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5 54-35

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1 .

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3 2 .

4 2 .

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6 5 .

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2,20,30 : 4,22,32 :

6,24,34 : 10,12 :

14,16 : 101,130 :

102,132 : 106,134 :

108,136 : 110,138 :

112,148 : 114,116,140,146 :

118,142 : 120,144 :

가

가

1

1 , (4) , (2) (2) (GL1 GLn) (DL1 DLm) (6)

(2) (GL1 GLn) (DL1 DLm)
(TFT) , (TFT)

(6)

(4) (GL1 GLn) 가 1 (GL1 GLn)
(DL1 DLm) 1

) (TFT) (GL1 GLn) (DL1 DLm)
) 가 (Clc) (TFT)
(Clc)

()

(GL1 GLn) (DL1 DLm)
(DL1 DLm) (m)

P , N

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1 1 2 2 1 1

2 1 2 2 3 4 1

2 1 2 4

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1 2 i(i)

2 i-2 i(i)+1 , 4

1 2

2 1

3 4

2 4

1 1 2 2

2 2 1 1

1 4

,

P , N

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1 2 1 1

2 가 2 1 2 1

1 1 2 2

1 1 2 2

1 1 2 2

1 1 , 2 2

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1 , 2 3 ,

1 3 .

2 1 3 .

1 3 1 2 , 2 1 2

3 .

i 2 i+1 1 i-2

3 .

1 2 가 3 2 가 .

가 가 1

가 2

i(i) 1 i i+1 가

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i(i) 2 i i-2 가

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2 8 .

2 .

2 , (20) , (20) (DL1

DLm/2) (22) , (20) (GL1 GLn)

(24) .

) (20) (GL1 GLn) (DL1 DLm/2) 1 (10

2 (12) , 1 (10) 1 (14) 2 (12) , 1

2 (16) . 1 2 (10,12) 가 (Clc)

(14) 2 (16) (10,12) (Clc) () .

1 (10) 1 (14) (DL) , 2 (12)

2 (16) (DL) , 1 (10) 2 (1

2 (12) (DL) / . , 1 (10) 2 (1

2) (DL) (DL) 가 .

1 (10) 2 (12) 4 , 4 1

(10) 1 (14) (DL) , 1 (10) 1 (14) ,

(DL) (12) 2 (14) .

1 (10) 1 (14) 1 2 (TFT1,TFT2) .
 1 (DL) (TFT1) i(i) (GLi) , (GLi+1) ,
 2 (TFT2) i+1 2 (TFT2) (GLi+1)
 1 (10) 1 (14) (GLi) (GLi+1)
 가 1 (10) .
 2 (12) 2 (16) 3 4 (TFT3,TFT4) .
 3 (DL) (TFT3) i(i) (GLi) , (GLi-2) ,
 4 (TFT4) i-2 4 (TFT4) (GLi-2)
 3 (12) (TFT3) 2 (16) (GLi) (GLi-2)
 가 2 (16) .
 1 2 (14,16) 2 (TFT) 4 (TFT4)
 , .
 (24) 3 (GL
 1 GLn) 1 (SP1), 2 (SP2) 3 (SP3) 1 3 ,
 1 (SP1) 3 (SP3) 1 (SP1) 3 (SP3) (SP1) 1 3
 (SP3) , 1 (SP1) 3 (SP3)
 .
 (22) (R,G,B)
 (DL1 DLm/2) , 1 (DL1
 DLm/2) 가 (22) IC
 .
 (GL) 1 3 (SP1 SP3) , (24)
 1 (GLi) 2 (SP2) i+1 (GLi+1) i (SP1)
 (TA) , i (GLi) 2 (SP2) i-2
 (GLi-2) 3 (SP3) 2 (TB) .
 , (GLi) 1 (SP1) (GLi-1) 2 ((
 SP2) 1 (TA) , 2 (GLi) 3 (SP3)
 (GLi+2) 2 (SP2) 2 (TB) .
 (10,12) 가 , 1 (TA) 2 (TB) i
 (GLi) 2 (SP2) 1 3 (TFT1,TFT3) (SP2)가 (TA+TB)
 , 1 3 (TFT1,TFT3) 2 (SP2)가 (TA+TB)
 - .
 , 1 (TA) i+1 1 (SP1)가 , 1 (SP1)
 2 (TFT2)가 (TFT2) 2 (TFT2) , 2 (TFT1,TFT2)
 (DL) (DA)가 1 2 (GLi) (DA)
 2 (SP2)가 , i+1 (GLi+1) 1 (SP1)가 (DA)
 .
 1 (TA) 2 (TB) i-2 3 (SP3)가 , 3 (DL
 (SP3) 4 (TFT4) - 4 (TFT3,TFT4) 2 (12) .
) (DB)가 3 4 (GLi) 2 (SP2)가 , i-2
 , i (GLi-2) 3 (SP3)가 (DB) .

