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10-2004-0016184
2004 02 21

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10-2002-0048440

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1 : 2 :

2a,71a : 3 :

3a,72a : 4,103 :

5 : 6,37,67,79 :

7a,7b : EMI 21,31,61,71,81 : TCP

22,32,62,72,82 : TCP 23,101 : PCB

24 : PCB 25,105 : FPC

26,102 : 31a,61a,77a :

32a,62a,78a : 33,35,63,74,75 :

34,36,64,65,76 : 41,69,83 : /

42,68,84 : 51,66,85 :

52 : 73,86 : /

가

가 (Active Matrix) (Thin Film Transistor; 'TFT')가

1 , (DL1 DLm) (GL1 GLn) (Clc)

(6) , (5) , (5) (DL1 DLm)

TFT가 (2) , (5) (GL1 GLn) (4) , (2) (3) ,

(2) (GMA)

(3) (1) (2) (1) , (6) (1) , (7a,7b) .

(5) 가

(5) (DL1 DLm) (GL1 GLn) TFT 가 TFT

(DL1 DLm) (GL1 GLm) , TFT (Clc) (DL1 DLm) .

TFT (Clc)

(6) 가 (Flexible Printed Circuit : , 'FPC')

LVDS(Low Voltage Differential Signaling) , TMDS(Transition M
inimized Differential Signaling) , RSDS

EMI (7a,7b) (Low pass filter) (6) (1) (2) (1)

(1) (6) EMI (7) 1 2 (RGB) (1) 1 /

(H,V), (Data Enable : DE), (RGB) (2) (GDC)

(1) (DDC) (SSC), (DDC)

(SSP), (POL) (SOE) (DDC) (GSC)

(2) (GOE) (GDC) (GSP), (3)

(3) (1) (GDC) GL1 GLn (Clc)

(3) (5) (GDC)

(4) (4) (GMA) (2)

(2) (DL1 DLm) (1) (DDC) (1) 1 2

(RGB)

2 (Tape Carrier Package : , 'TCP') 가

2 , (2) TCP(21) (S1 Sn)(2a)

(3) TCP(22) (G1 Gn)(3a)

TCP(21) (1), (6), EMI (7), (26) (4) 가

(Printed Circuit Board : , 'PCB')(23) (5)

(26) (Vcc,Vdd), ACF(Anisotropic C

(Vcom) TCP(21) PCB(23) ACF

onductive Film) TCP(21) (5)

TCP(22) PCB(24) (5)

[illegible]

3 , (37) , TFT가
 (40) , (31a) , / 가 가 (40) (40)
 (32a) .
 (40) 가
 (40) .
 TFT가 . TFT
 , TFT
 TFT
 (37) FPC (37) LVDS
 , TMDS , RSDS
 TCP(31) 1 TCP(32) (36) TCP (31) 2 (37) (33) 1 (35) (37)
 (31a) TCP(31) (31a) 4 /
 (41) (42) (41) (37)
 (33,35) (SSC), (SSP), (POL) (DE) (SOE)
 (DDC) (41) (37) (34,36) (DDC) (42) , /
 (41) (42) (42) (RGB) 1 2
 (42) (RGB) (42) /
 (31a) k (DL1 DLk) (40)
 (42) / (DL1 DLk)
 (32a) TCP(32) (32a) 5
 (51) (52) (51) (37)
 (33,35) (GSP), (GSC) (GOE) (DE) (G
 (51) (GDC) (52) (52) i
 (GL1 GLi) (52)
 6 7 2
 6 7 , 2
 (67) ,
 TFT가 (40) , (66) / (69)가
 (40) (61a) , (61a) (62a)
 (40) 가
 (40) . TFT
 TFT가 . TFT
 , TFT
 TFT
 (67) FPC (67) LVDS

