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(12)(KR)  
(A)(51) 。 Int. Cl. <sup>7</sup>  
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(43)2002 - 0055428  
2002 07 08(21) 10 - 2001 - 0086355  
(22) 2001 12 27

(30) JP - P - 2000 - 00403533 2000 12 28 (JP)

(71) 가 가  
가  
5 7 1(72) 가  
5 7 1 가 가

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- 7 6 EL ;
- 8 6 EL

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2000 12 28

2000 - 403533

EL

EL 가

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( , 11 - 143429 ).

6 EL (100)

(100)

EL (100)

7 6 EL

8 6

6, EL (100) EL E11, E  
 12, E13, ..., E1n, E21, E22, E23, ..., E2n, E31, E32, E33, ..., E3n, E41, E42, E43, ..., E4n, ..., Em1, Em2,  
 Em3, ..., Emn, EL E11, E12, ..., Emn  
 R1, R2, R3, R4, ..., Rm EL E11, E12, ..., Emn  
 C1, C2, C3, C4, ..., Cn EL  
 R1, R2, R3, R4, ..., Rm (change - over switch)  
 11, 12, 13, 14, ..., 1m, C1, C2, C3, C4, ..., Cn (driving source) 21,  
 22, 23, ..., 2n, C1, C2, C3, C4, ..., Cn 31, 32, 33, ..., 3n,  
 31, 32, 33, ..., 3n (4), 1 (5) 2 (6)

6 EL (100) (R), (G) (B) 3 가  
 EL E11, E12, ..., Emn, 3 가  
 EL E11, E12, ..., Emn 가  
 EL E11, E12, ..., Emn E  
 L .

EL E11, E12, ..., Emn DE CE, E  
 L E11, E12, ..., Emn C1, C2, C3, ..., Cn, EL E1  
 1, E12, ..., Emn R1, R2, R3, ..., Rm .

R1, R2, R3, ..., Rm ,  
 C1, C2, C3, ..., Cn 11, 12, 13, 14, ..., 1m , "  
 " 가 , , 11, 12, ..., 1m ( )  
 11, 12, ..., 1m 2 (6) p FET(  
 R1, R2, ..., Rm ) n FET 21, 22, 23, ..., 2n  
 31, 32, ..., 3n R1, R2, R3, ..., Rm ,  
 (4) EL E11, E12, ..., Emn (4)  
 (ZD) EL E11, E12, ..., Emn (DH)  
 가 ( ) CH , 31, 32, ..., 3n가  
 (on) EL E11, E12, ..., Emn VH 1 (5) V1 가 2  
 (6) 11, 12, ..., 1m V2 가 .

EL (100) 6, 7 8 .

6 1 R1 2 R2 R2가  
 (12) C2가 (22) 1 (5)  
 , C2 R2 EL E22( ) ,

DE

CE

21, 23, ..., 2n EL ( , "

" .) , R2 C1, C3,..., Cn

EL EL 가

R1, R2,..., Rm EL , 1 (5)

가 2 (6) EL 가 EL

가 EL

CE . , EL

7 가 3 R3 31, 32,

33,..., 3n (on) R2가 12 2 (6) R3

13 C1, C2, C3,..., Cn

31, 32, 33..., 3n (4)

EL , EL

(4) VH VH

가 EL 가 , R3 E

L .

8 31, 32,..., 3n가 (off) (4)

C1, C2, C3,..., Cn (4)

R2가 2 (6) , EL E22 2 (6)

EL E22 (消光) .

R3 가 C2 EL E

32 , EL E32 , C1, C3,..., Cn CE EL

가 R3

E31, E33,..., E3n EL E32 CE

(4) EL E32 CE EL

EL E32

6, 7, 8 EL (100) ,

EL 가 (4) ,

가 .

EL (100) 가 . , EL

CE 2 (6) (4) ,

가 가 ,

EL EL EL

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2 가 가 .

가 ， ， 2 가 .

， ， 2 1 가 .