2 (10,12) (14,16)
 5 DLm/2) , (32) , (30) (30) , (GL1) (30) (DL1
 (34) .
 10) (30) 2 (12) , 1 (GL1) (10) (DL1) DLm/2) 1 (14) , 2 (12) 1 (14)
 2 (12) 2 (16) (16)가 (DL) .
 0) 2 (12) 2 (16) 1 (10) 1 (14) 5 , 2 (12) 2 (16) 1 (14)
 , 1 (10) 1 (14) 1 (16) 2 (12) 2 (16) 1 (14)
 6 (12) 2 (14) (16) 1 (10) 1 (14) 2 (12) 2 (16)
 (16) 1 (10) 1 (14) (16) 2 (12) 2 (16)
 (DL) (DL) 1 (10) 2 (12) (DL) 가
 1 (DL) (DL) 가
 1 (10) (TFT1) 1 (14) 1 2 (TFT1,TFT2) .
 1 (DL) (TFT1) 2 i(i) (GLi) , (GLi+1) (TFT2) ,
 1 (10) (TFT1) 1 (14) (GLi) (GLi+1) (TFT2) (GLi+1)
 가 1 (10) 1 (14) (GLi) (GLi+1)
 2 (12) (TFT3) 2 (16) 3 4 (TFT3,TFT4) .
 3 (DL) (TFT3) 4 i(i) (GLi) , (GLi-2) (TFT4) (GLi-2)
 2 (12) (TFT3) 2 (16) 2 (16) (GLi) (GLi-2)
 가 2 (16) 2 (16) (GLi) (GLi-2)
 1 2 (14,16) 2 (TFT) 4 (TFT4)
 (34) 1 (SP1), 2 (SP2) 3 (SP3) (GL)
 1 (SP1) 3 (SP3) (SP1) 3 (SP3) 1 3
 (SP3) , 1 (SP1) 3 (SP3)
 (32) (DL1) DLm/2) , 1 (R,G,B) (DL1)
 DLm/2) 가 (32) IC
 (GL) 1 3 (SP1) (SP3) (24)
 1 (GLi) (TA) 2 (SP2) i+1 (GLi) (GLi+1) 1 (SP1)
 , i (GLi) 2 (SP2) i-2

(GLi-2) 3 (SP3) 2 (TB) .

SP2) 1 (GLi) 1 (SP1) (GLi-1) 2 ((

(GLi+2) 2 (SP2) 2 (TB) .

(10,12) 가 1 (TA) 2 (TB) i

(GLi) 2 (SP2) 1 3 (TFT1,TFT3) (SP2)가 (TA+TB)

1 3

2 1 (TA) i+1 1 (SP1)가 1 (SP1)

(TFT2)가 (TFT2) 2 (TFT1,TFT2)

1 (10) (DL) 가 1 2 (GLi) 2

(SP2)가 , i+1 (GLi+1) 1 (SP1)가

1 (TA) 2 (TB) i-2 3 (SP3)가 3 (DL

(SP3) 4 가 3 4 (TFT3,TFT4) (TFT4)가 (12) , i

(GLi-2) 3 (SP3)가 (GLi) 2 (SP2)가 , i-2

1 (10) 2 (12) 1 (10) 2 (12)

1 1 (10) 2 (12) 2 (12) 가

1 (10) 2 (12)

(TFT) 7

7 (106) (106) (TFT) (101) (

(110) (118) (120) (108) (110) (110)

(120) (TFT) .)