, TMDS , RSDS
 TCP (61) 2 (63) (67) 1 (35) 1
 (36) TCP (61) (64) (67)
 (61a) TCP(61) (61a) 7 (66)
 (66), / (69) (68) (DE)
 (67) (35,63) (GSP), (GSC) (GOE) (GDC)
 (GDC) TCP(61) 6 TCP(61) 3
 (65) TCP(62) / (69) (67)
 (35,63) (SSC), (SSP), (POL) (SOE)
 (DDC) (69) (67) (36,64) (68) (RGB) 1 2
 (DL1 DLk) (42) (68) / (69)
 (DL1 DLk) (40) (61a) k
 (62a) TCP(62) (62a) 2 TCP(61)
 (3a) (65) 가 (GDC) (62a)
 3 i (62a)
 8 9 3
 8 , 3
 가 (79) , TFT가
 (40) , / (83)가 (77a) , / (78a) ,
 가 (71a) , (85)가 1 가
 (72a) (78a) ,
 (40) 가
 (40) TFT가 . TFT
 . TFT , TFT
 TFT
 (79) FPC (79) LVDS
 , TMDS , RSDS (79)
 (77a) 1 TCP(81) (79) (78a) 1 (75)
 TCP(81) (79) TCP(82) 1
 (77a) 1 TCP(81) (61a) 9 /
 (83) (84) / (83) (79)
 (75) (SSC), (SSP), (POL) (DE) (SOE)
 (DDC) , (DDC) (84) , /
 (83) (79) (76) (RGB) 1 2

(84) (73) (83) (DL1 DLk) (83) (71a) (84)
) / (R,G,B) (84) (77a) k k (40) (DL1 DLk)
 (71a) / (73) (40) 가
 2 (77a) (DDC) 가 (77a) (71a) (4
 0)
 (78a) (75) TCP(82) 9
 (85) (86) (85) (79) (GSP), (GSC) (GOE) (DE) (GDC) (GDC) (74)
 (85)가 (72a) TCP(72)
 (78a) (86) (GDC) i
 (85)
 (72a) TCP(72) 가 (72a) 2
 TCP(82) (3a) (78a) (GDC)
 , i
 10 12 TCP 가
 10 (31a,61a,77a) (71a) TCP(31,
 61,71,81) (32a,78a) (62a,72a)
 TCP(32,62,72,82)
 TCP(31,61,71,81) (37,67,79), (102) (103) 가 (V
 PCB(101) (40) (102) TCP(31,61,71,81)
 cc,Vdd), ACF (Vcom) TCP(31,61,71,81)
 (40) PCB(101) ACF
 TCP(32,62,72,82) PCB(101) FPC FPC(105) (40)
 TCP(32,62,72,82) (40) ACF T
 CP(32,62,72,82) (40)
 11 (31a,61a,77a) (71a) TCP(31,
 61,71,81) (32a,78a) (62a,72a)
 (Chip on glass : , 'COG')
 TCP(31,61,71,81) (37,67,79), (102) (103) 가 (V
 PCB(101) (40) (102) TCP(31,61,71,81)
 cc,Vdd), ACF (Vcom) TCP(31,61,71,81)
 (40) PCB(101) ACF
 (40) (32a,78a) (62a,72a) (40)

(Line on glass : , 'LOG') (111)
 (37,67,79) (31a,61a,77a) .
 10 11 , COG , LOG ,
 PCB , PCB .
 , 11 (37,67,79), (31a,61a,77a), (71a) (102)가
 LOG (40) COG PCB가 , LOG (40)

