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(43)

2003-0076270
2003 09 26

(21) 10-2003-0012511
(22) 2003 02 28

(30) JP-P-2002-00073495 2002 03 18 (JP)

(71) 가 가
가 4 6
가 가
3681

(72) 2601-9

4835-55

1301-1-101

가 850

(74)

:

(54)

, 가 , ,
, , ,
, 가 2 , 1 2¹
, 가 , .

11 : 12 :

13 : 60 : 1

63, 71 : 66, 74, 76 :

70 : 72 :

73 :

(TFT)

, TFT(I hin E ilm I ransistor)

2 , 2 가

가 . TFT ,

TFT , 가 가 .

가 / 가 . TFT , 가 2 2

가 . TFT , TFT(TFT)가

TFT () 가

TFT () 가

TFT 가 , 가 , 가 . ,

가 , 가 .

1 , 18 .
 , (R), (G), (B) 2 1 , 36 가 8
 , 48 가 1 1 (5) 3 .
 (3) (5) , (5)
 . 2 (6)가 (6)
 2 (6) (2) , 가 (X) . 2 (6)
 (1) (1) , 1 (60) (60) (1) 1 (8) (60)
 (8) Y , (10) . (8)
 X
 1 (60) (8) 가 . 2 (6)
 (3) 1 (60) 1 (8) (60) (63)
 6) (1) , 2 (63) (8) (70) (6)
 (70) (1) , (66) , (6)
 , 2 (6), 1 (60) . ,
 () 가 (10) (8)
 (2) (Y) , (, 7)가 (7)
 (10) (1) (9) (9) X (10)
 (9) Y X (7)
 (3) (9) (10) , 1 가 가
 (1) (2) , (11) (11) . 1
 (11) 2 (8) , 2 (10) (12)
) (9) (7) 가 .
 (10)가 (8) (12) (8) (10)가
 , () . , 1 (13,)
 (12) (13) 가 .
 (12) (13) 가 .
 1) (가) (12) ()
 . 2 (6) 가 , 2 (6) 가
 , (1) 가 , (5) 가
 가 .
 가
 (4) (13) , (12) , 가 .
 . 2 (6)

(31) 4 (24) (24) (23)
 , 6 , 8 가 가
 4 (31) 1 (23) (31) (24) , 1
 (23) (31) 1 . 1
 (1H) , (23) 1 (31)
 가 (31) (24) (25)
 (31) 가 1 (25)

4 (31-1, 31-2, 31-3) 1 (25)
 (25) (19) (31)
 (27) (25-1) (19-1) , 1
 (1H) (31-1) (27)
 (25-1) (19-1) , 1 (1H)
 (31-1) (27) (31-2, 31-3)

5 (TS) (BL1 ~ BL3) 5 1 (CL1) 1
 (1H) (TS) 1 (1H) , 4 (BL1, BL2,
 (26) (26) (TS) (BL1, BL2,
 BL3) (19) , 5 1 (1H) 3 (BL1, BL2,
 19-2) , (BL1)가 (19-1) , (BL2)가 ((BL3)가 (19-3) (16) 3
 (TS) (TS1 ~ TS3)

4 (19) (32) (32-1) (1
 9-1) 가 (31-1) (31-2) (32-2) (32-3)
 (19-2) (31-2) (31-3)
 (19-3)

(TS) 1 (1H) 가 , (24)
 , 가 (23) 가 (23) (24) (24)
 가

6 가 4 (24) (25) , (33)
 (23) 4 가 (32) (19) , (23)
 (32) (25) 4 가 (24)

3 × 4 12 , (60) (1) 1 (60)
 , 7 1 (62) (62) (10,
) (62) (63) , /
 가 (62)가 , 2 (6) (8)

(1H) 가 (R), (B) 2 (6) 1 (R)
 , (R), (G), (B) (62) (R)
 , (R) (8, R) 2 (6)
 (G) , (G) (8, G) 2 (6)
 (B) , (B) (8, B) 2 (6)

1 (60) (1) , 2 (6)

2 (6) , 2 (6) (1)
 , (3) (1) (3) 가 . 가

8 2 (6) TCP(Tape Carrier Package) . 66
 (66) 2 (6) (66) (20),
 (30)가 () (30) 가 (30)
 , 2 가 (6) (66) (66) (30) 1 (60)가 (60)
 (67) (30) (66) 가 1 가

20 (20) 2 (6)
 , (20) (30) (68) . 16
 (6) (26) TCP (20) 2 (6)
 (68) 가 , 2 (67) (6) (1) 2 (6)

(20) (66) (65) 2 (6)
 (30) (65) (64) 2 (6)
 8 (20) (66) (30) (64) 8

, 9 2 (6) (64) 9 (6)
 2 (6) (66) 가가 (64) 2 2

, 9 (64) (30) (30) (6
 4) (65) (65) , (30)

9 , 70 (66) . 71 (70)
 (70) 가 , (70)
 (20) (70) 72

10 2 (6)가 (20)
 2 (6) (64) 2 (64) (6) (26)

(64)

10 (26) (24)가 (27) , (24)
 (27) (27) (24)

, (27) (27) (24) , (27) 10
 (27) 가 (27)가

11 (3 ~ 5 V) .
 (62)가 (23)가 (34) (35)
 (1) (62)가 (35)
 (62)

11 가 2 (6) (26) 가 가 , ,
 (6)

12 (26) (16) (26) (19)
 26) .69 (25) (32,) (64)
 (34) (34) (26)
 (34) (35) (1) (62)가
 (35) (62)

11 12 2 (6) (62) (35) ,
 (62) (10)가 , 2 (1)
 , 2 (6)가 가 2 (6)가 (1)
 , (62)가 2 , 2 가 2
 가 가 2
 가

13 (6)가 (62) 2 가 (6) 13 (1) 2
 (6) (66) (64) (65)
 (66) (62)가 (6)가 ,
 (64) (66) (1) (65) TFT
 (1) , TFT

14 (7) (1) 2 (6) 2 (6) (20, (6)
 (66) (70) (70) (4) (3)가 (73)
 (4) (73) (74) (3) (76) 가 (73) (7)
 (76) (74) (1)

15 2 (6) (1) 2 (6)
 () (20) (30) (1) (1)
 (70) (70) 2 (6) (7)
 . 1 (60) (70) (1)

16 (30-1) (30-2) . 16 2 , 29-2
 () .) 가 16

(29-1) , (29-2) .

16 (36-1) (29-1) (29-2)

1) (30-1) (30-1) (30-2) (36-1) (29-2) (29-1)

(36-2) (36-2) (25) (27) 가 .

(36-2) (25-1) (27-1) (27-2) 가 .

17 (36) (37) . 38 (37) .

(31) 1 ,

(36-1) , (38-1) (38-2)

(37-1) 가 , (29-1) (30-1) , (37-2)

(29-2) , (38-1) (37-4)가 , (37-3) 가

(38-1) , (38-2) , (29-1)가 (30-2)

(29-2)가 (30-1) , 17 (40) ,

(16) (TS1) (TS3) , (42)

(M) (MS) (38)

18 (36-2) (32) (39) . 38

(39) (31) 1 ,

(36-2) , (39) (38-1)

(38-1) 가 . (36-2) (24)

가

18 (36-1) (38-1) (38-2) , (37-1)

(37-4) . 5 (TS1 ~ TS3) ,

(BL1 ~ BL3) (36-1) (29) .

(29) 가 .

18 (26) , (TS1 ~ TS3) 19

(TS) (41) (40) . (40)

(TS) (M) (MS) (38) ,

(40) (37-1) (37-4) ()

MS) 가 .

19 16 18 , 1 (1H) , (30)

. M 2 (6)

. MS , (38) , TS , BL (M)

(TS1 ~ TS3) . 19 (36) (MS) (M) ,

(M) (MS) (M)

. OUTn OUTn + 1 , (30) , 17 18

(MS)가 , (38-1) (38-2) 가 .

(MS)가 , OUTn , OUTn + 1

(MS)가 , OUTn , OUTn + 1

3 (8) . DS1 ~ DS3 (30) 1 (62) (60) (62)

3 (30-1) 3 (8) , SL4 ~ SL6 , SL1 ~ SL

3 (8) (30-2)

1 (1H) , (SL1 ~ SL3) , 1 (1H) 3

(8) (8) (SL4 ~ SL6) (SL1 ~ SL3)
 3 (8) , 3

20 16 18 1 (1H) (30)
 (TS) (BL) 1 (MS) (1H) 3 (M) 가

(M) 1 (3) (40) (B)
 (M) (TS) (MS) (16)
 (TS1) (TS3) (TS) (3) (TS) 18 (41)
 (TS1) (TS3) 가 (26) (40)

17 (30-1) (19-1) (32-1)가
 (MS) (BL1)가 (36-2) (25-1)
 (27-1) (31-1) 가 (31-1) (28-1) 가 (27-1)
 (28-1) (29-1) (27-1)
 (36-1) (MS)가 (29-1) (30-1)
 (30-1) (30-2) (25-2)

(BL2)가 (32-2)가 가 (MS)
 (36-2) (25-1) (27-2)
 (31-2) 가 (27-2) (31-2)
 (36-1) (29-2) (30-1) (MS)

가 (BL3)가 (32-3)가 가 (31-3)
 (27-1) (29-1) (30-1)
 (30-1) (30-2) (OUTn + 1)

(8) (SL1 ~ SL3) (SL1) (SL2)
 (SL3) (SL2) (8) 1 (8)

21 (1H) (62)
 (DS1 ~ DS3) (1H) 7
 (63) (62) 가 (8)

(OUTn) OUTn 2 (6) (1H)
 (OUTn)가 (R), (G), (B) (DS1 ~ DS3)가 (R)
 (V1) (R)
 21 V1 (G) V2 (B) V3

(R) 7 1 (8, R) (8, G), (8, B)
 (8, G), (8, B) 가 (8)
 (8) (62)가

(R)가 (DS1)가 가 , 1 (8, R) (SL1)
 (V1) (R) (G)가 , (8, G) (DS2)
 (DS3)가 (SL2) (SL3) (G) V2가 . (8, B) (8, B)
 (V2) .
 (G)가 (DS2)가 가 , 2 (8, G) (SL2)
 (V2) (B) (G) V3가 (B)가 , (8, B) (DS3)가
 (SL3) .
 3 , 2 , 3 1 가 3
 , 3 , 1 가 .