(106) (108) (110) (114,116)

(110) (114,116) (114) (114) (108) (114)

(116) N P (114)

6) (106) (108) (110) (114,11

(106) (114,116) (102) (110) (108) (110)

(112)

4,116) (TFT) (108) (110) (114,116) (11

8 (TFT)

8 (134) (134) (TFT) (130) (

(138) (142) (144) (136) (138) (138)

(144) (TFT) .)

(134) (136) (138) (140,146)

(140,146) (140) (140) (136) (140)

(138) (146) (140)
, N P
6) (134) (136) (138) (140,14
(134) (140,146) (132) (136) (138)
(148) (136) (138)
(138) (140,146) (TFT) (136)

1 2 가 /
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1 2
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- (57)
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- 5.

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i(i) 2 i 2 i-2 가 .

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2 2 .

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가 가 1
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가 , 가 1 가 2 1
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11.
10 ,
i(i) , i+1
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12.
10 ,
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가 가 3
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가 , 가 2 가 4 3
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13.
12 ,

i(i) , i-2

12 14.
1 4

14 15.
N P

14 16.
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14 17.
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18.

1 1 2
2 3 4
1 2 4

19.

18 ,

1 2 $i(i)$

20.

19 ,

2 $i(i)+1$, 4
i-2

21.

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1 , 2 1 2

22.

20 ,

3 , 4 2 4

23.

18 ,

1 1 , 2 2

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18 ,

2 2 , 1 1

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N P

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1 3 .

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36 ,

2 1 3 3 1 2 , 2 1 .

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i 3 2 i+1 1 i-2 .

39.

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1 2 가 3 2 가 .

40.

가 1 ,
가 2 .

41.