5 ， ，

[illegible]

$$\begin{array}{ccccccc}
 & & R1, R2, R3, R4, \dots, & Rm & & EL & E11, E12, \dots, Emn \\
 & & C1, C2, C3, C4, \dots, & Cn & & & EL \\
 & , & R1, R2, \dots, Rm & & & (change - over switch) & 11A, 12A, 13 \\
 A, 14A, \dots, 1mA, & & C1, C2, \dots, Cn & & & (driving source) & 21, 22, 23, \dots, 2n, \\
 & C1, C2, C3, C4, \dots, & Cn & & 31, 32, 33, \dots, 3n, & & \\
 31, 32, 33, \dots, 3n & & & & (4), & 1 & (5) & 2 & (6) & .
 \end{array}$$

1 EL , 6 (R), (G) (B)  
3 3 EL E11, E12, ..., Emn (短冊狀)  
(R), (G) (B) 가 EL E11, E12, ..., Emn  
가 EL E11, E12, ..., Emn  
EL

$$3, \dots, 3n, \quad (4), \quad 1 \quad (5) \quad \text{EL} \quad E_{11}, E_{12}, \dots, E_{mn}, \quad 21, 22, 23, \dots, 2n, \quad 31, 32, 3$$

$R_1, R_2, \dots, R_m$ ,  $C_1, C_2, \dots, C_n$   
 $11A, 12A, 13A, \dots, 1mA$ , "  
 $11A, 12A, \dots, 1mA$   
 $11A, 12A, \dots, 1mA$ , EL  $E_{11A}, E_{12A}, \dots, E_{mn}$   
 $A$ 가  $R_1, R_2, R_3, R_4, \dots, R_m$ 가,  $R_1, R_2, \dots, R_m$   
 $2$  (6),  $p$  FET  
 $n$  FET

$$\begin{aligned}
 & \text{EL} \quad 1 \quad 4 \\
 & , \quad 1 \quad \text{EL} \quad \text{E22} \quad , \quad 2 \quad 31, 32, \dots, 3n \\
 & \quad , \quad 3, 4, 5 \quad 6 \quad R1, R2, R3 \quad R4 \quad . \\
 & 1 \quad 1 \quad R1 \quad 2 \quad R2 \quad R27 \\
 & (12A) \quad (4 \quad 1) .
 \end{aligned}$$

, R2 EL C2가  
 가 (22) 1 (5) , C2 R2 E  
 L E22( ) 4 (A) ,  
 , DE , CE

$\{$   $\frac{R2}{21, 23, \dots, 2n}$   $\frac{C1, C3, \dots, Cn}{EL}$   $\}$



, 2 (6) 11A, 12A, 13A, 14A,...,1mA  
R1 , 1 (5) 가 V2  
2 (6) EL 가 DE 가  
, R1 EL , EL  
CE , R3, R4,..., Rm  
13A, 14A,...,1mA HiZ , R3, R4,..., Rm  
EL CE ,  
EL ,  
.

2 R2 , 31, 32,..., 3n (on) C1, C2,  
C3,..., Cn (4) ( 4 2 ). , 4 (B) , EL  
E22 EL (4)  
VH , EL E22 (off) ( 4 3 ).

2 , 1 11A가 , 2  
R2 12A 2 (6) , 3 R3  
13A ( 4 4 ). , 11A ,  
R1 가 (HiZ) , R2가  
2 (6) V2 (4) VH ,  
가, 4 (C) , R2 EL 가 , E  
L , EL DE가 CE EL , R3  
EL (4) VH  
( 7 5 ).

, 3 31, 32, 33,..., 3n , 22  
3 R3 EL E32 , ( 6, 7 8 ).

, 31, 32, 33,..., 3n 2 R2 12A  
( 4 9 ) , EL E32 , 3 R3  
13A 2 (6) V2 R3 EL 11  
4 C2 EL 14A E42 ( 4 )  
, .