, /
 , EMI EMI 가 , 가,
 PCB PCB , PCB
 가

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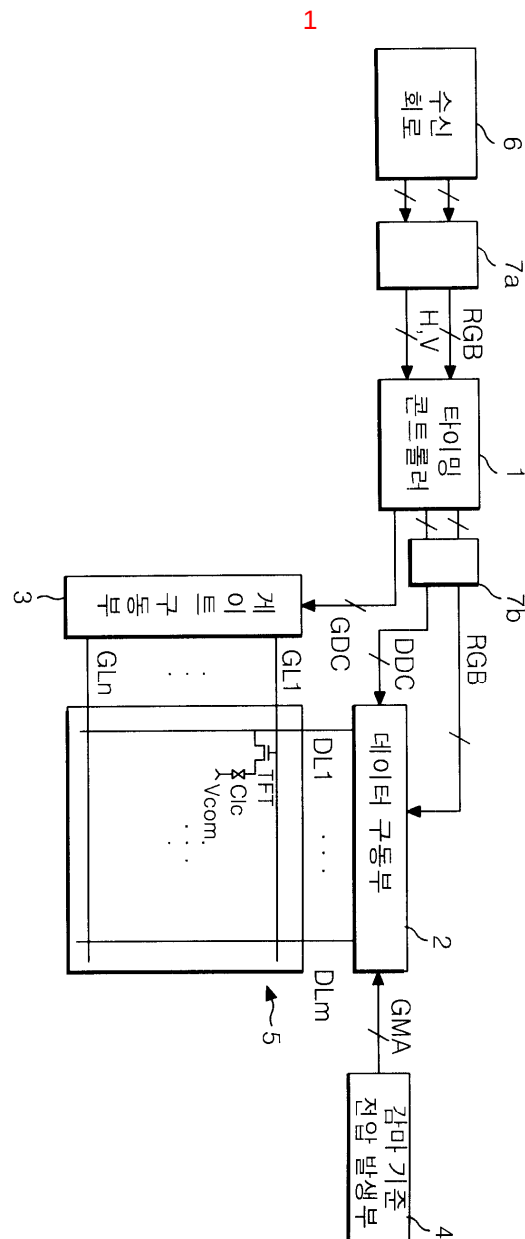
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