- (1) , 가 가 가 .
- (2) 가 , 가 , 가 .

(57)

1.

,
 ,
 1 ,
 2 ,
 2 1 1 , 1 n

2.

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 ,
 1 ,
 2 ,
 1 n 가 , 2 2 1 가 n
 n 가 , 2 /

3.

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 1 2 ,

1

2

2

4.

2

1

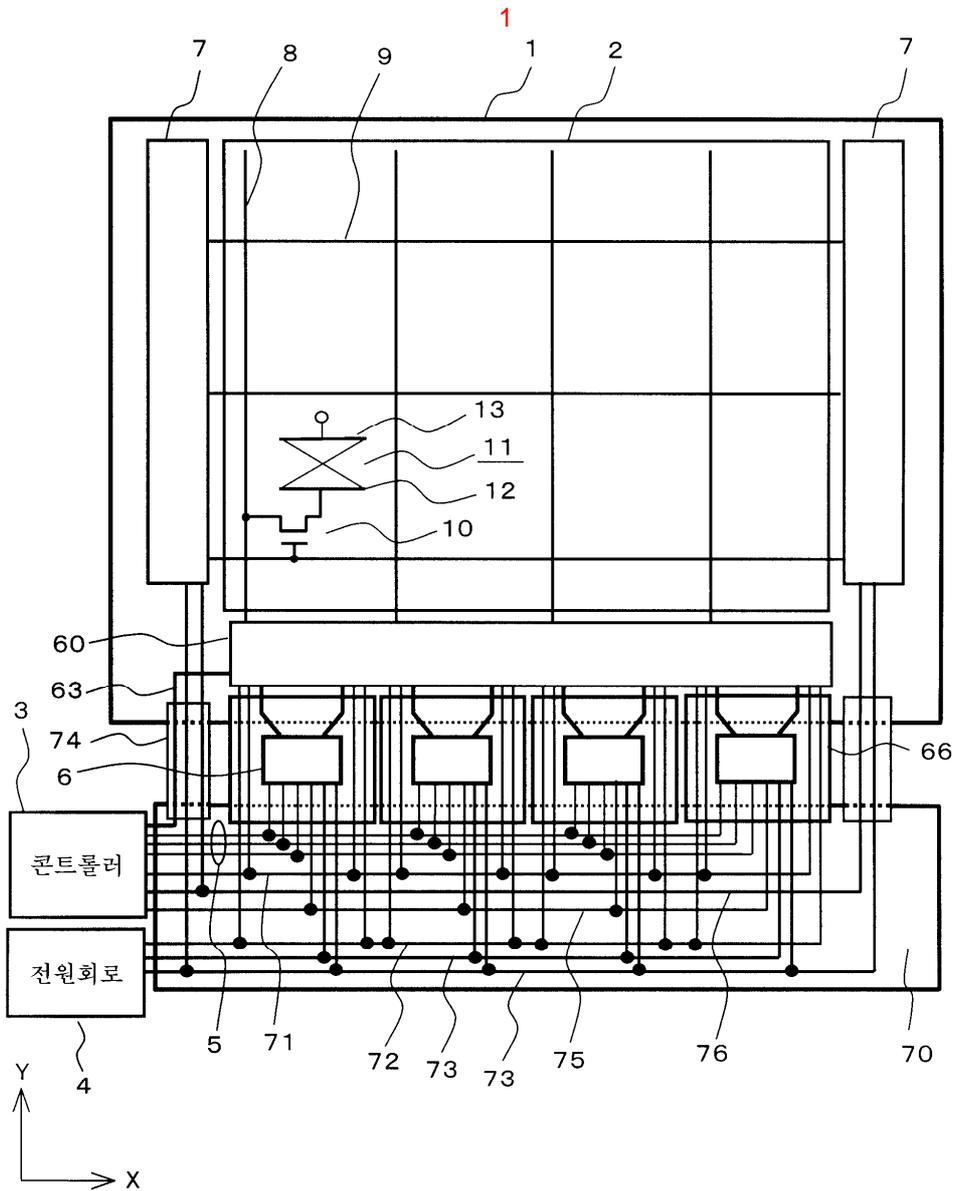
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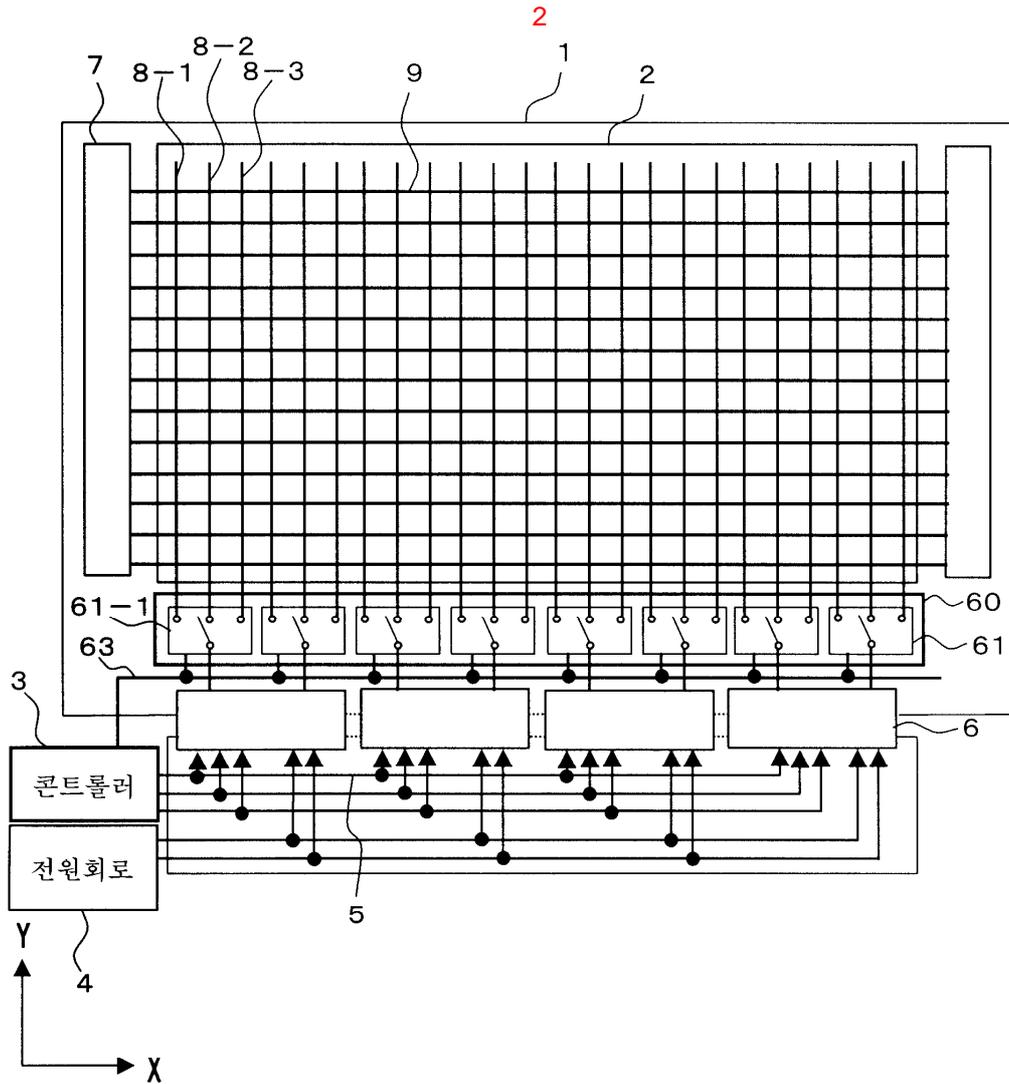
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가

