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(30) 02392017.6 2002 11 07 EP(EP)

(71) , - , -73230, 95

(72) , , 66 , , 34
 , 48 , , , 7

(74) :
:

(54)

LCD , , 가 RAM
, . COMMON , COMMON
, LCD

5

COMMON , COMMON , COMMON , RAM,

1 , COMMON (sequencing)
6 SEGMENT 6 COMMON

2 , COM/SEG .

3 (Super Twisted Nematic: STN) LCD CO

M SEG .

4 COMMON

6 SEGMENT 6 COMMON .

5 SEGMENT ' (ALL-ZERO)' .

6 ' (blanking)' COM .

7 .

8 .

* *

50; 51; SEG

53; OR 60; COM

62; AND

(LCD) , LCD IC

(LCD) (nematic liquid crystal) .

, .

, .

, .

LCD DC AC DC DC

가 가 가 가 DC

C LCD 0 D

가 (V_{th})

1.5 ~ 2.5 , 4 ~ 5 .

LCD 'COMMON' (row)
 GMENT' (column) . 'COMMON' 'COMMON' 'SE
 'COMMON'

LCD ' (ON)'
 M) 'SEGMENT'(SEG) (V_{th})
 가 , 'SEGMENT' / 'COMMON' (capacitor) 'COMMON'(CO

, 'COMMON' SEGMENT
 COMMON SEGMENT 가 (RMS) (V_{th})
 (' (ON)') (' (OFF)')

(RAM)
 , 80 SEGMENT 64 COMMON RAM 가
 COMMON RAM

가 IC LCD 가 ,

1 6 SEGMENT 6 COMMON (2)
 COMMON (1) 36
 6 COMMON (1,5,6)
 (blank) , 1 COMMON (2)

2 (22) COM/SEG
 LCD (21) PN RAM
 , 0 DC PN(/) COMMON SEGMENT
 M (21) 4 '0' '1'
 5,26) LCD (V0 ~ V3) . 4 SEG/CO
 (21) 4 (V0 ~ V3)
 가 PN 가

PN	SEG COM
0 0	V1 V2
1 0	V3 V0
0 1	V2 V1
1 1	V0 V3

, 가 '1' SEG COM (PN) (V3)

COM SEG 3 (STN) LCD
 (31) COMMON 2 4
 (33) COM SEG 가 (V3) (32) SEGMENT
 ('1').

(Moon 5,825,343)
 TFT-LCD

3 (Nanno 5,986,631) LCD 가 .

가 4 IC , .

(Kumagawa 6,232,944) IC LCD 가 , 가 LCD (cross-talk) 가 .

[illegible]

1. LCD가 IC (COMMON SEGMENT)를 사용하여 RAM (capacitance) /

가 RMS (rate)

4 6 SEGMENT 6 COMMON 1

(1) 36 (2) COMMON

6) RAM COMMON COMMON (COM1, COM5, COM SEGMENT

COMMON LCD IC

가 , 80 × 64 20 54

35 COM1 , RAM 2 19 20 54

COMMON 1 55 64

64 RMS

SEGMENT (ALL-ZERO)' 5 . RAM(52) LCD

가 SEGMENT 0 SEGMENT n (50) OR (51) . RAM OR

가 '1' , COM 가 '0' (53) , COM 4

6 COM COM COMMON RAM (61)

COM (60) RAM 가 (50) AND (62)

COM AND (50)가 COM 가

7 LCD IC (7)

1) RAM COMMON (72) 가

COMMON (73) 가

COMMON (74)

COMMON COMMON

8 (84) RAM(80) SEGMENT RAM(80) (82), (

85) (81) RAM(80), SEGMENT 가 (85)

) COMMON COMMON (85) COMMON COMMON

(81) COMMON (86) COMMON (85)

(84) , COMMON (87) , SEGMENT (83)

(82) (81)

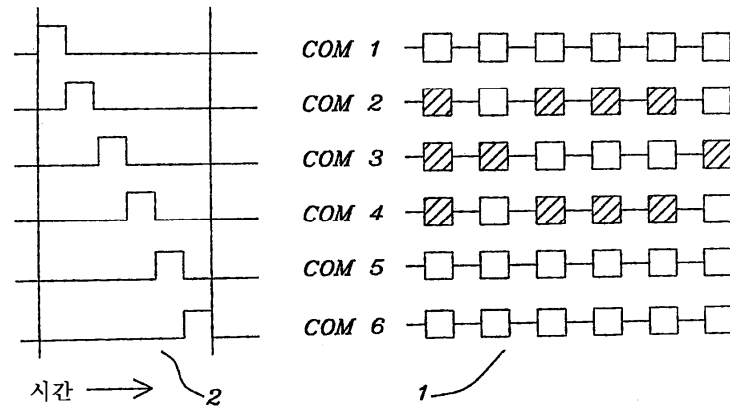
, LCD

1.
LCD COMMON LCD IC
,
MENT RAM, COMMON (all-zero) , SEGMENT , SEG
, COMMON , COMMON , COMMON
COMMON ;
RAM COMMON ;
COMMON 가 ;
COMMON 가 , 가 COMMON ;
가 가 , COMMON 가 COMMON
, LCD IC .
2.
1 ,
COMMON , LCD IC COMMON .
3.
2 ,
COMMON SEGMENT RAM OR
SEGMENT OR , LCD IC COMMON .
4.
1 ,
COMMON COMMON 가 가
COMMON COMMON , LCD IC .
5.
4 ,
COMMON AND , LCD 가 가
IC .
6.
1 ,
COMMON , LCD IC COMMON 1 .
7.
1 ,
RAM COMMON , LCD IC .
8.