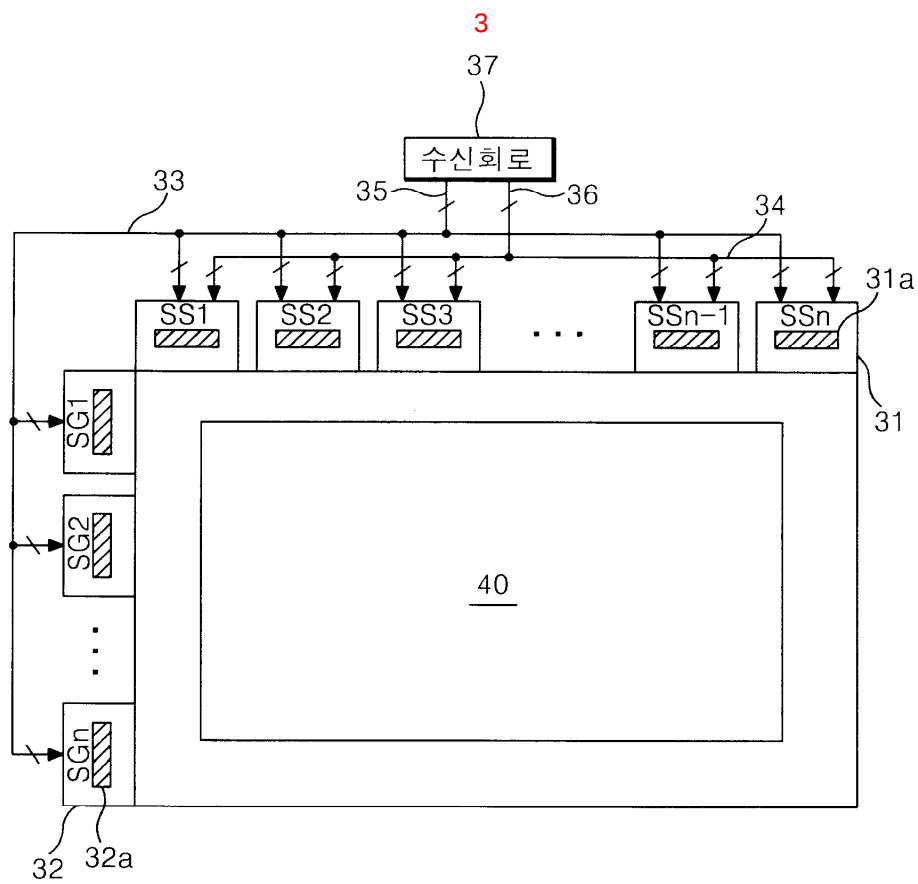
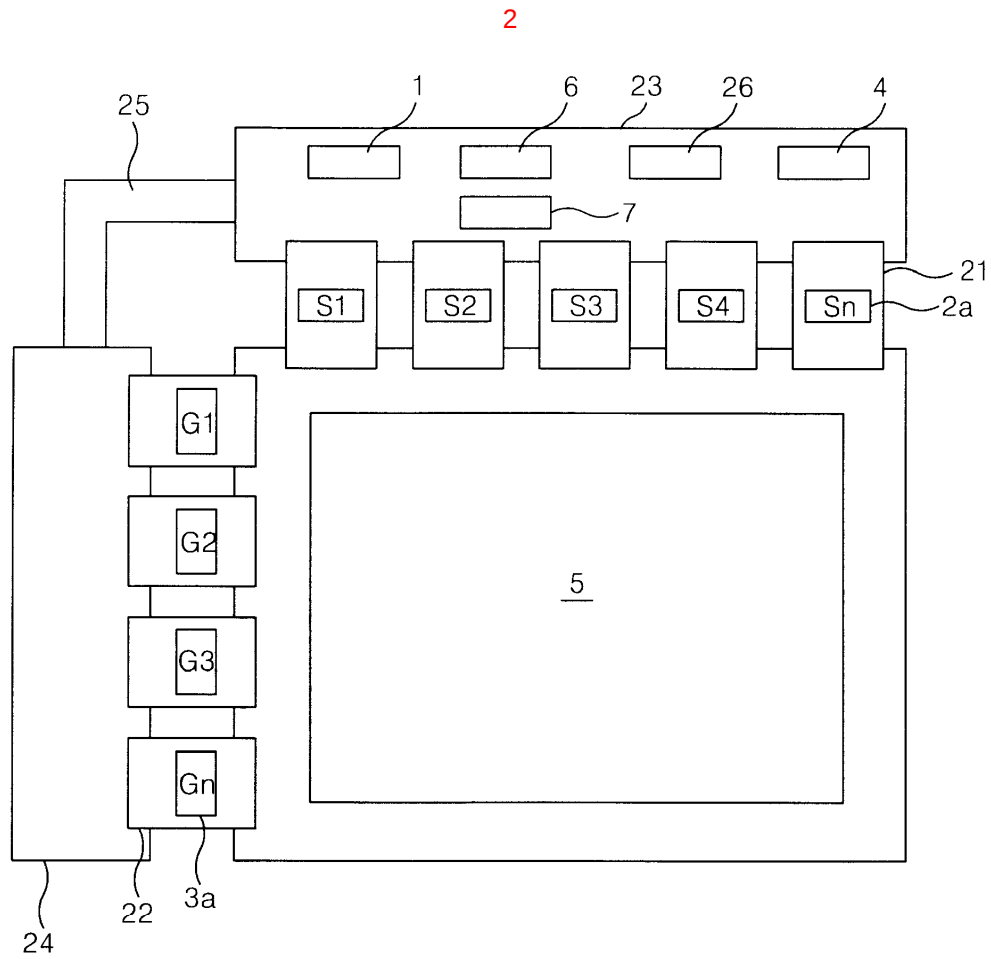
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