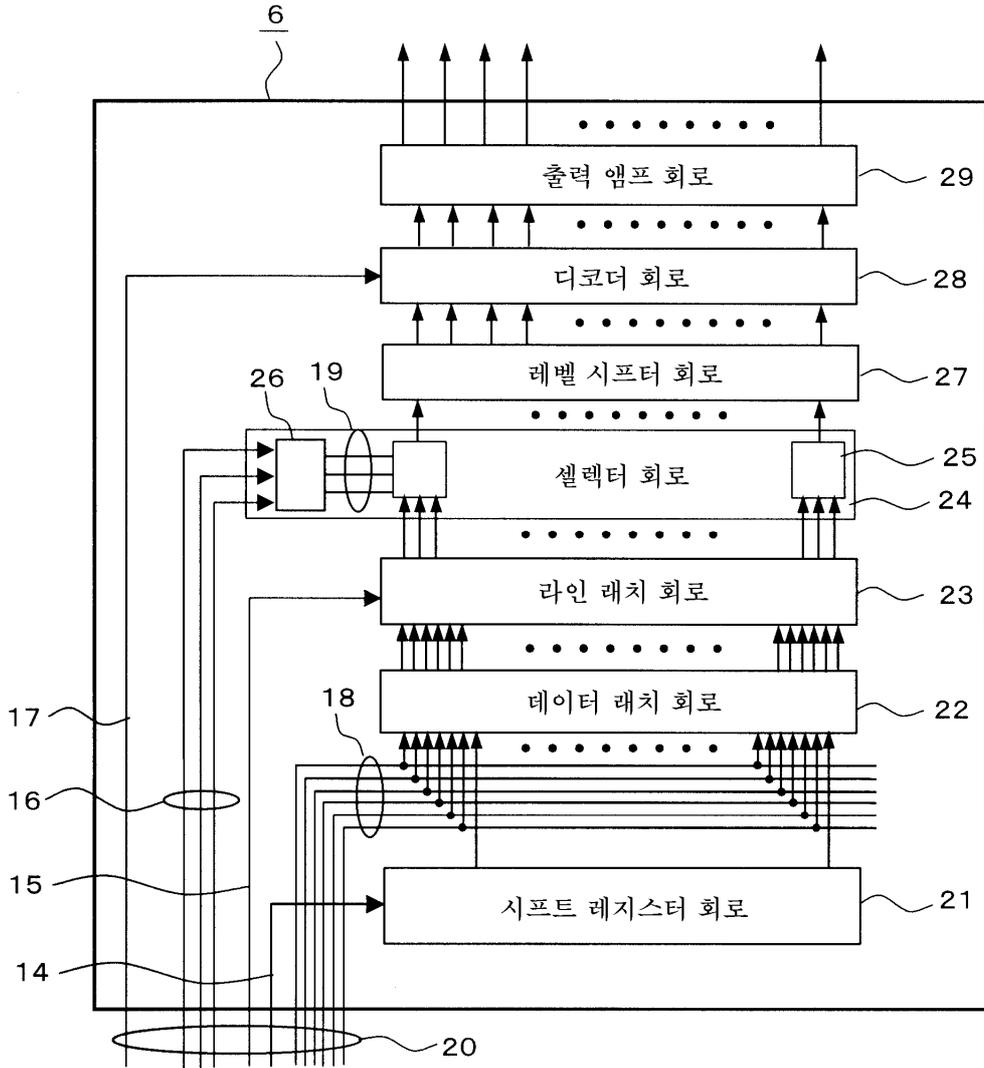
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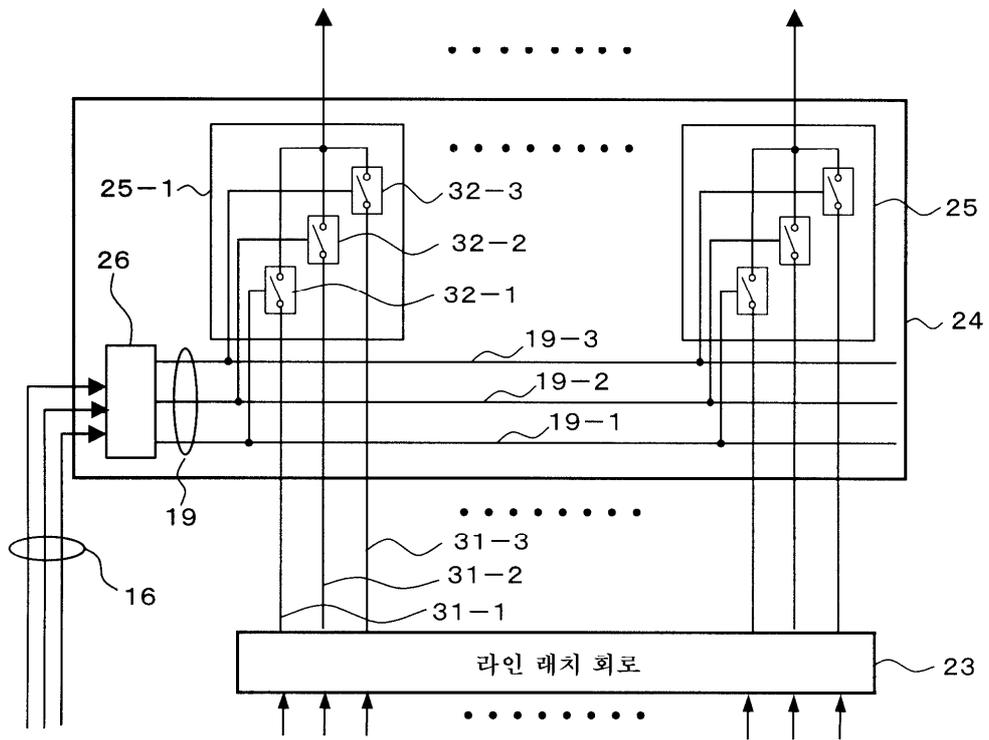




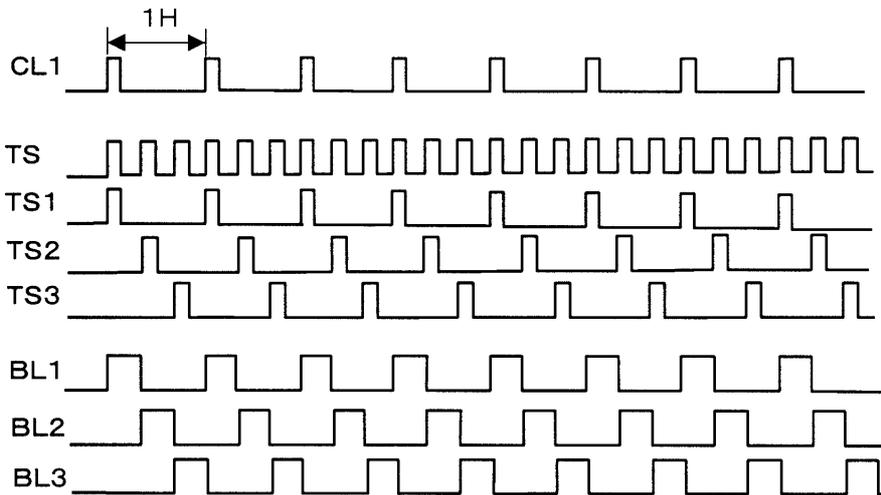
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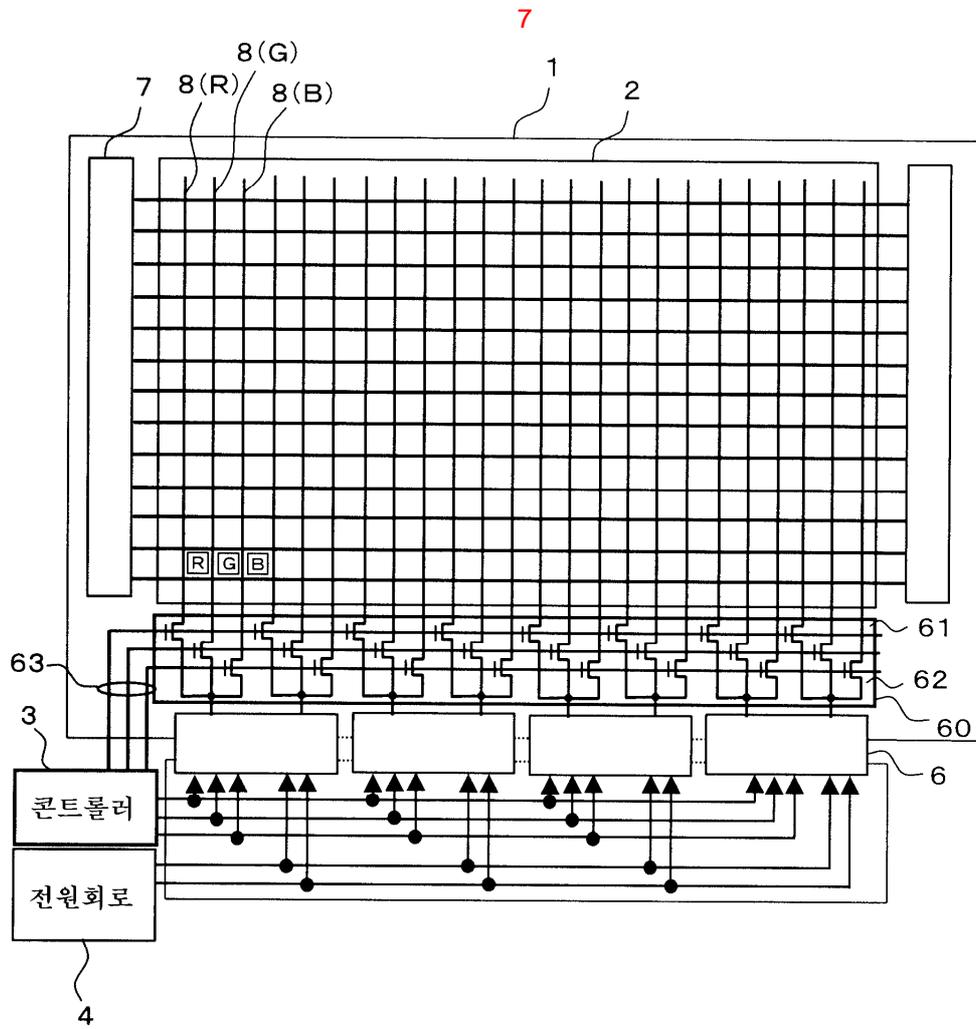
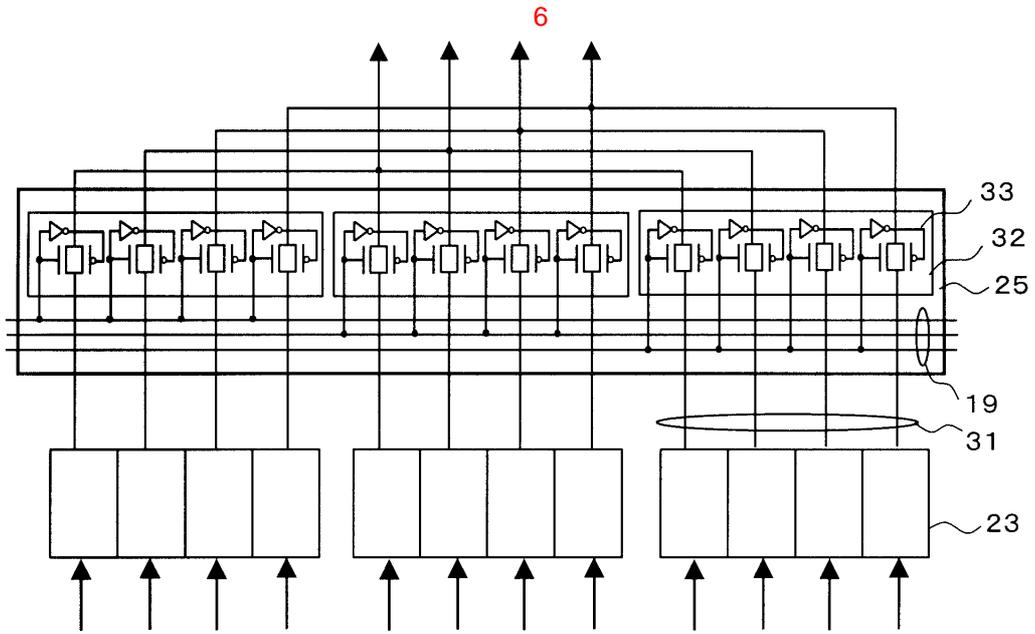


