

(19)
(12)

(KR)
(B1)

(51) 。 Int. Cl. 7
G09G 3/30

(45)
(11)
(24)

2003 01 29
10 - 0370286
2003 01 16

(21) 10 - 2000 - 0085683
(22) 2000 12 29

(65) 2002 - 0056353
(43) 2002 07 10

(73) 575

(72) 14 - 1102

(74)

:

(54)

shold voltage) 가 (TFT) (TFT) (thre

NxM 가 1 ; 1 가 ,
2 ; 2 가 ;
4 가 3 . 4

, (OLED) (TFT)

4

,

1

,

2

,

3

,

4

,

5

,

6

,

7

,

8

,

9

,

10

A

(GND)

(Precharge)

가

,

11

,

.

*

M1~M4:

OLED:

C1: Select[n]:

Data:

(TFT)

(TFT)

(threshold voltage)

가

, NxM
 1 (ITO), (Metal) 가 (EML:emitting layer) (ETL:Electron Transport Layer), (HTL: Hole Transport Layer) (EIL: Electron Injecting Layer) (HIL:Hole Injecting Layer) 가 .

(passive matrix) TFT

(active matrix) TFT ITO

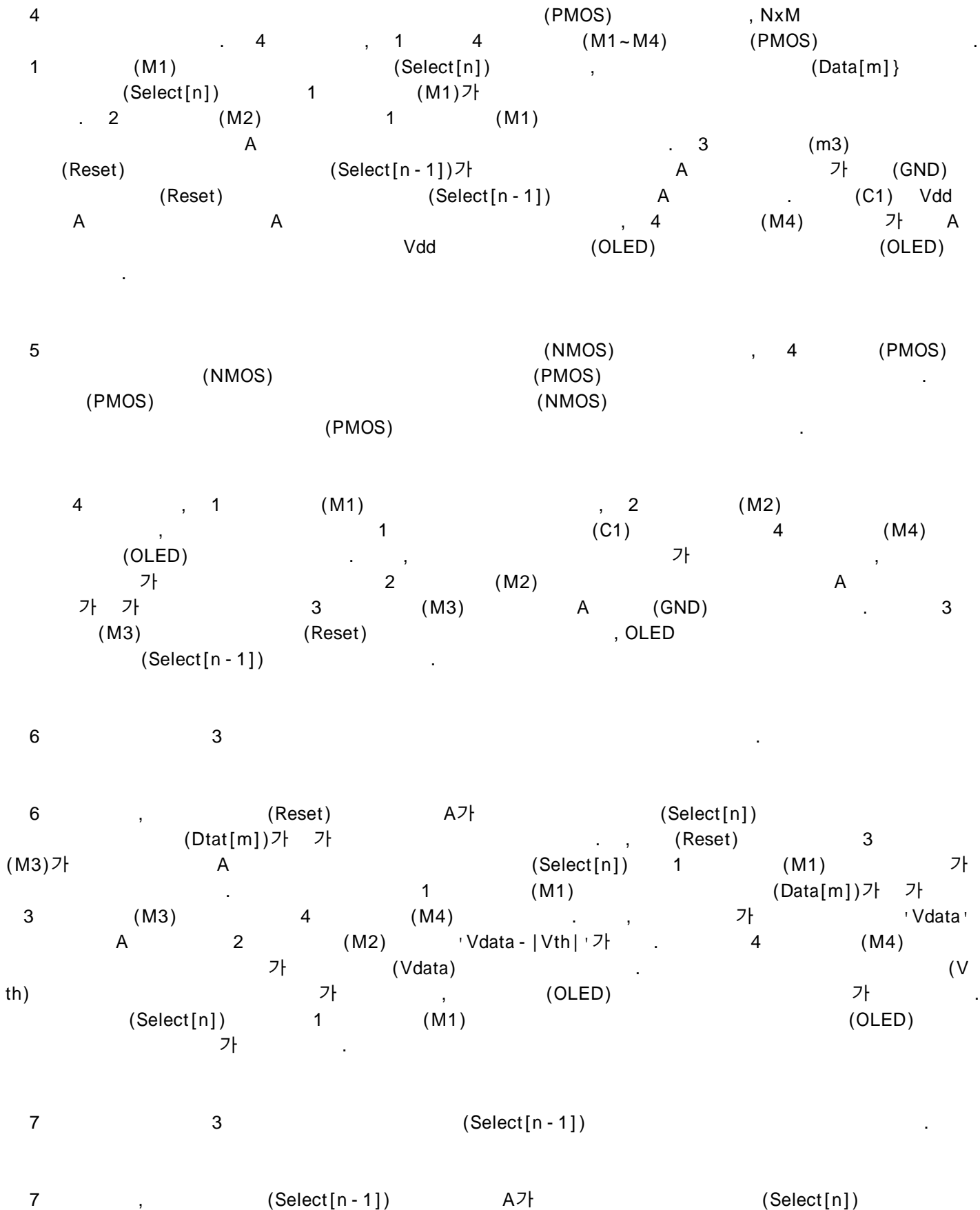
2 TFT , NxM
 2 (OLED: Organic Light Emitting Diode) 2 (M2)가
 , 2 (M2) 1 (M1) 가
 가 (C1)가 2 (M2)
 , 1 (M1) n (Select[n])
 , (Data[m]) .