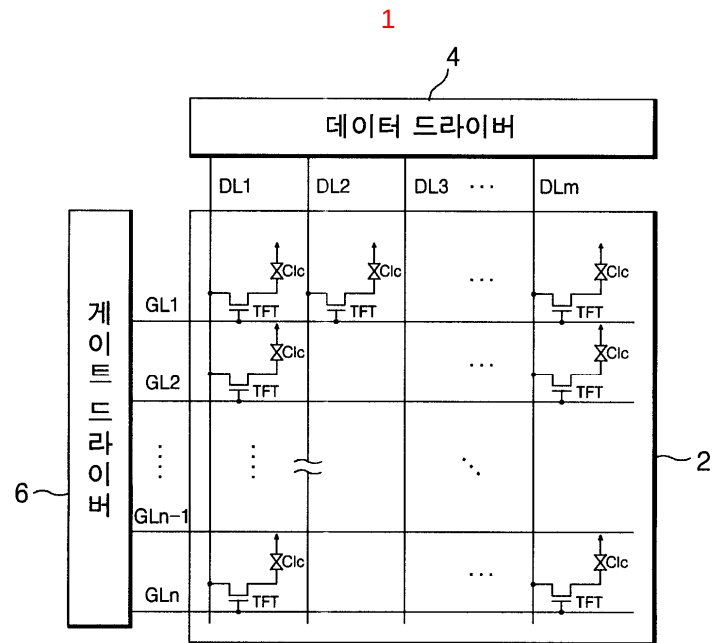
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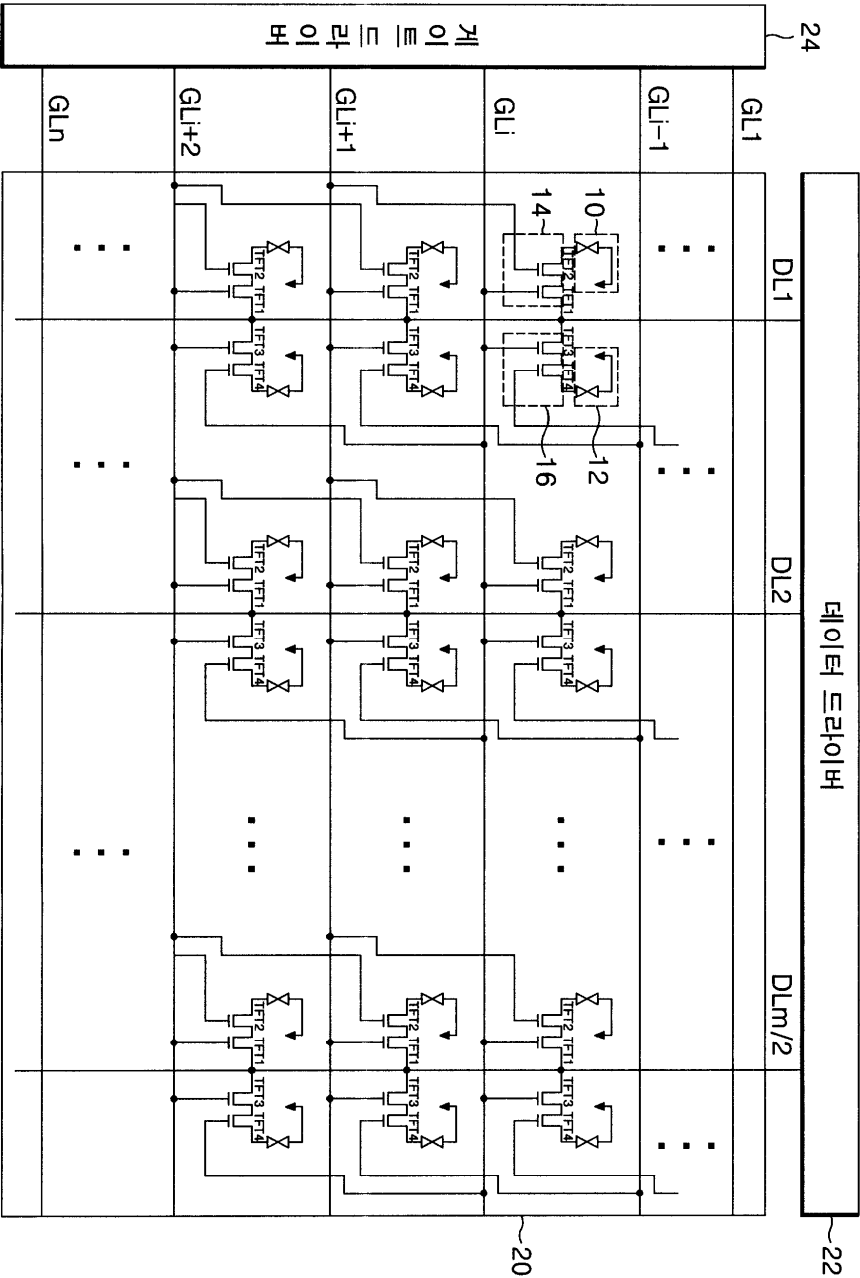
i(i) 1 i i+1 가 .