, EL , EL  
2 (6) , 2 (6)  
(4) EL  
CE CE , 가 EL  
EL CE , EL

EL, EL, EL (high), DE 1 (5), EL E22, (4) R3 (11) R4, R3, 가, EL 5, 5, EL E, L E11R, E11G, E11B,..., E1nR, E1nG, E1nB, E21R, E21G, E21B,..., E2nR, E2nG, E2nB, E31R, E31G, E31B,..., E3nR, E3nG, E3nB, E41R, E41G, E41B,..., E4nR, E4nG, E4nB, Em1R, Em1G, Em1B,..., EmnR, EmnG, EmnB가, EL E11R, E11G, E11B,..., EmnR, EmnG, EmnB R1, R2, R3, R4, ..., Rm EL E11R, E11G, E11B,..., EmnR, EmnG, EmnB C1R, C1G, C1B..., CnR, CnG, CnB EL R1, R2, ..., Rm (change - over switch) 11A, 12A, 13A, 14A, ..., 1mA, C1R, C1G, C1B..., CnR, CnG, CnB (driving source) 21R, 21G, 21B..., 2nR, 2nG, 2nB, C1R, C1G, C1B..., CnR, CnG, CnB 31R, 31G, 31B..., 3nR, 3nG, 3nB, 31R, 31G, 31B..., 3nR, 3nG, 3nB (4R, 4B, 4G), 1 (5) 2 (6)

" R" EL, " B" EL, " G" EL, R, G B, 가 EL, EL E11R, E11G, E11B..., EmnR, EmnG, EmnB EL, EL, EL, EL, 가 100 $\mu$ m 300 $\mu$ m (短冊狀)가 EL 가 300 $\mu$ m

" R", " G", " B", 21R, 21G, 21B..., 2nR, 2nG, 2nB, C1R, ..., CnR, C1G, ..., CnG, C1B, ..., CnB, 31R, ..., 3nR, 31G, ..., 3nG, 31B, ..., 3nB, 21G, ..., 3nG, 21B, ..., 3nB, (4R, 4B, 4G) EL,

5 EL EL  
 , 1 , 5 EL  
 EL , , EL 4 EL  
 가 , , 가 가 .

가

2 (6) V2 1 (5) V1  
 (4, 4R, 4B, 4G)  
 , , EL  
 가 , ,  
 (4, 4R, 4B, 4G) ,  
 .

가  
 EL

2 (6) EL  
 , 가 ,  
 , EL 가 2 (6)  
 , EL 가 EL

EL , EL EL  
 EL , EL .

(57)