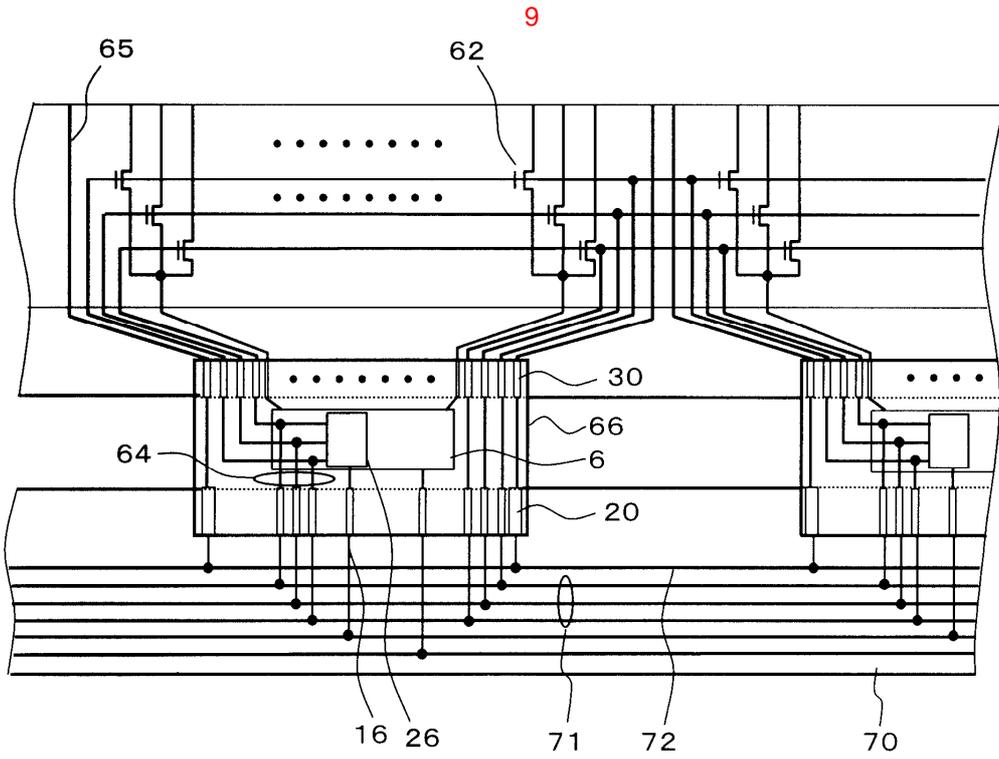
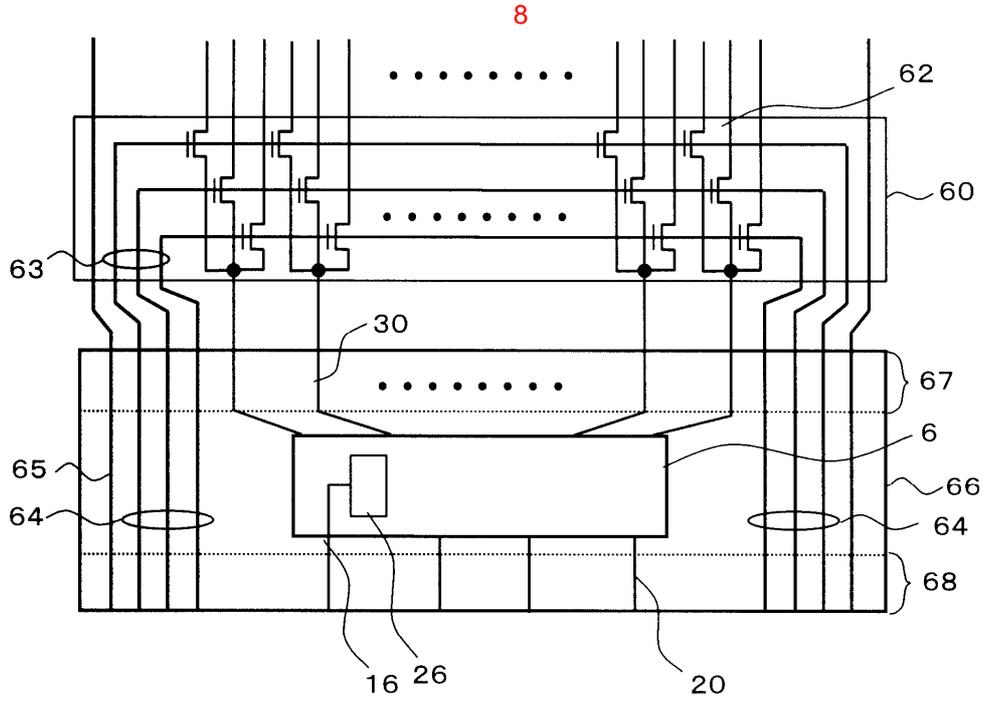
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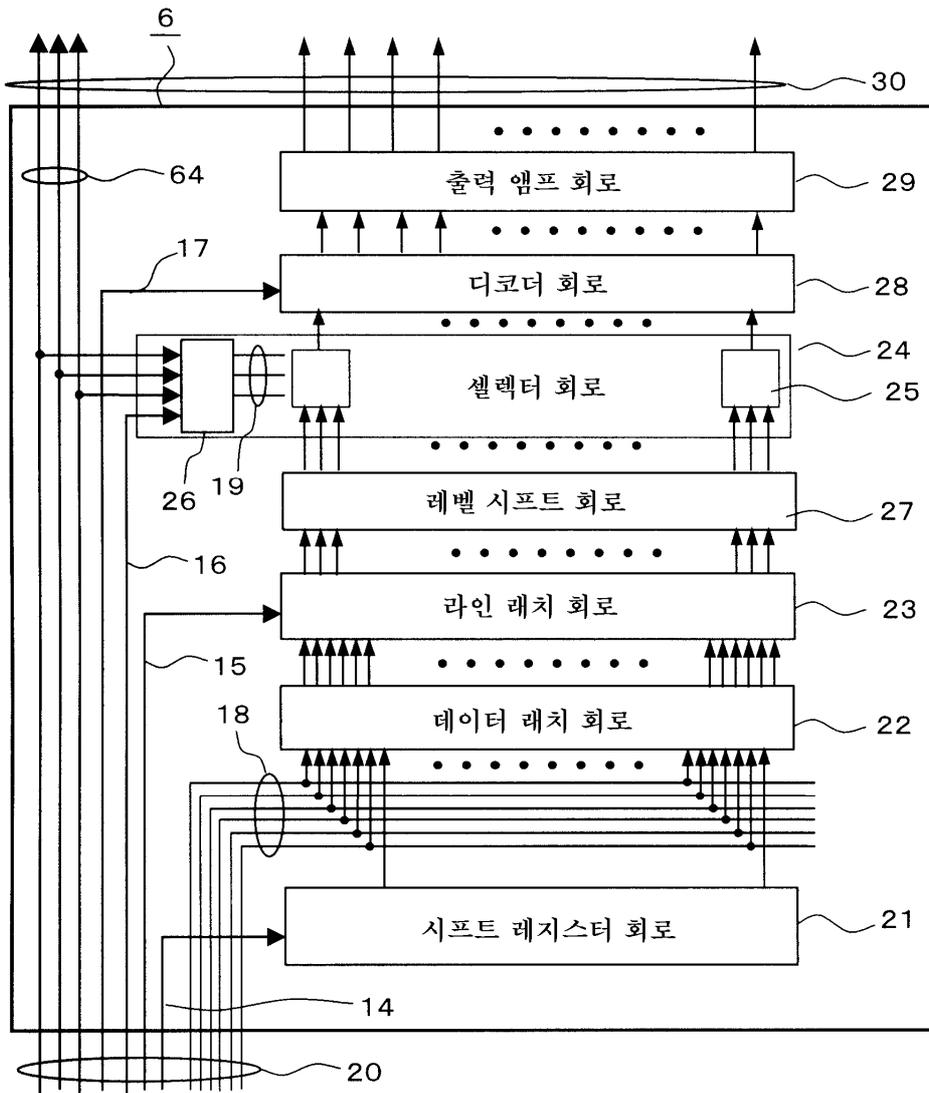
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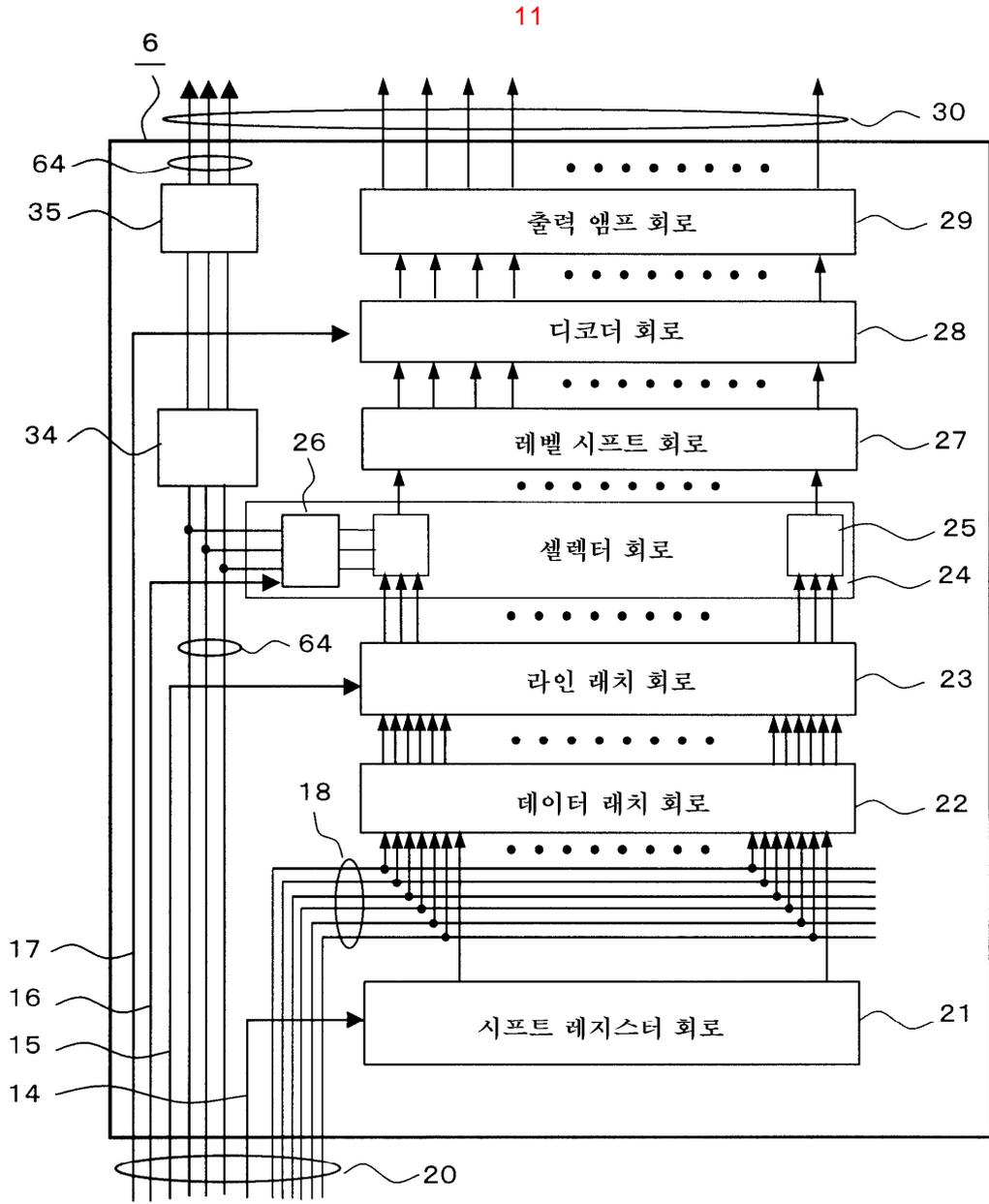