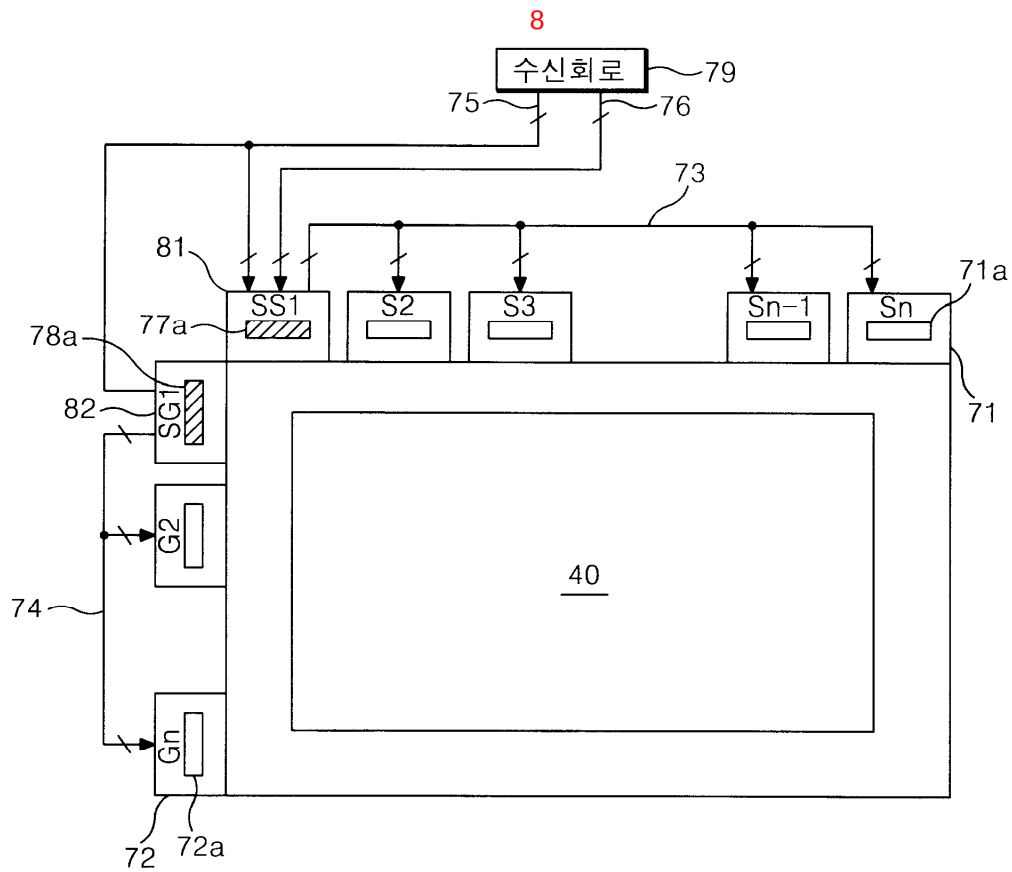
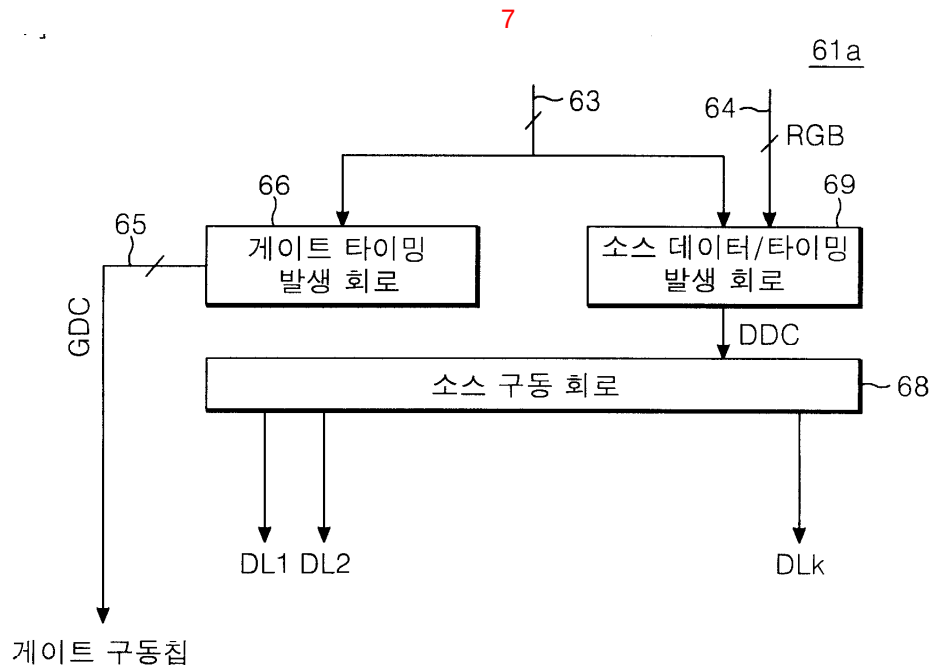
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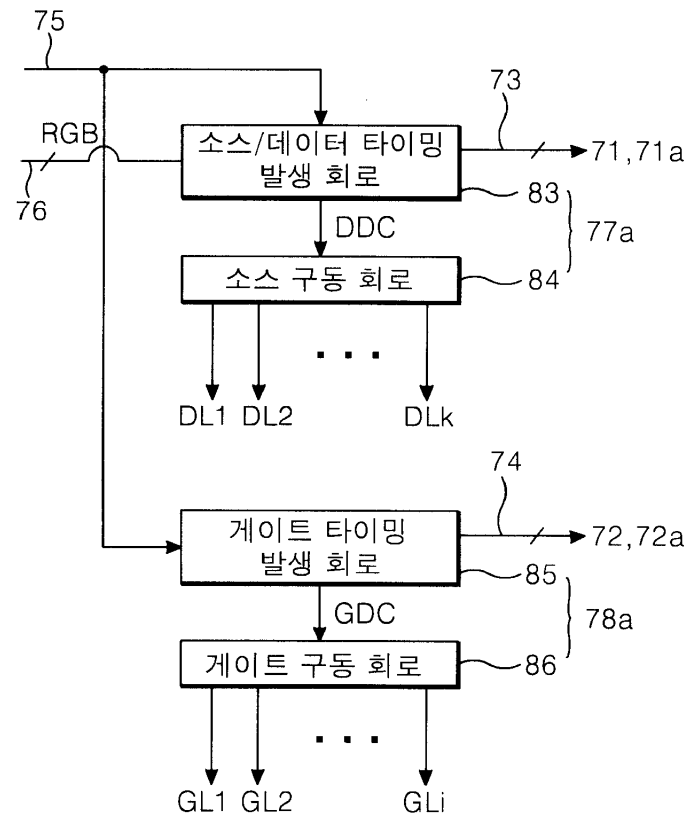