LCD COMMON LCD IC
,
LCD COMMON
RAM;
RAM ;
COMMON SEGMENT COMMON
;
COMMON ; COMMON
COMMON COMMON COMMON
;
SEGMENT SEGMENT
T ;
LCD SEGMENT SGEMENT ;
LCD COMMON COMMON , LCD IC
.
9.
8 ,
COMMON , LCD IC COMMON .
10.
9 ,
COMMON SEGMENT RAM
OR
COMMON SEGMENT OR , LCD IC .
11.
8 ,
COMMON , COMMON 가 가 , LCD IC
.
12.
11 ,
COMMON 가 가
AND , LCD IC .

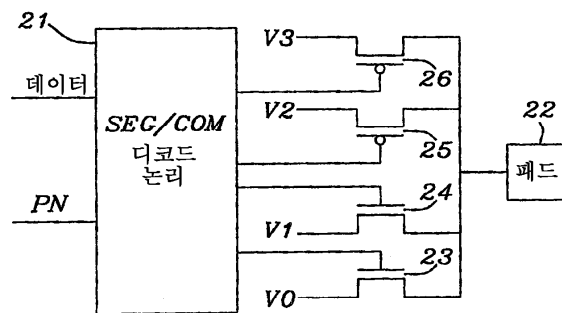
1

종래기술



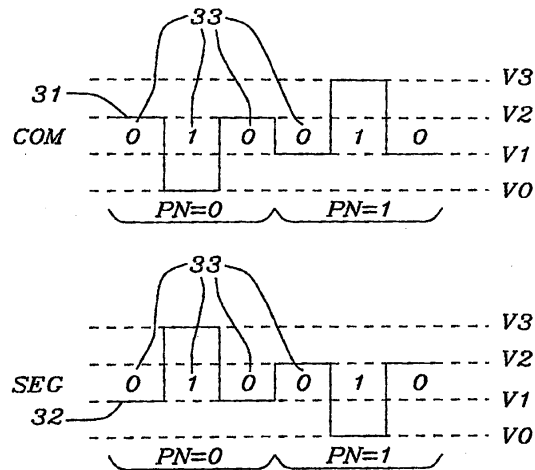
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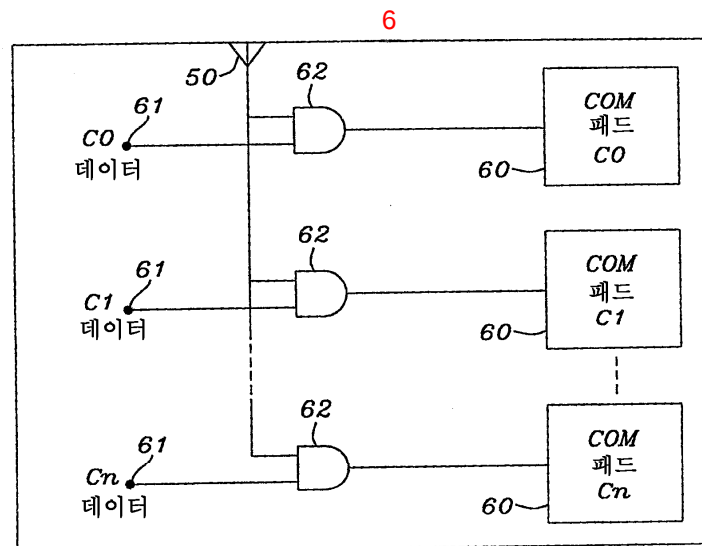
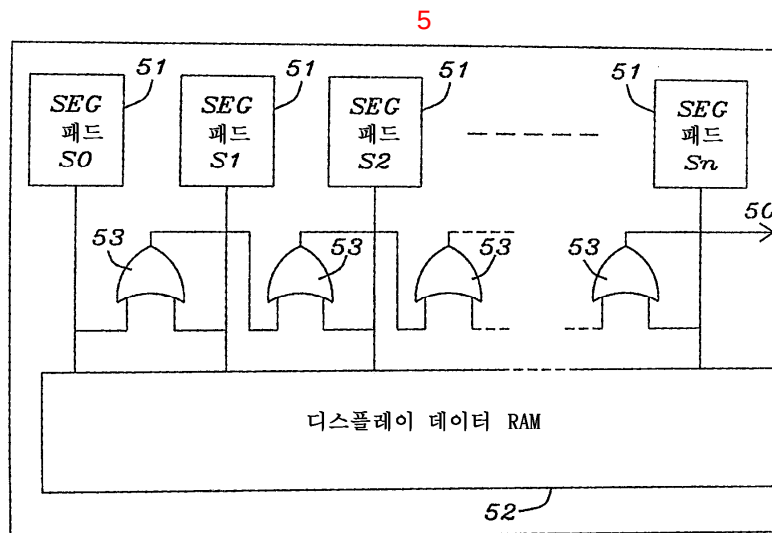
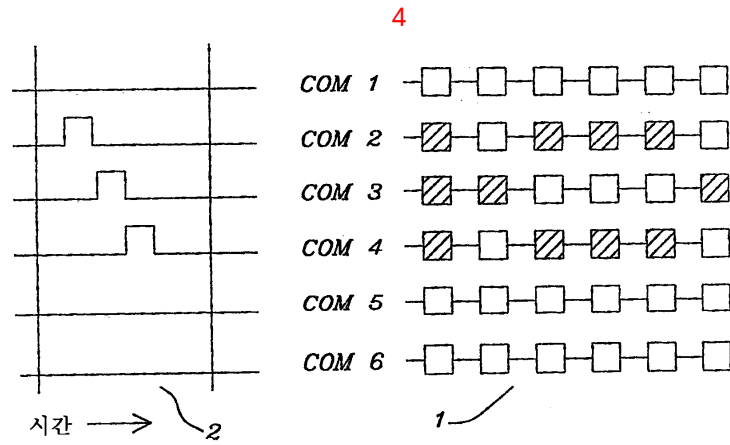
종래기술