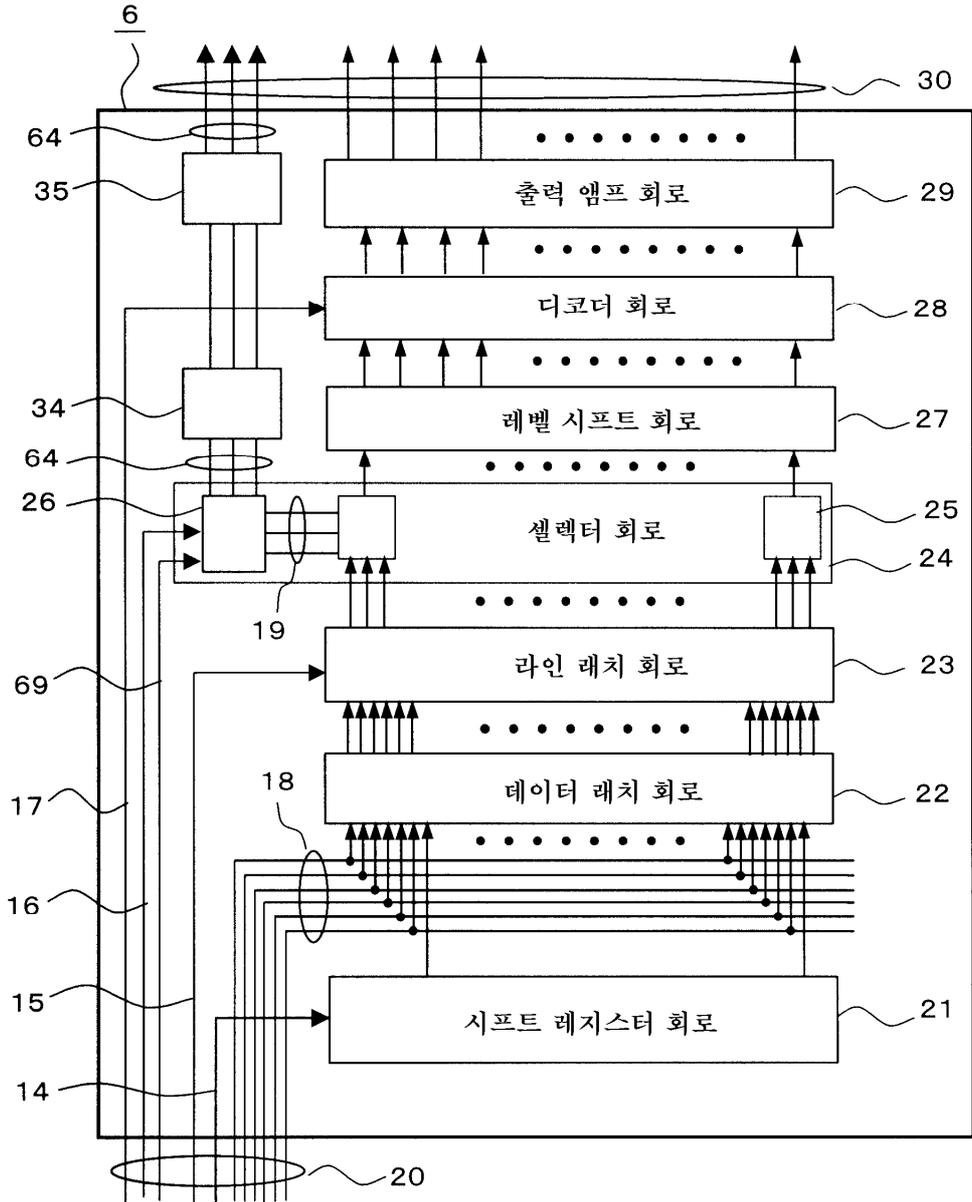


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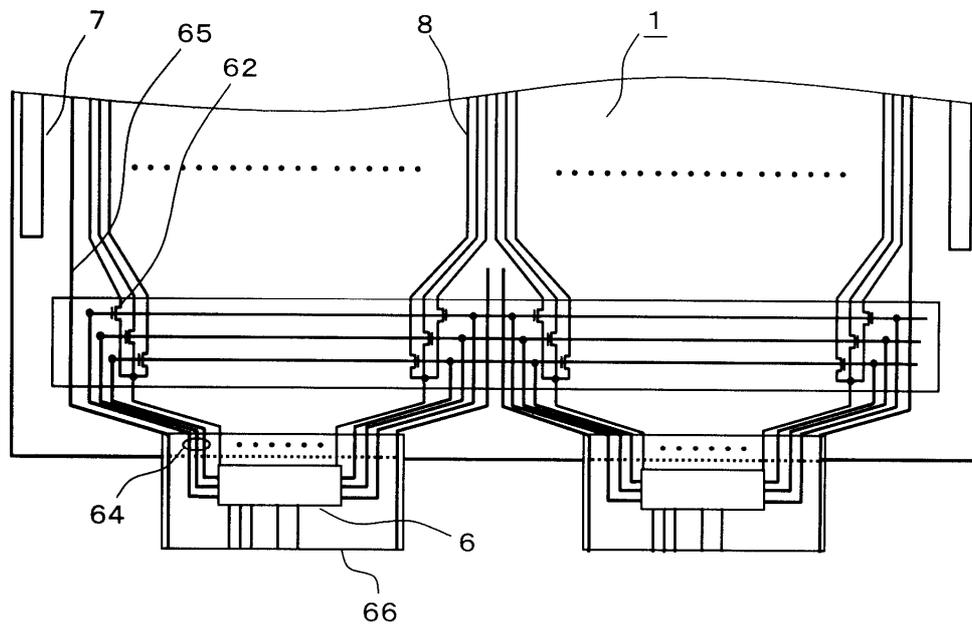


