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(21) 10-2001-0081562
(22) 2001 12 20

(71) . 20

(72) 1008-1 가 302

146 104 703

1510

(74)
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(54)

LOG

LOG

LOG
;

2 ;

5

1

2 1

3 2

A-A'

4 3 가 .

5 .

6 5 B-B' .

7 6 가 .

8 .

9 8 C-C' .

10 9 가 .

< >

1 : 2, 40 :

4 : 8 : TCP

10 : IC 12 : PCB

14 : TCP 16 : IC

18 : 20 :

21 : 22, 28 :

24 : TCP 25 : TCP

26, 42, 56 : LOG 27, 44 :

30 : TCP 32, 50 :

34, 52 : 36 :

38, 48 : 46 :

54 : /

가

(Thin Film Transistor)

가 1

가

가

(Vcom),

(Vgh),

(Vgl)

1

가

가

IC(Integrated Circuit)

AB(Tape Automated Bonding) IC TCP(Tape Carrier Package) T
COG(Chip On Glass)

TCP TAB IC TCP PCB(Printed Circuit Board)

IC PCB

IC PCB

COG (Line On Glass; LOG IC

가 IC TAB LOG PCB

IC TAB LOG IC PCB

, LOG (1) PCB(12) TCP (8) , (1) (1) (1)

CP (14) TCP (14) , TCP (8) IC (16) TCP (8) , IC(10) , T

(1) (4) , (2) (4) 가 (2) , (1) 가 (2)

(18) (21) (2) (18) (21) (2)

IC(16) LOG (26) (2)

TCP(8) (24) IC(10)가 TCP(8) (24) IC(10) PCB(12)

(25) (25) (2) (26) (22) PCB(12) (22) 가 TCP(

LOG (26)

IC (10) (18)

TCP(14) (28) IC(16)가 (30) IC(16) (28) (2) LOG
 (26) (30) (2)

(20) IC (16) (VGL) IC(16) (VGH) (VGH)가

LOG (26) (VGH), (VGH), (VCOM),
 (GSP), (GND), (VCC) (GSC), (GOE)
 LOG (26) 2

(21)

2 3 , LOG (26) LOG (2) (27)

(27) (36) (32) (34) (38) (27)
 (36) LOG TCP(8) TCP(14)
 AINd (26) (20)
 (0.046)

LOG (26) PCB LOG 4
 (Ri) 가 (26) 가 LOG
 PCB(12) (26) (21)

, LOG (26) IC(16)
 가 가 PCB(12) LOG (26)
 (21) 가 IC(16) IC(16)

가

가 (VGL) LOG
 (26) LOG (26) TCP(14) , IC(16) (VGL) (2)
 1) (VGL) (VGH) (VGL)

가

LOG LOG (26) , LO
 LOG (26) (26) (21) LOG 가 (26)

가

LOG (26)

LOG LOG

2

2

LOG

LOG

5 10
 LOG B-B' LOG 6 5
 5 6 LOG (42) ()
 2) ND), (VCC) IC (VGH), (VGH), (VCOM), LOG (4
 (GSC), (GOE) (GSP), (G
 LOG (42) (40) (44) (50)
 (52) (48) (44) (46)
) (46) (44) 2 TCP TCP (36
 (46) (50) (52) (44)
 LOG (42) 7 (46) (44) 1
 (Ri1) , (46) 2 (Ri2) 가 2
 LOG 가 (42) (44) (46)
 LOG (42)
 (40) LOG (44) (50)
 (Amorphous) / (44)
 52) LOG (42) (44)
 (42) (44) (46) , LOG
 , LOG (42) (46) 가
 (44) (50) (52) (44) LOG
 (46) (44) (46) (Ri2)
 (Ri1//Ri2)
 , LOG (42) 2 (50) (44) / ()
) (44) / () 2
 , 가 (50) LOG (42) (44) / 가
 (44) / (44)
 (50) / (44) LOG LOG

(44)

/

8 LOG C-C' LOG , 9 8

8 9 LOG (60) ()

0) ND), (VCC) IC (VGH), (VGH), (VCOM), LOG (6 (G

(GSC), (GOE) (GSP),

LOG (60) (40) (44) , (44) (54)

