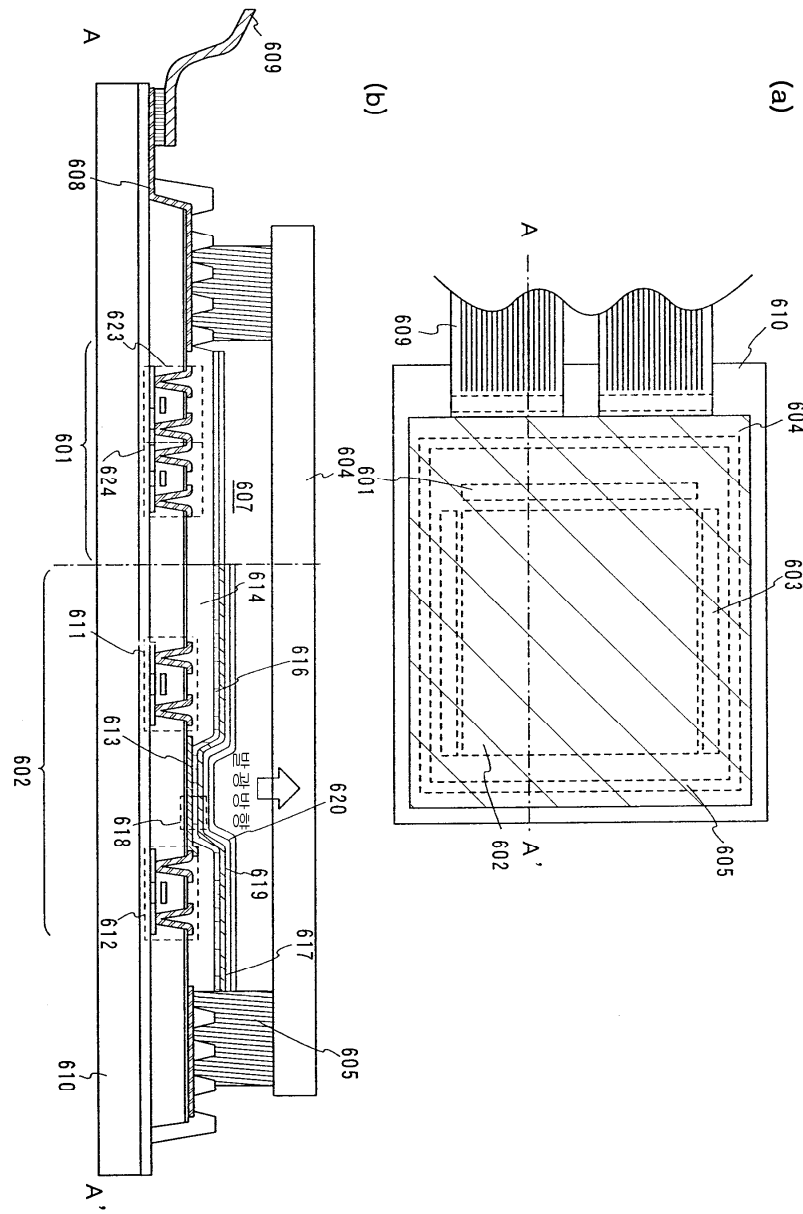
19 20.
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 1 .

19 21.
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 1 2 , , ,
 1 .