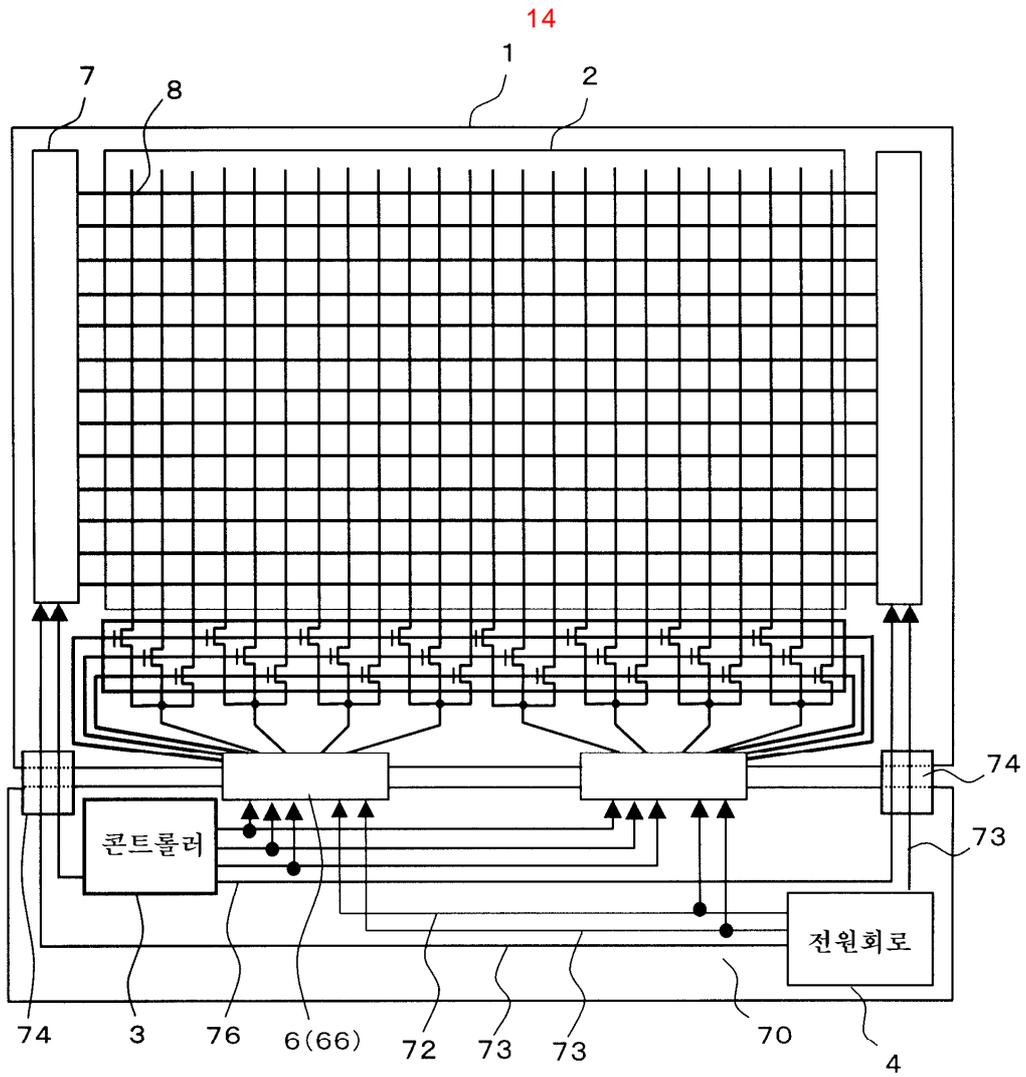


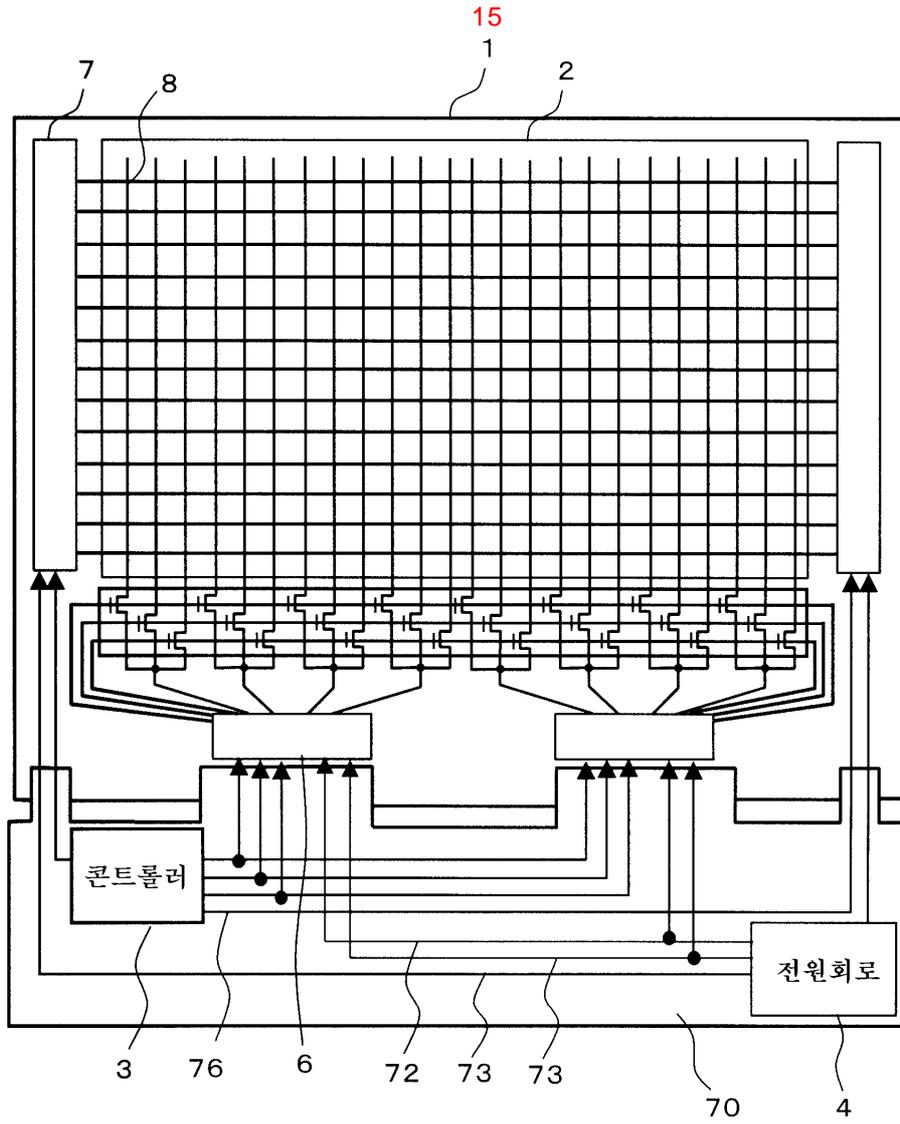
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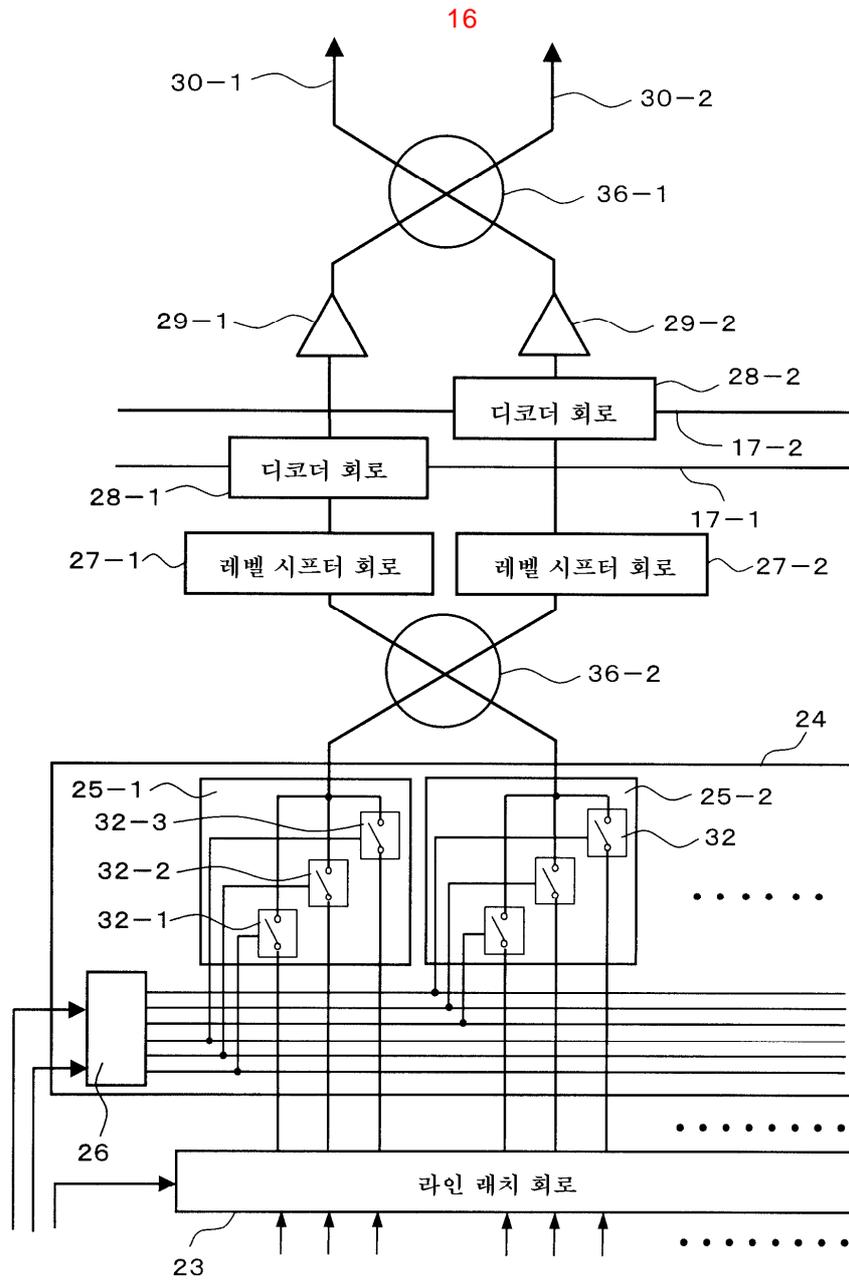