(50) (52) (58) / (44) / (50) / (54) (54)

(56)

/ (54) (50) (44)

(56) (52) / (50) / (54) (54) (52)

(58) (56) / (44) / (54) (54)

(60) (54) 2 (Ri2) , (56) 3 (Ri3) 1 (Ri1) LOG /

2 (27) 가 (44) /

(54) LOG (56) (60) 3 가 (44) /

(36) (56) (44) 2 TCP

TCP

LOG (60)

(40) (44) , (50) LOG

LOG LOG / (54) (52)

(54) (52) (42) (44) (44) (50)

/ (60) (44) / (54) (54) (56) , LOG

(56)

, LOG (60) (44) / (54) (56) LOG (54) , (52)

가 (56) LOG (50) / (44) (54)

) (56) LOG (54) / (44) (56)

/ (54) (46) / (54) (Ri2, Ri3) (56)

(Ri1//Ri2//Ri3)

$$\frac{1}{\sqrt{2\pi}} \left(\frac{1}{\sqrt{2\pi}} \int_{-\infty}^{\infty} \frac{e^{-t^2/2}}{\sqrt{2\pi}} dt \right)^3 = \frac{1}{\sqrt{2\pi}} \int_{-\infty}^{\infty} \frac{e^{-t^2/2}}{\sqrt{2\pi}} dt$$

가 , IC 가 IC 가

(57)

1.

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2

2.

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3.

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4.

1

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1

5 6. ,

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6 7. ,

6 8. ,

6 9. ,

10.