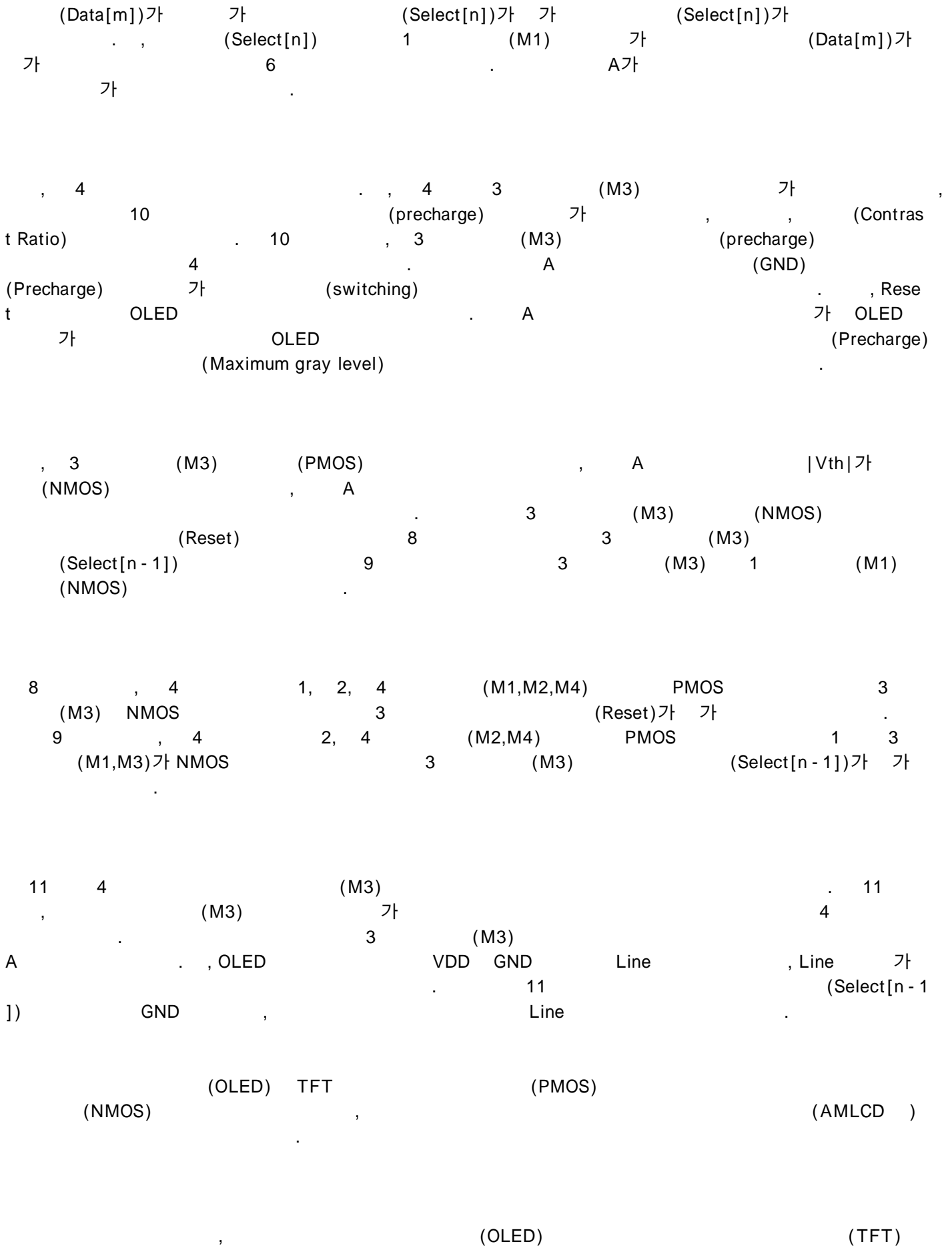
(Select[n]) 1 (M1)가 1 (M1) 가
 (A) 가 , 2 (M2) (Data) 2 (M2)
 , (Select[n]) (OLED) 가
 (Data[m]) 가 ,

mV 10mV , TFT , 3V TFT (Vth) 3/256=12
 , TFT 8 (256) 100mV

(TFT)

가 , NxM 가 1 ; TFT 1
 2 ; 2 가
 가 4 ; 3 ; 4
 가 4 ; 3 .





(57)

1.

NxM TFT ,
 가 1 ;
 1 가 2 ;
 2 가 4 ;
 ;
 4 가 3
 .

2.

1 , 3 가
 .

3.

1 2 , 1 4 가
 .

4.

3 , 가 , 3 가
 .

5.

3 , 가 , 1 3 가
 .

6.

5 , 가

7.

1 2 , 1 4 가
 .

8.

7 , 가 , 3 가

9.