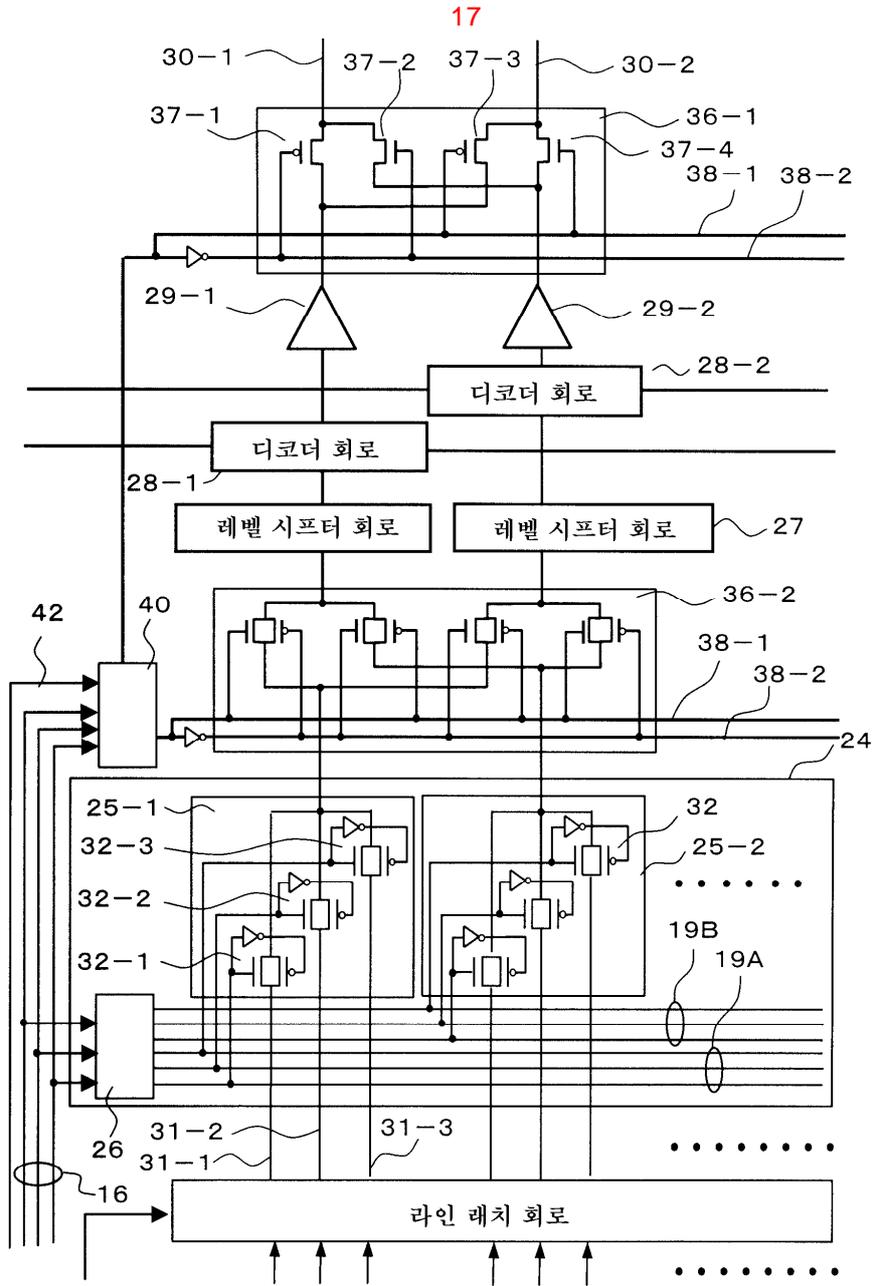
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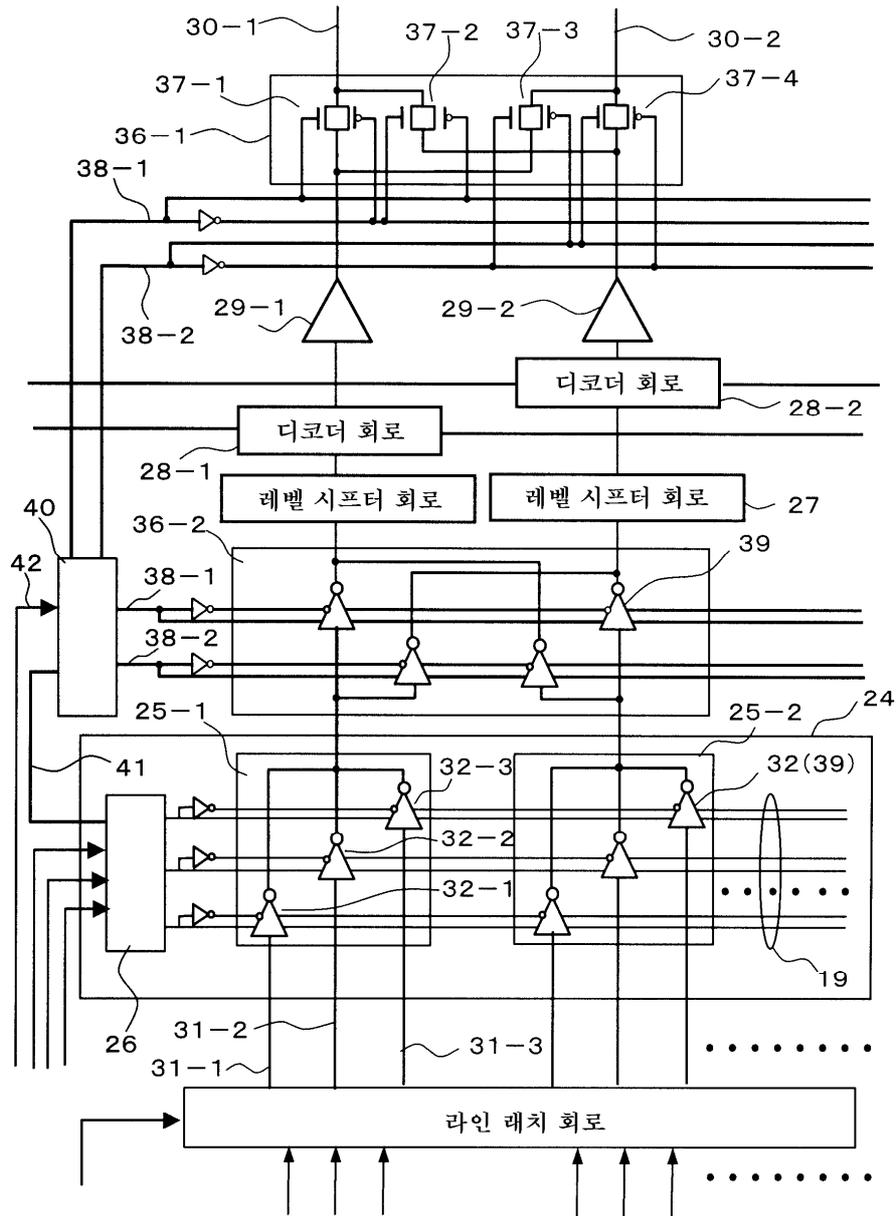