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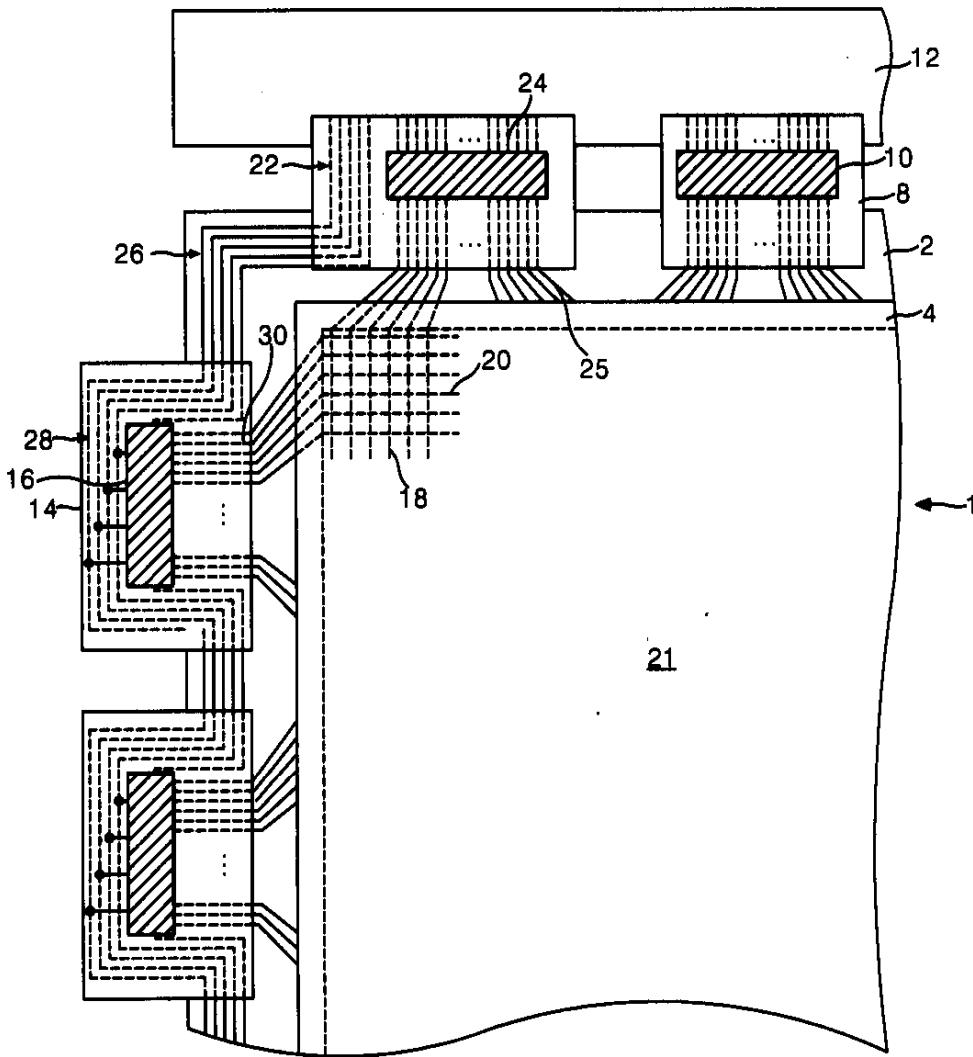
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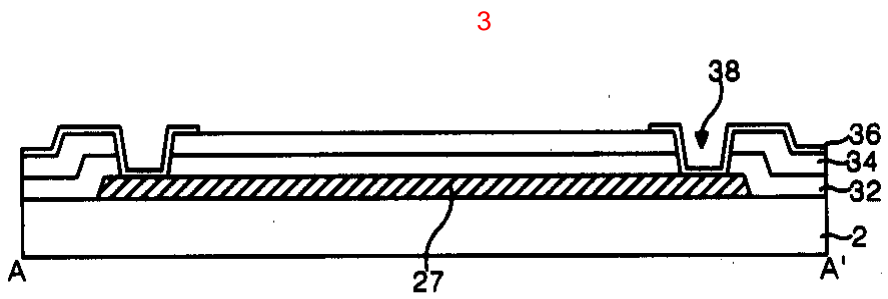
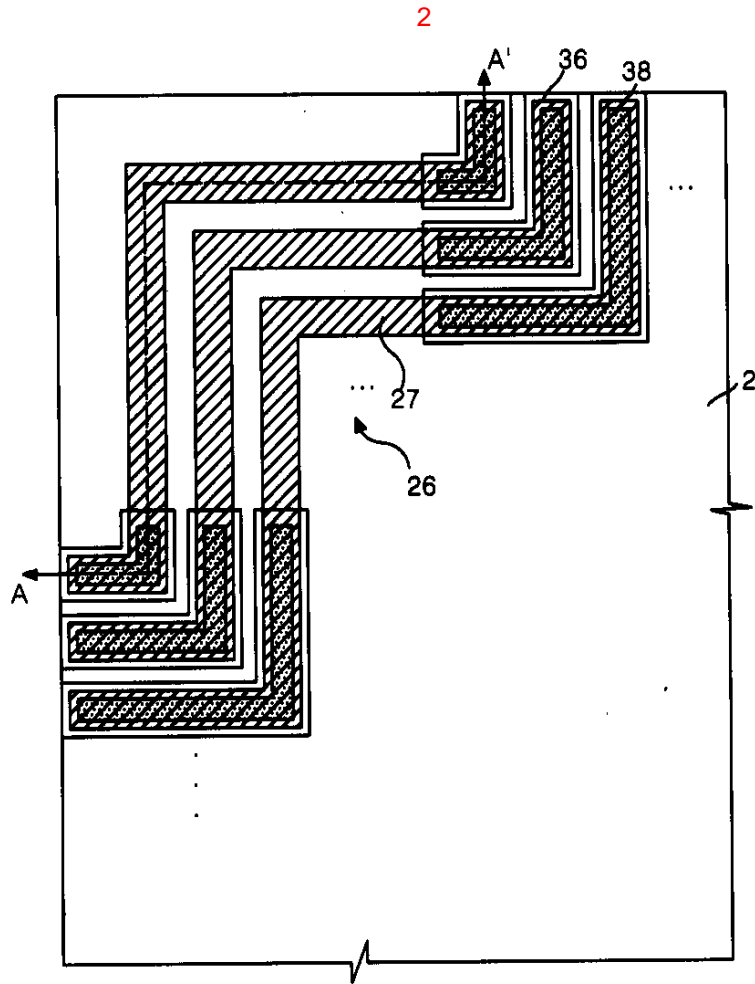
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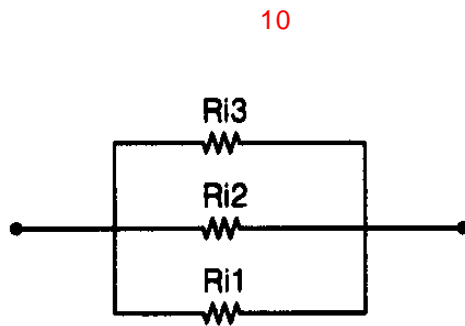
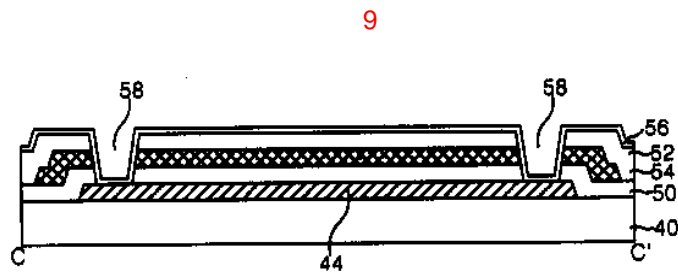