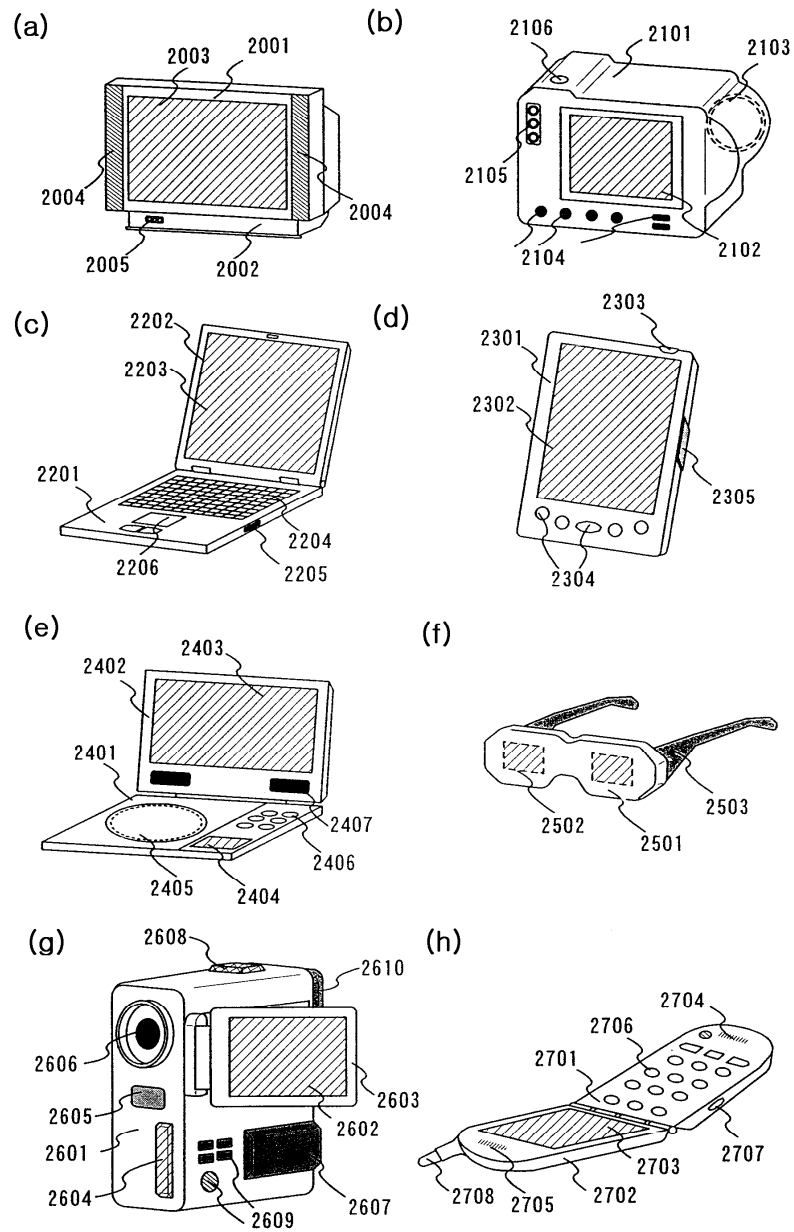
19 22.
 ,
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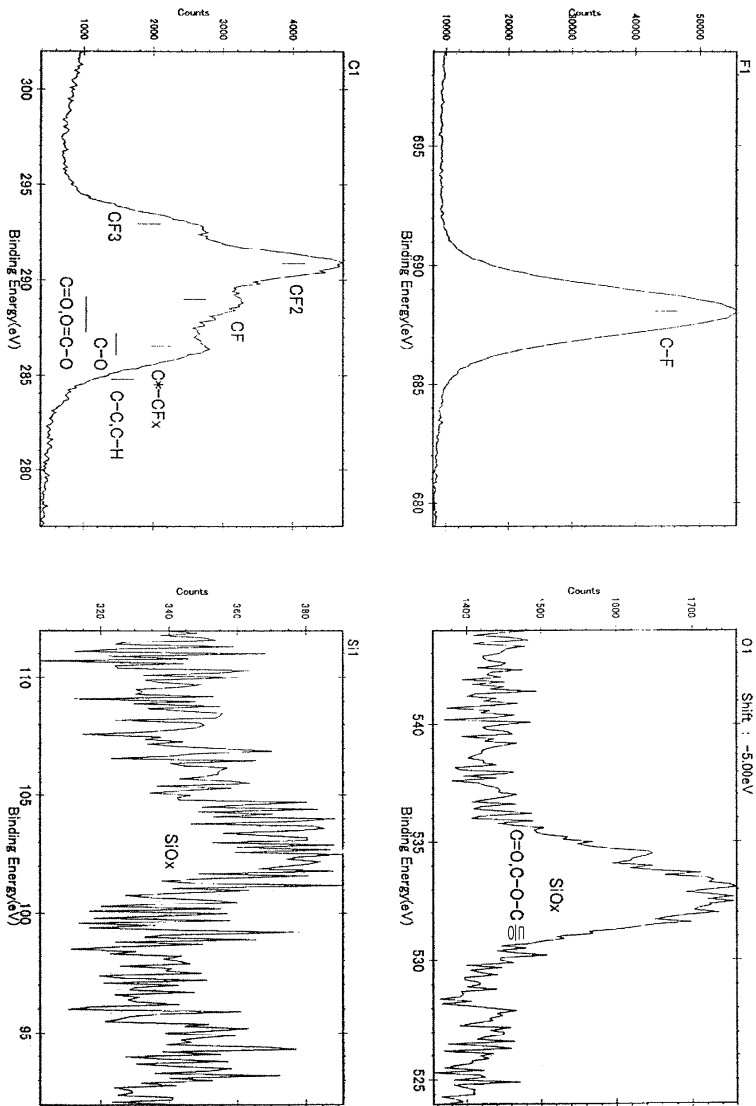
4



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