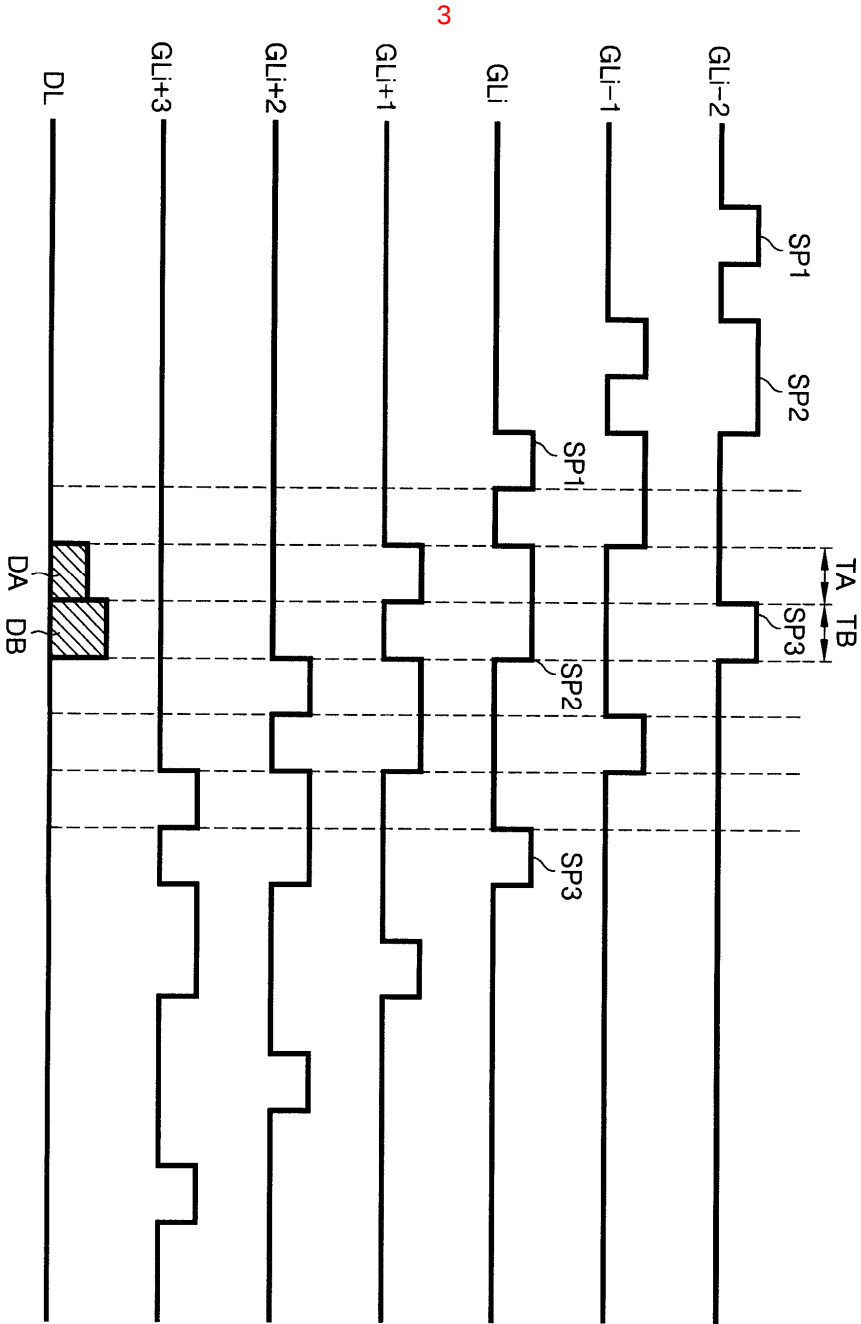
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