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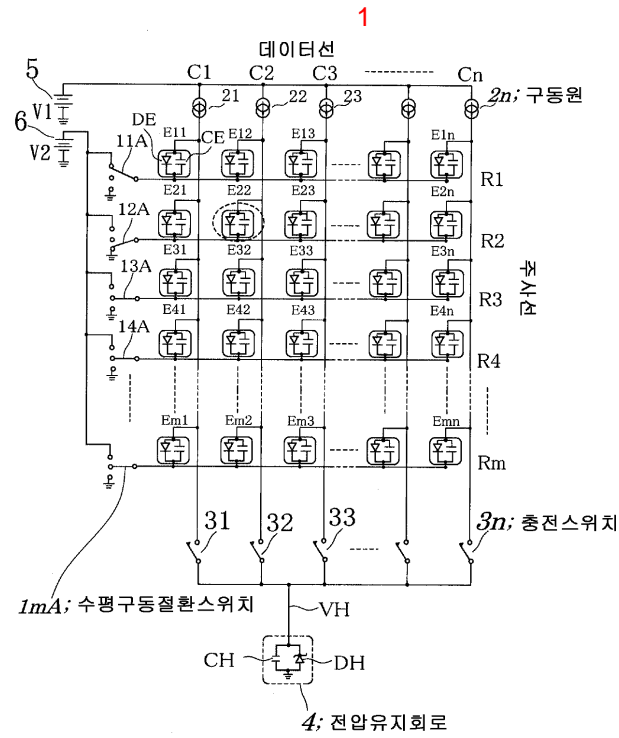
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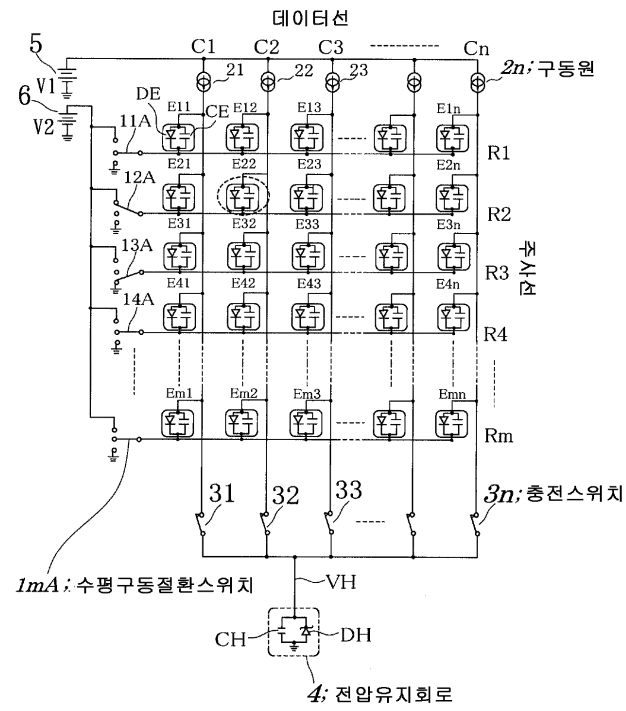
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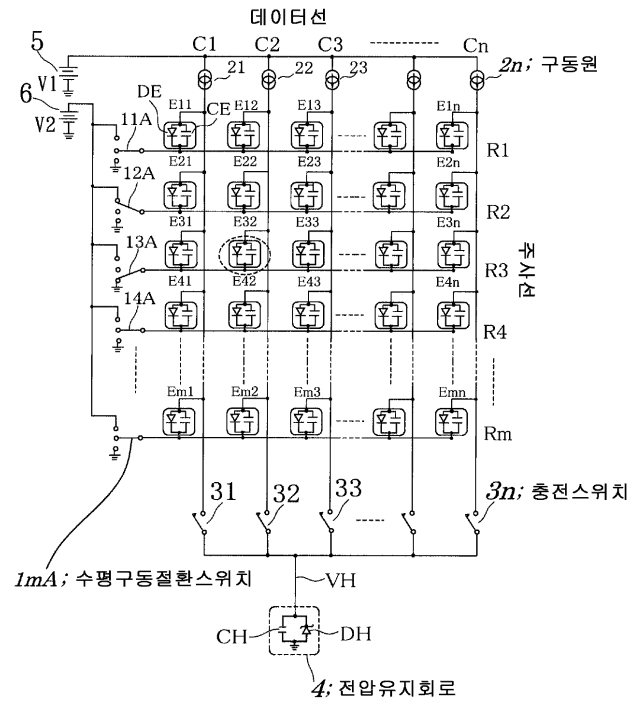


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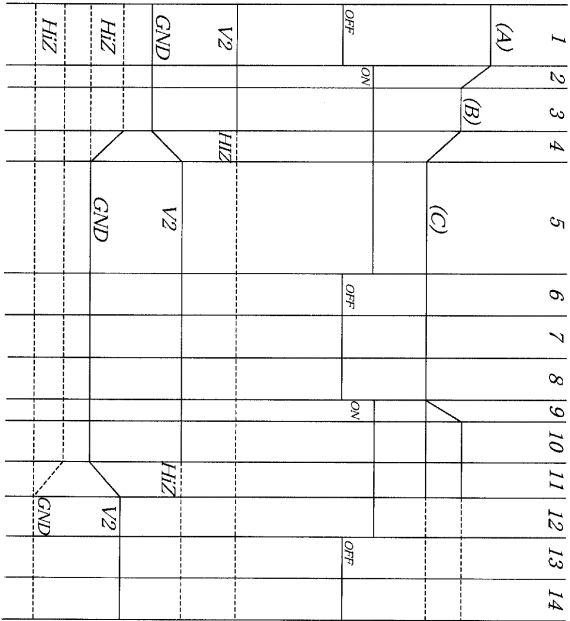