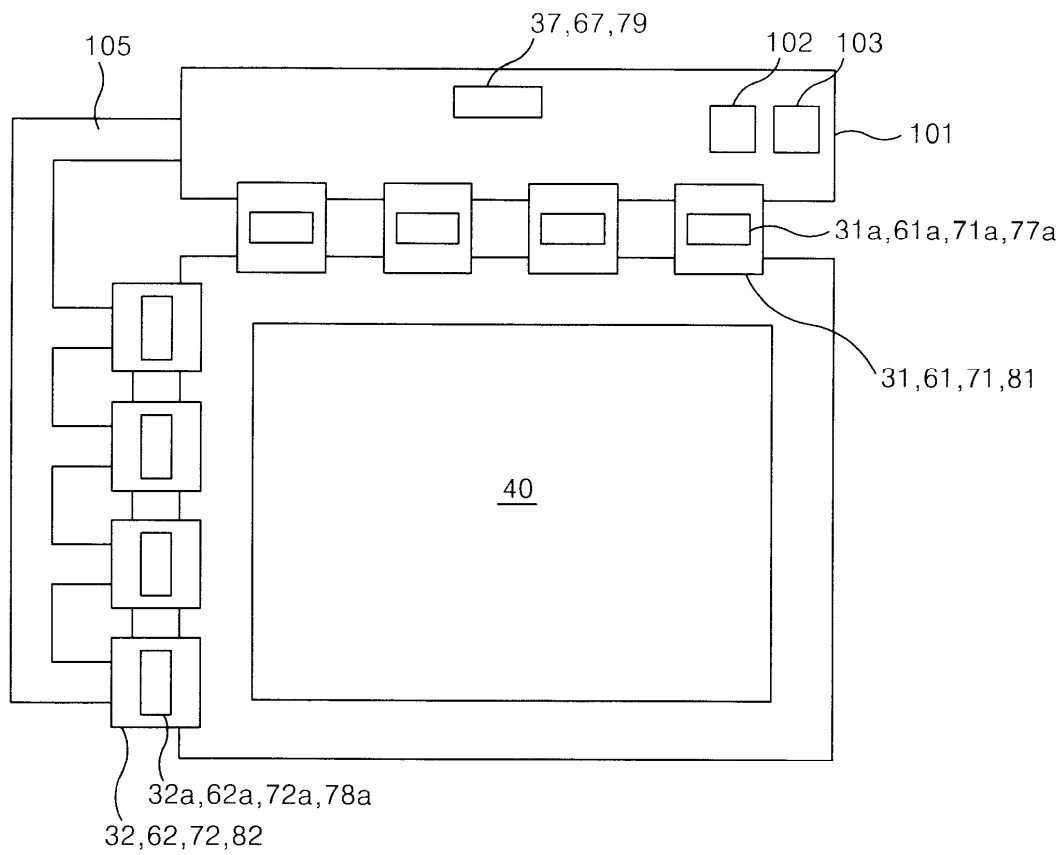


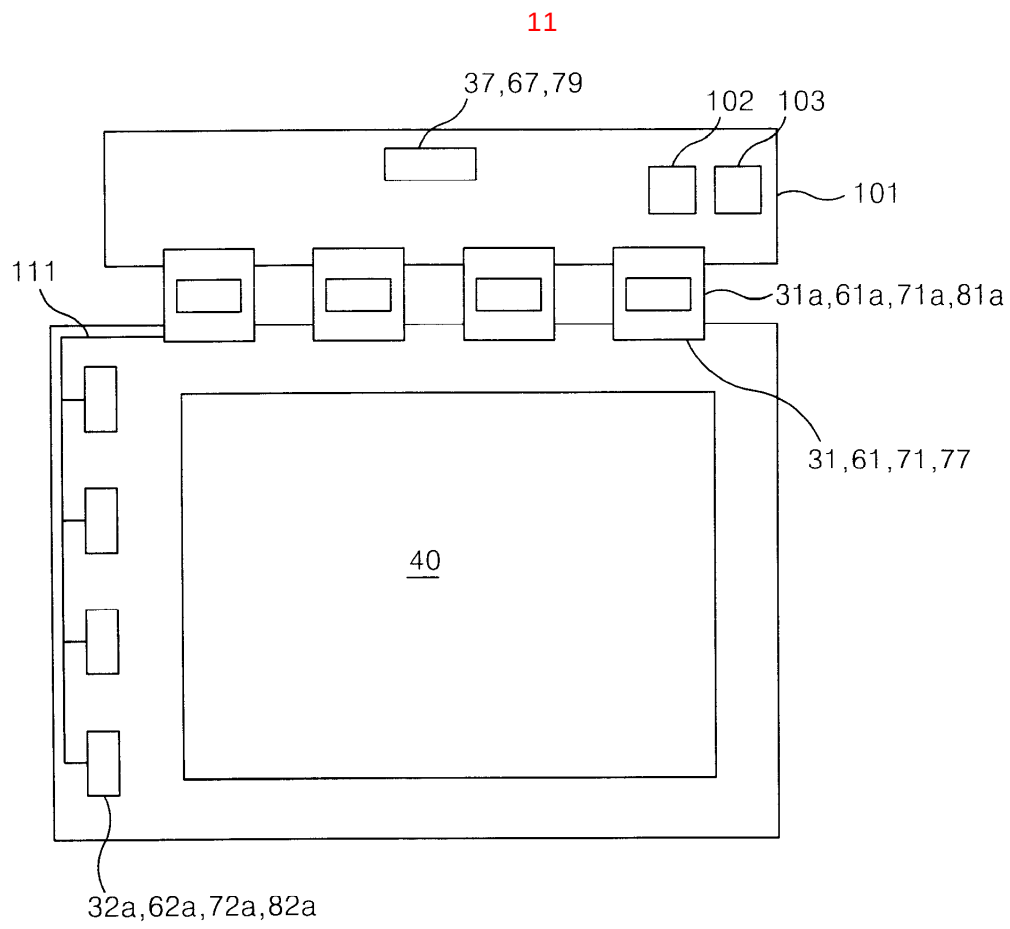


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专利名称(译)	一种液晶显示装置，其中集成了控制信号产生电路和驱动电路		
公开(公告)号	KR1020040016184A	公开(公告)日	2004-02-21
申请号	KR1020020048440	申请日	2002-08-16
[标]申请(专利权)人(译)	乐金显示有限公司		
申请(专利权)人(译)	LG显示器有限公司		
当前申请(专利权)人(译)	LG显示器有限公司		
[标]发明人	SOHN MINHO 손민호		
发明人	손민호		
IPC分类号	G02F1/133		
CPC分类号	G02F1/1333 G09G3/3614 G09G3/3648 G09G3/3685		
代理人(译)	KIM , YOUNG HO		
其他公开文献	KR100555302B1		
外部链接	Espacenet		

摘要(译)

液晶显示装置技术领域[0001]本发明涉及一种液晶显示装置，其中集成了控制信号生成电路和驱动电路以简化电路配置。液晶显示装置包括：液晶面板，其中多条数据线和多条栅极线彼此交叉；数据驱动电路，用于向数据线提供数据；以及源数据/定时产生电路，用于产生用于数据驱动电路的控制信号并内置智能源驱动芯片。3