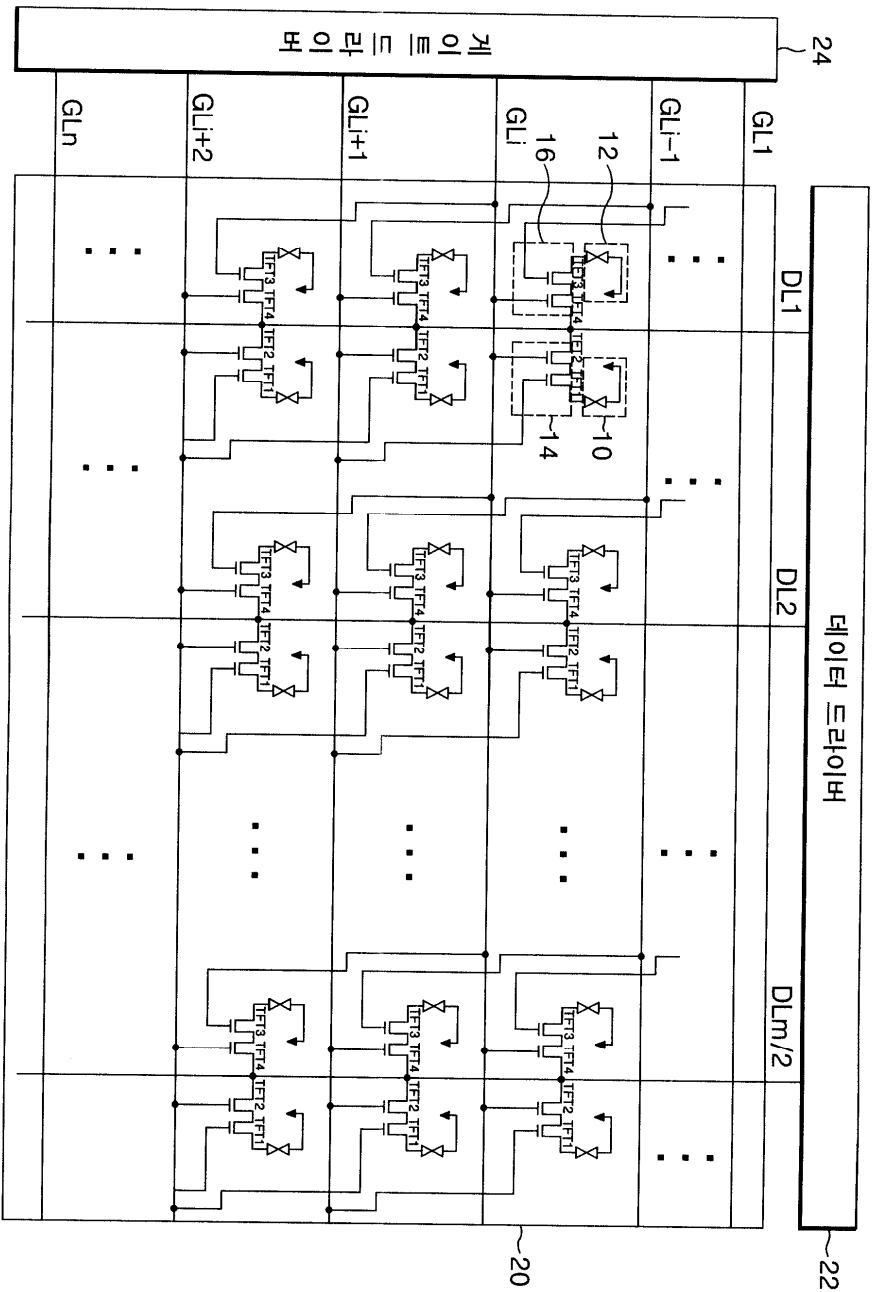
i(i) 2 i i-2 가 .