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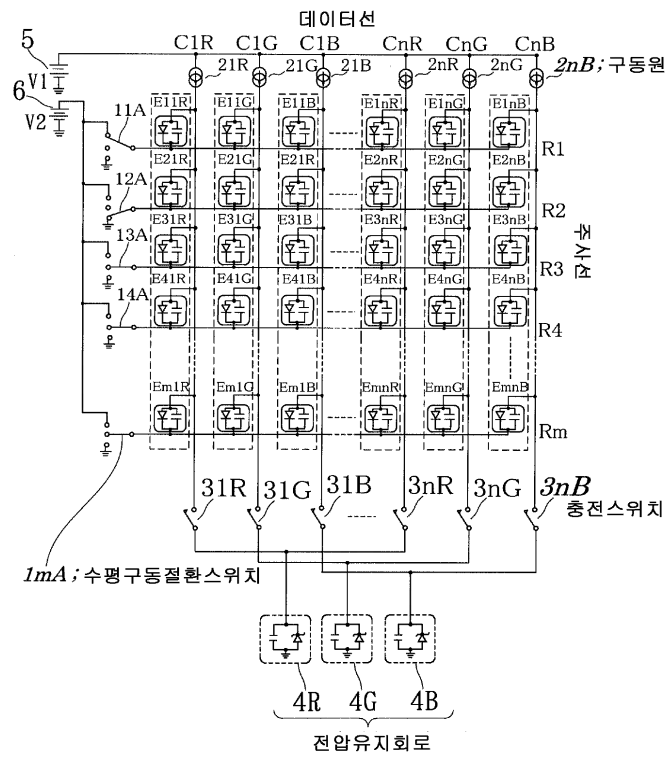


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- 타이밍
- (1)유기티소자 E22의  
양극측 전위
- (2)충전스위치의  
온과 오프상태
- (3)주사선R1의 전위
- (4)주사선R2의 전위
- (5)주사선R3의 전위
- (6)주사선R4의 전위

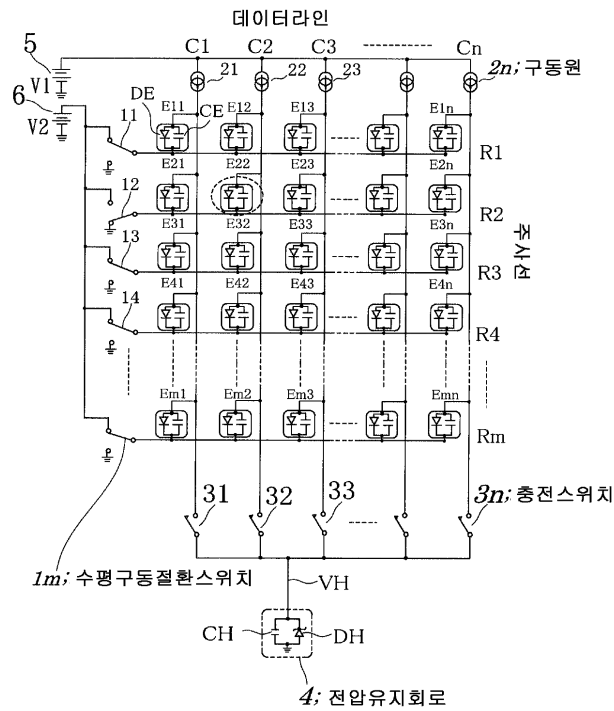


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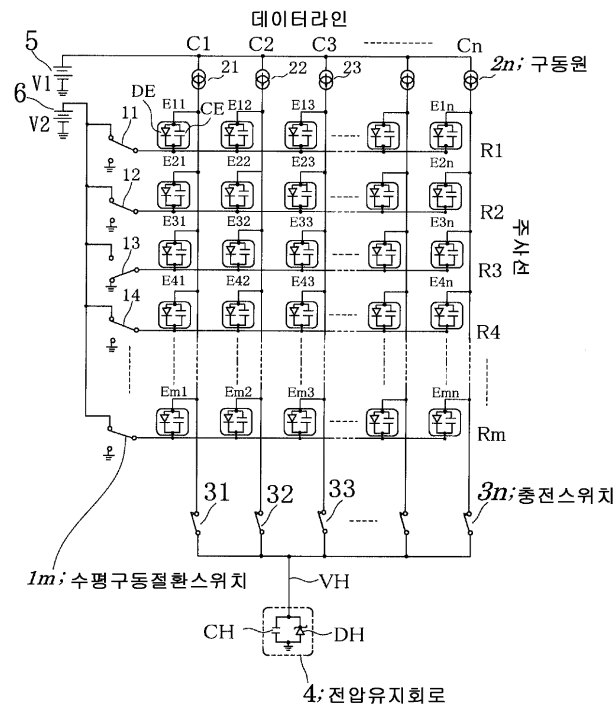
6