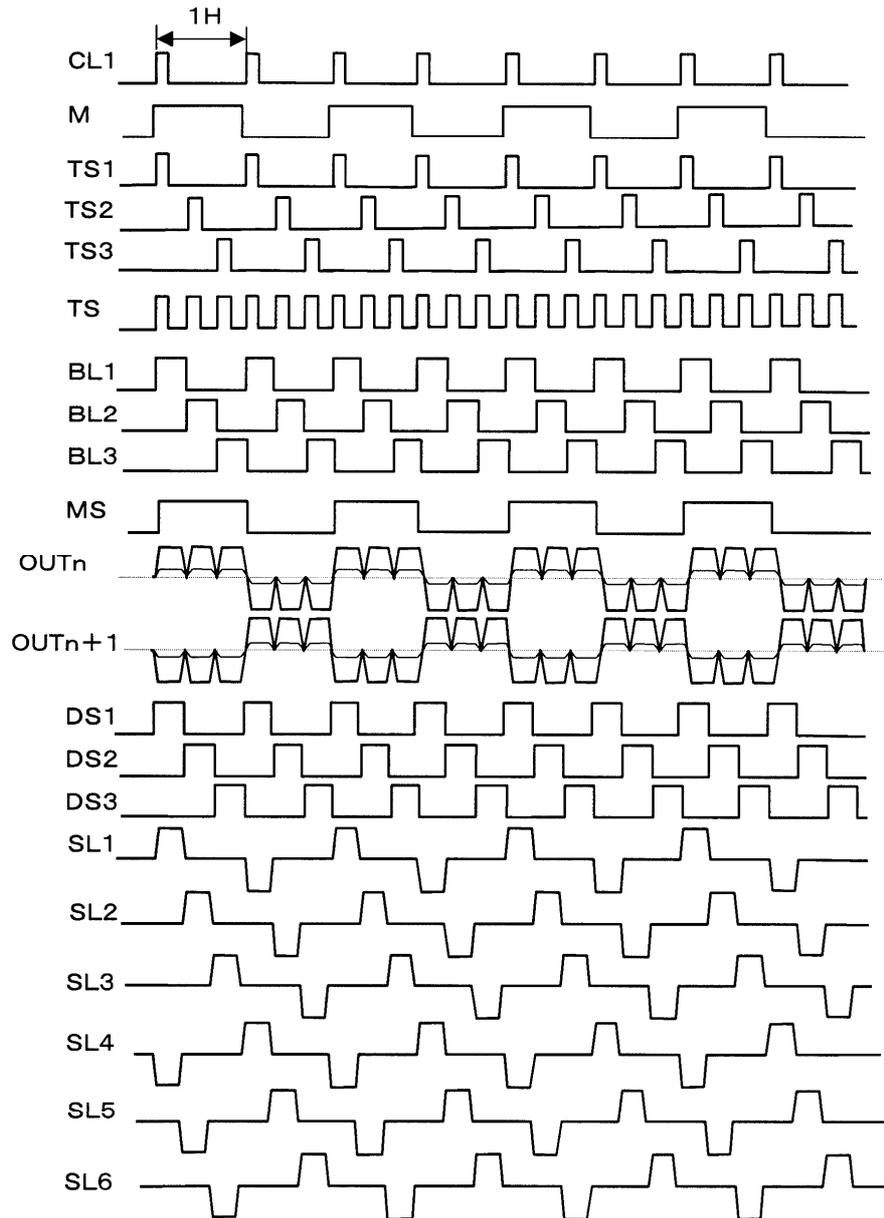




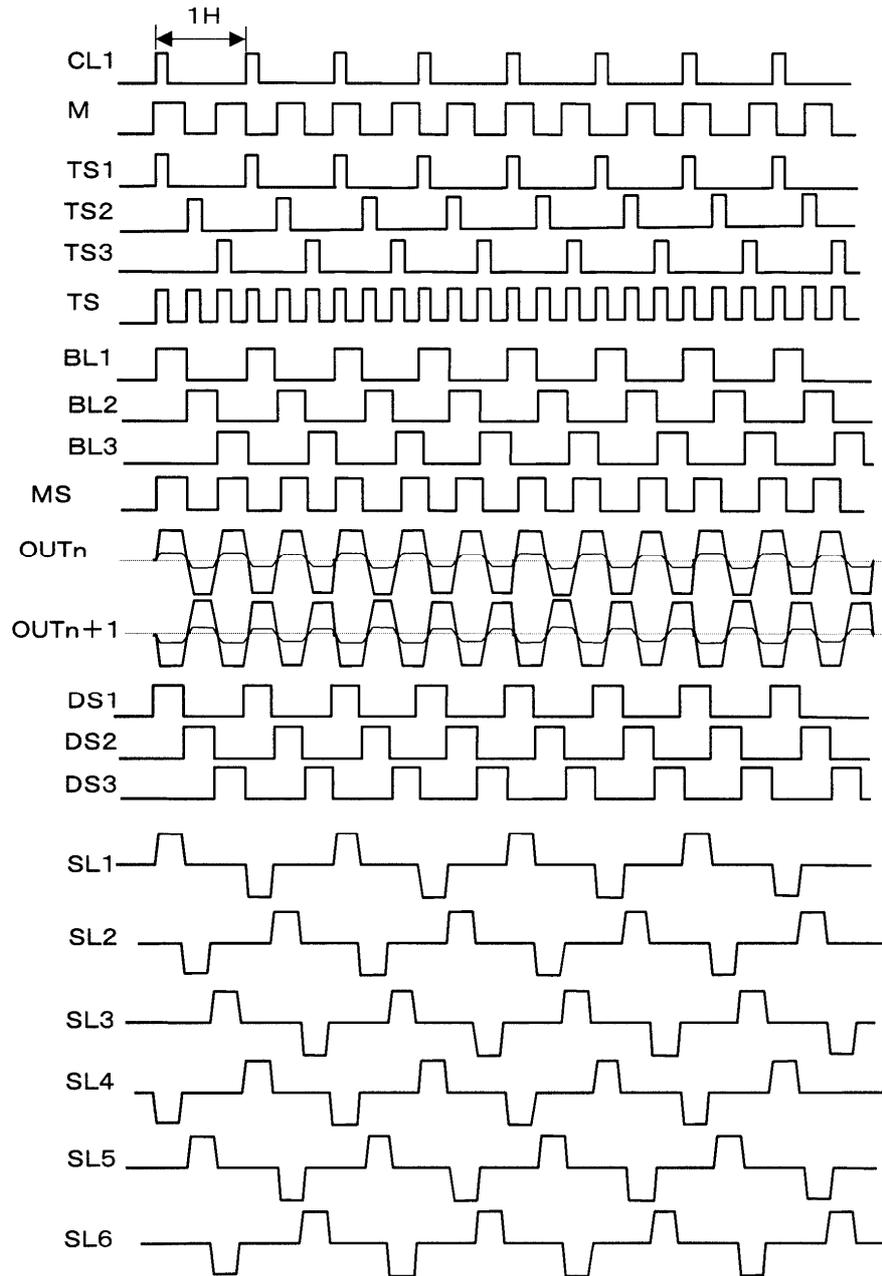
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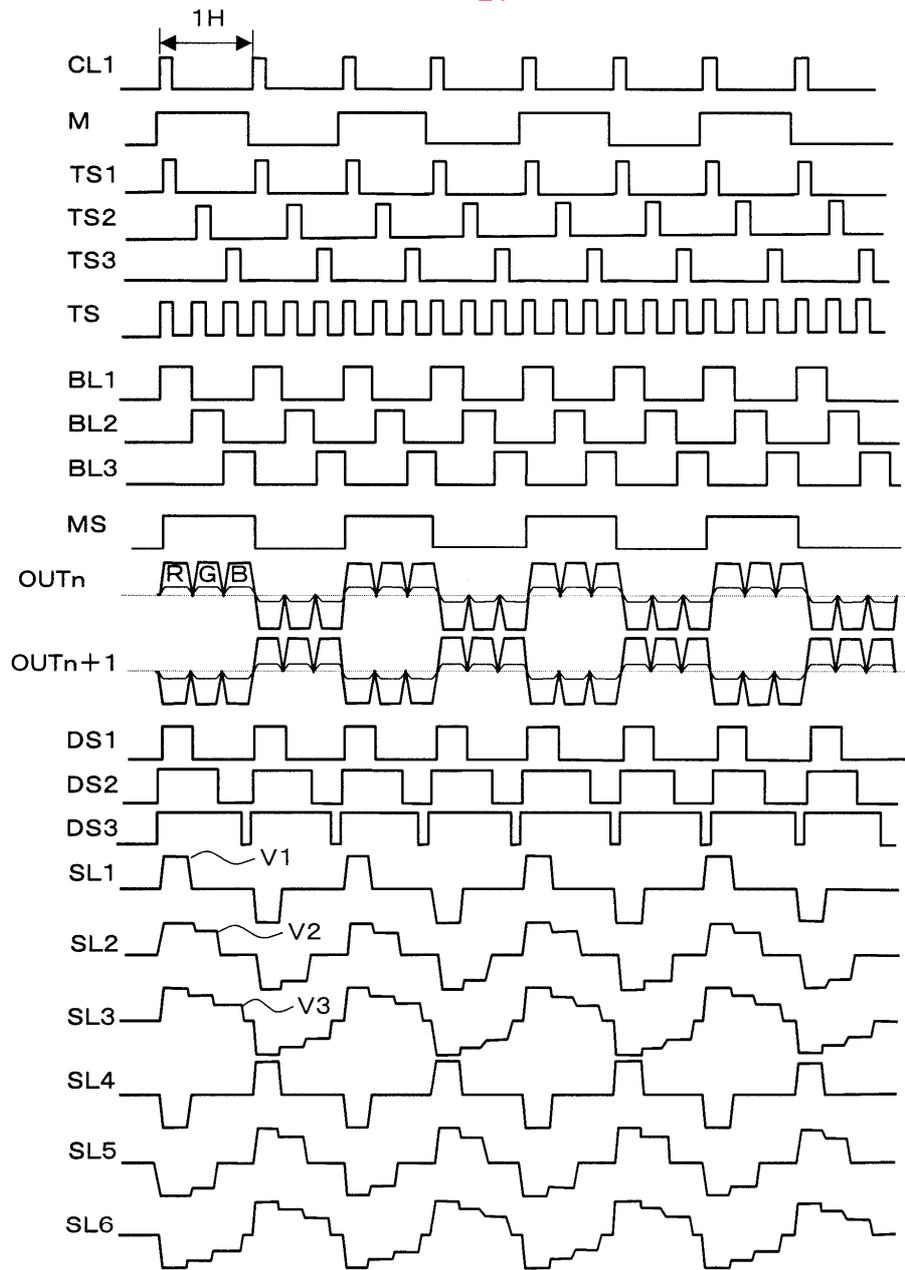
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20



21



专利名称(译)	液晶显示器		
公开(公告)号	KR1020030076270A	公开(公告)日	2003-09-26
申请号	KR1020030012511	申请日	2003-02-28
[标]申请(专利权)人(译)	日立HITACHI SEISAKUSHODBA 株式会社日本显示器		
申请(专利权)人(译)	株式会社日立制作所 株式会社日本排气量		
当前申请(专利权)人(译)	株式会社日立制作所 株式会社日本排气量		
[标]发明人	WATANABE HIROSHI 와타나베히로시 YASUKAWA SHINJI 야스카와신지 KIDA HIDETOSHI 키다히데토시 OOISHI YOSHIHISA 오오이시요시히사		
发明人	와타나베히로시 야스카와신지 키다히데토시 오오이시요시히사		
IPC分类号	G09G3/36 G02F1/1345 G09G3/20 G02F1/133		
CPC分类号	G09G2310/0289 G09G3/3688		
代理人(译)	李钟IL		
优先权	2002073495 2002-03-18 JP		
其他公开文献	KR100556284B1		
外部链接	Espacenet		

摘要(译)

本发明涉及液晶显示器。并且适当的驱动电路被实现为液晶显示器，其中驱动电路集成型的屏幕尺寸增大。关于液晶显示器，它具有在LCD面板上提供图像信号的驱动电路和在相应的LCD面板上形成的图像信号线。LCD面板形成在第一驱动电路之后，其中驱动电路在LCD面板中形成成为诸如安装的像素和LCD面板形成的过程，形成连接到LCD面板的第二驱动电路。第一驱动电路提供包括切换电路的技术，该技术使得能够将第二驱动器电路的输出分配到多个图像信号线。