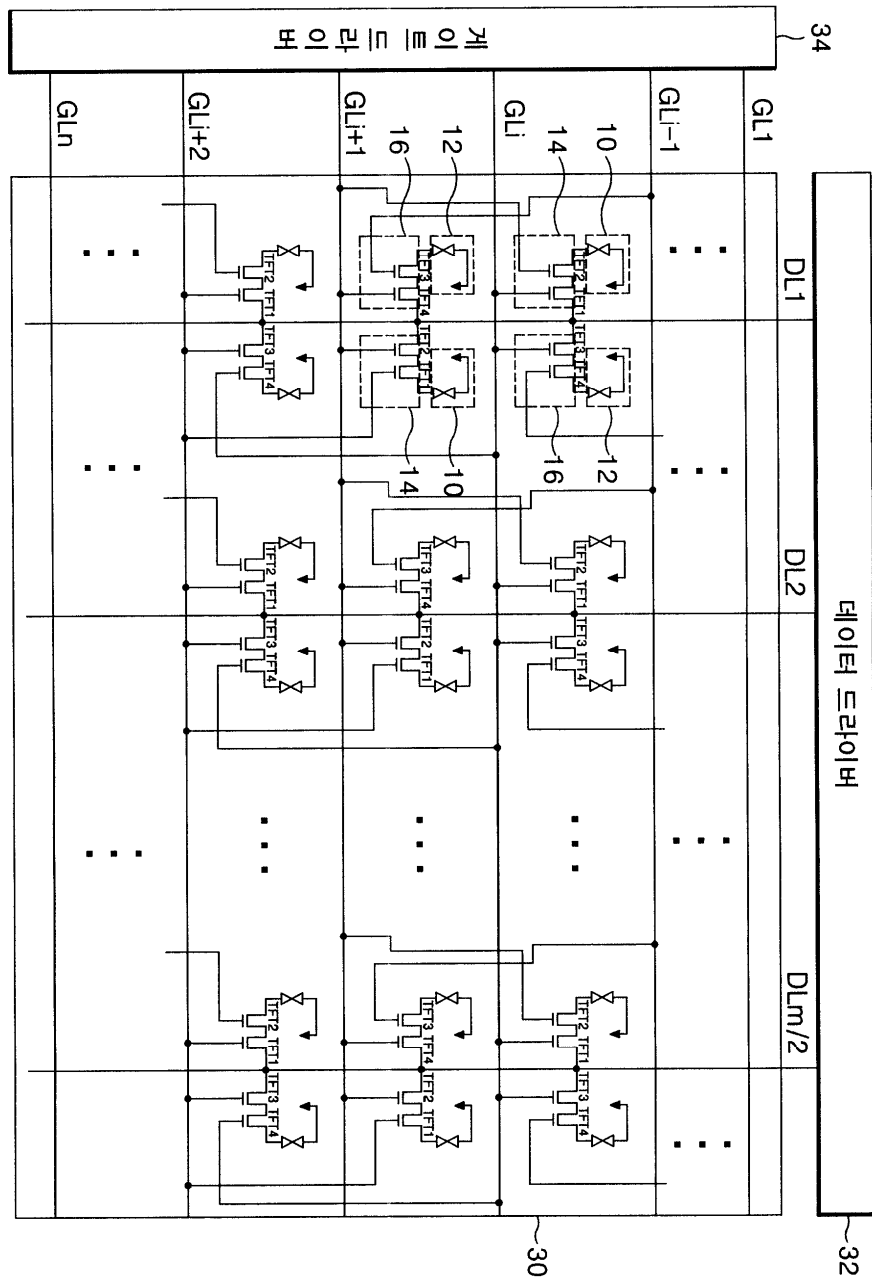




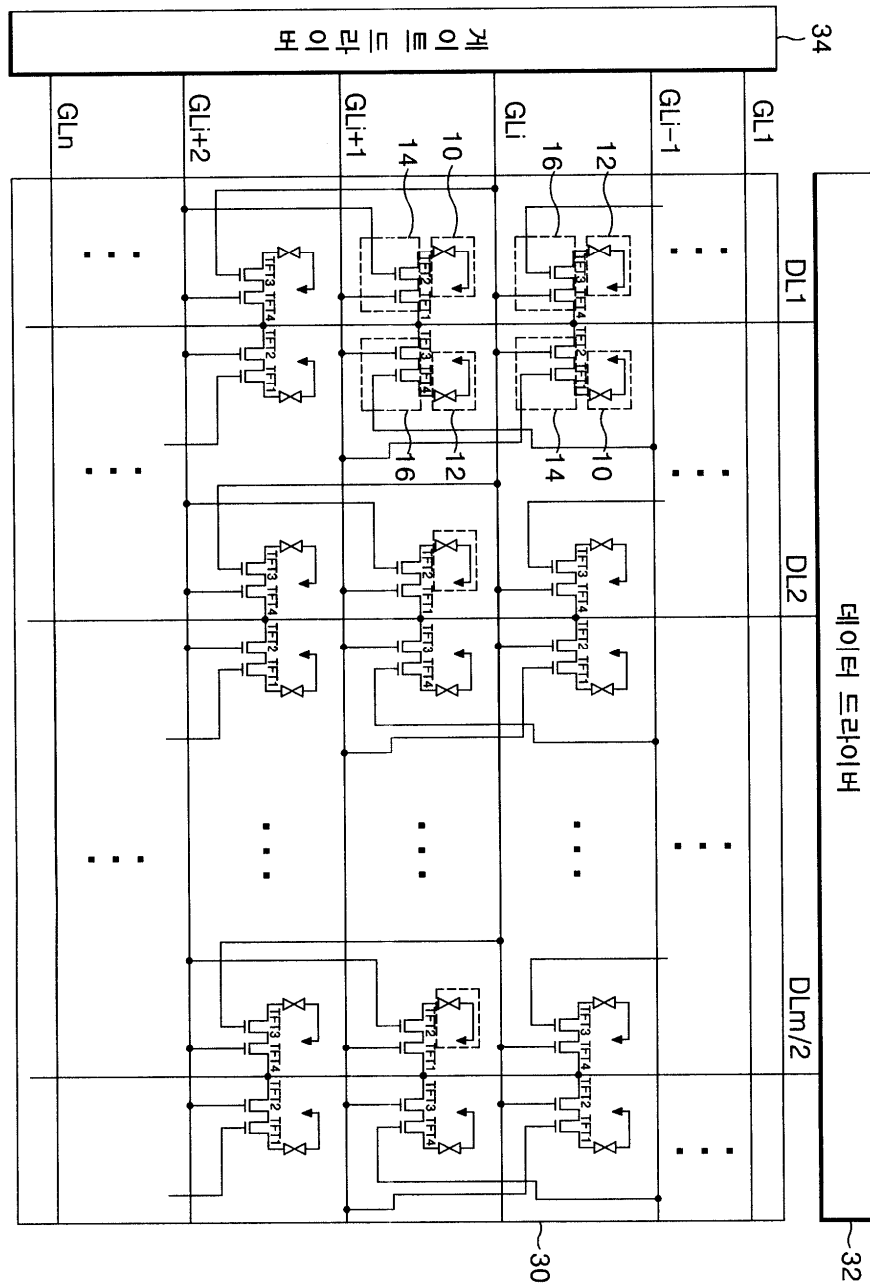


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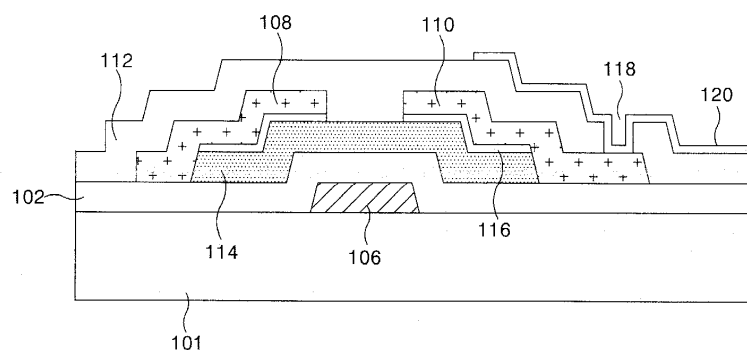


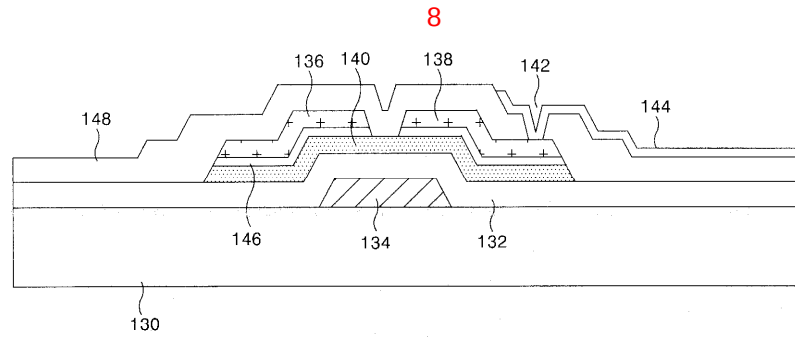


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专利名称(译)	用于驱动液晶显示器的装置和方法		
公开(公告)号	KR1020040055336A	公开(公告)日	2004-06-26
申请号	KR1020020081980	申请日	2002-12-20
[标]申请(专利权)人(译)	乐金显示有限公司		
申请(专利权)人(译)	LG显示器有限公司		
当前申请(专利权)人(译)	LG显示器有限公司		
[标]发明人	PARK KWANGSOON 박광순		
发明人	박광순		
IPC分类号	G09G3/36 G02F1/133		
CPC分类号	G09G2300/0439 G09G2300/0809 G09G3/3659 G09G2320/0233		
其他公开文献	KR100942836B1		
外部链接	Espacenet		

摘要(译)

本发明涉及减少数据线数量的液晶显示器和相应的数据驱动IC。本发明的液晶显示器包括数据线，数据线和第i栅极线和第一开关单元，用 $i + 1$ 控制栅极线和第i栅极线，第二开关单元用 $i - 2$ 在第二液晶单元处形成栅极线，在第一液晶单元和第二液晶单元处形成有沿交叉方向展开的栅极线，并且第一液晶单元连接到一条数据线它沿着 i (i 是自然数大于3)的数字水平线排列。