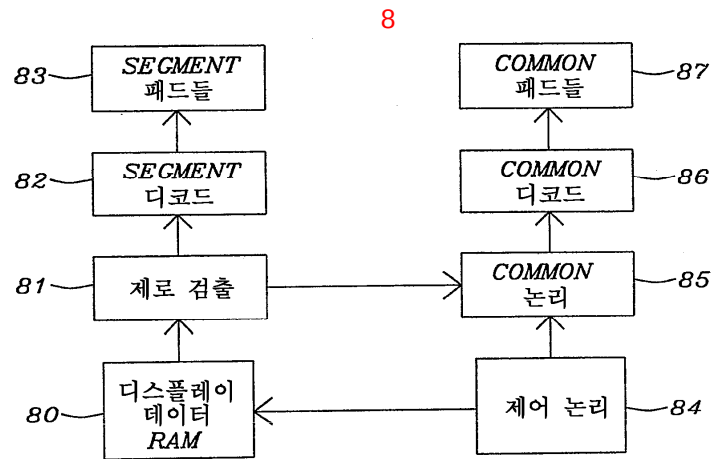
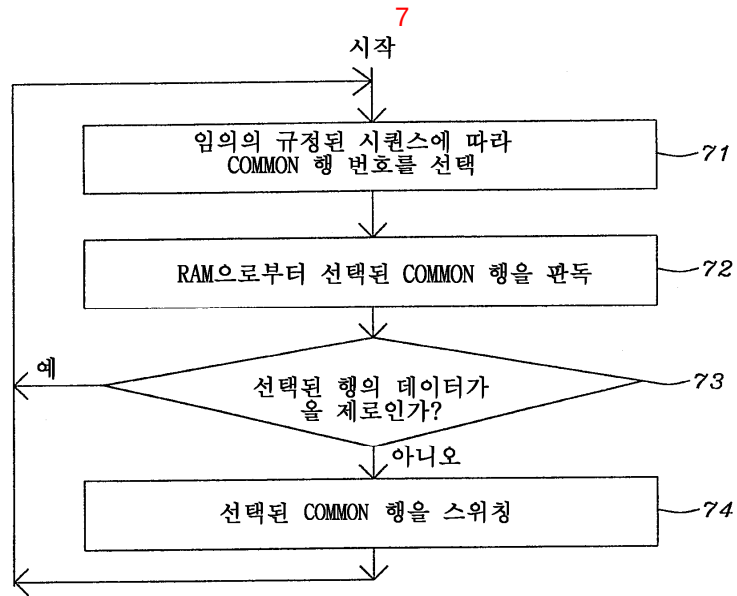


3

종래기술







专利名称(译)	通过消除不必要的切换，降低了黑白LCD显示驱动器中的功耗		
公开(公告)号	KR1020040041064A	公开(公告)日	2004-05-13
申请号	KR1020030078717	申请日	2003-11-07
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当前申请(专利权)人(译)	对白半导体宝马干.		
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发明人	티렐줄리안 클레웨트데이브		
IPC分类号	G09G3/36 G09G3/20 G02F1/133		
CPC分类号	G09G2310/04 G09G3/20 G09G2330/021 G09G3/3685 G09G3/3674 G09G2310/02 G09G2310/0232		
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优先权	2002392017 2002-11-07 EP		
其他公开文献	KR101005436B1		
外部链接	Espacenet		

摘要(译)

用途：通过消除不必要的切换，提供黑白LCD显示驱动器IC的省电效果，以避免具有所有空白的LCD行的公共输出，从而减少LCD驱动器IC的电流消耗。