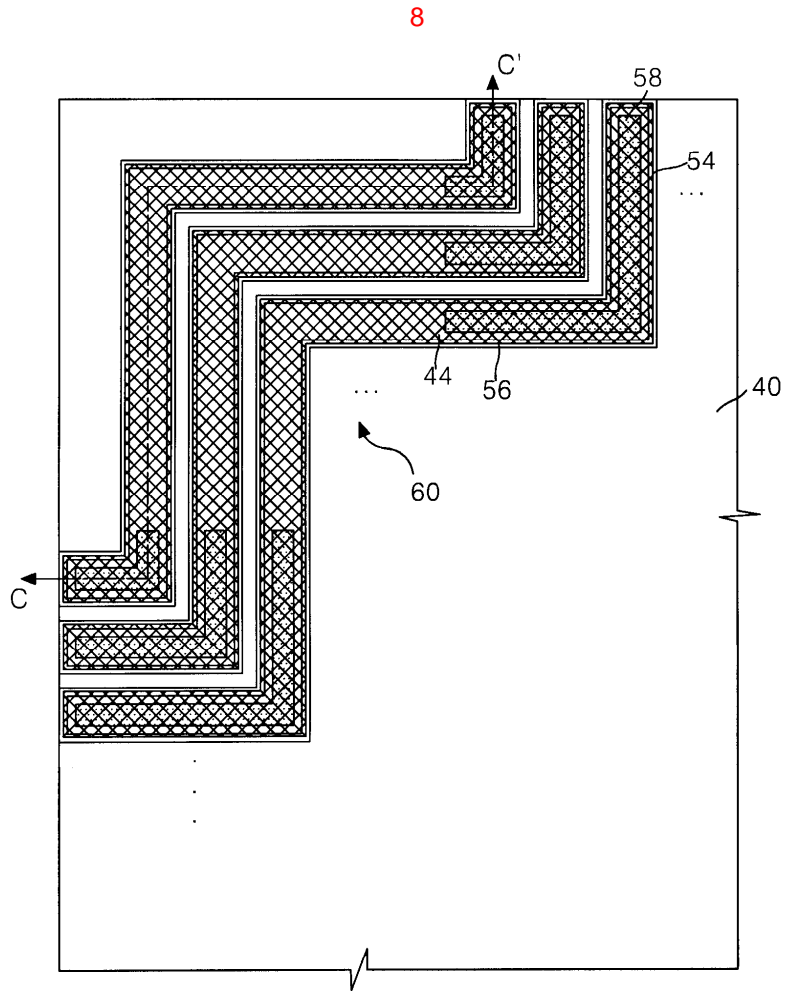
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专利名称(译)	玻璃上线型液晶显示面板及其制造方法		
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摘要(译)

本发明提供一种能够在有限的区域内减小LOG型信号线组的线电阻的LOG型液晶显示板和制造LOG型液晶显示板的方法。本发明的LOG型液晶面板包括图像显示单元，该图像显示单元包括在栅极线和数据线的交叉区域处形成的多个液晶单元；玻璃型信号线，在玻璃线上形成在图像显示单元的外部区域中，并提供驱动IC中用于驱动栅极线和数据线所需的驱动信号；并且，在其间插入绝缘膜的至少两个金属层（其中在线上玻璃型信号线中的至少一个信号线）并联连接。五