100; 수동 매트릭스 유기EL  
디스플레이장치

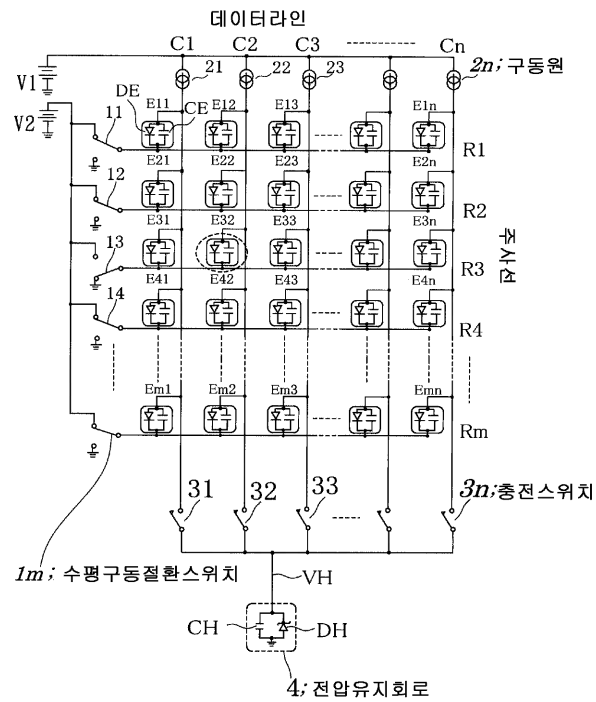


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100; 수동 매트릭스 유기EL  
디스플레이장치



100 ; 수동 매트릭스 유기EL  
디스플레이장치



专利名称(译)	有机电致发光驱动电路，无源矩阵有机电致发光显示装置和有机电致发光驱动方法		
公开(公告)号	<a href="#">KR1020020055428A</a>	公开(公告)日	2002-07-08
申请号	KR1020010086355	申请日	2001-12-27
申请(专利权)人(译)	三星SD眼有限公司		
当前申请(专利权)人(译)	三星SD眼有限公司		
[标]发明人	KAWASHIMA SHINGO		
发明人	KAWASHIMA,SHINGO		
IPC分类号	G09G3/30 H01L51/50 G09G3/32 G09G3/20 H05B33/12 H05B33/08		
CPC分类号	G09G2320/043 G09G2310/0251 G09G2330/021 G09G3/3216 G09G2310/0256		
代理人(译)	PARK, 常树		
优先权	2000403533 2000-12-28 JP		
其他公开文献	KR100635043B1		
外部链接	<a href="#">Espacenet</a>		

# 摘要(译)

目的：为了使无源有机EL显示器件处于未选择状态的扫描线的有机EL元件，减小用于转变为反向偏置状态的电流。组成：对于无源矩阵有机EL显示面板，其有机EL元件沿行和列排列成矩阵，所公开的有机EL驱动电路配备有多个驱动源21,22,23, ..., 2n，其供应从第一电源5到为每次扫描选择的数据线的驱动电流，多个放电开关31,32,33, ..., 3n，其在扫描定时开始时将所有数据线连接到电压保持电路4电压保持电路4，其将每条数据线保持在特定电压，以及水平驱动转换开关11A, 12A, 13A, 14A, ..., 1mA，它们由各行的扫描线提供并切换以保持未选择通过将所选择的扫描线接地或连接到第二电源6，扫描处于高阻抗状态的线。