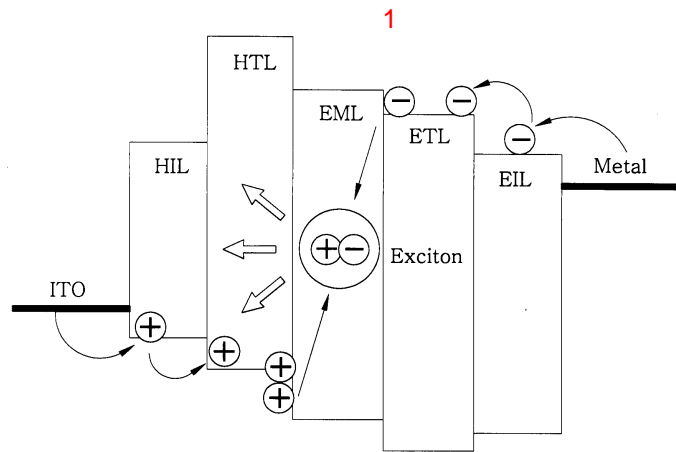
7 , 가 , 1 3 가

10.

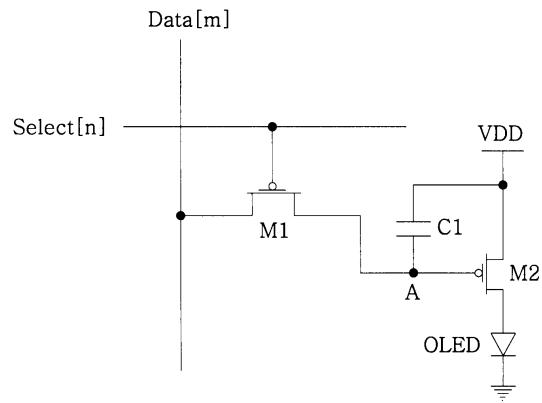
9 , 가

11.

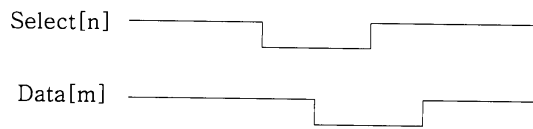
1 , 3



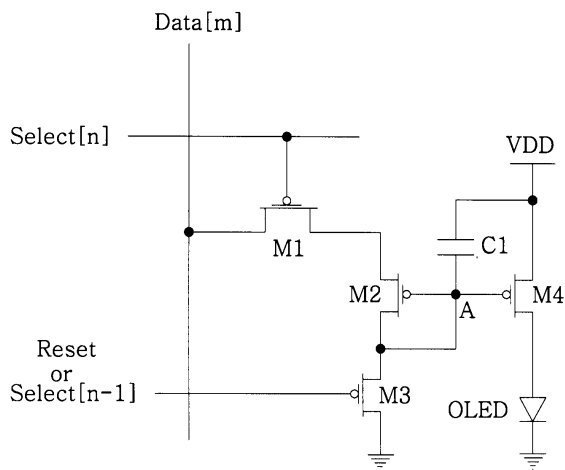
2



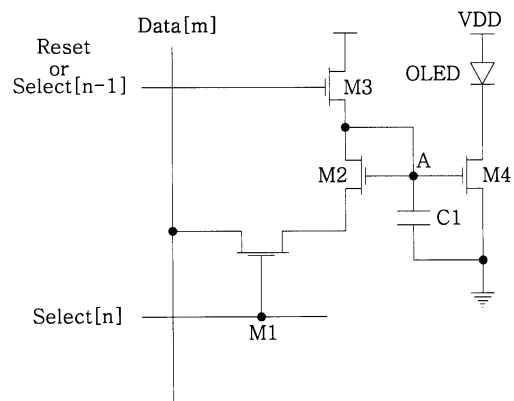
3



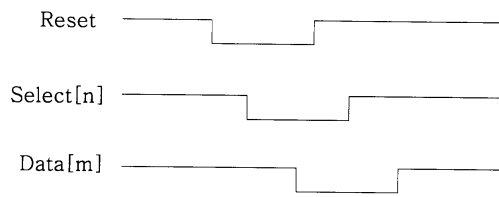
4



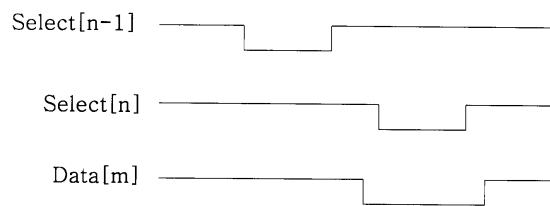
5



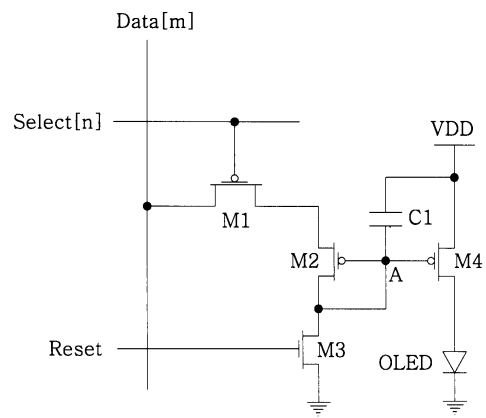
6



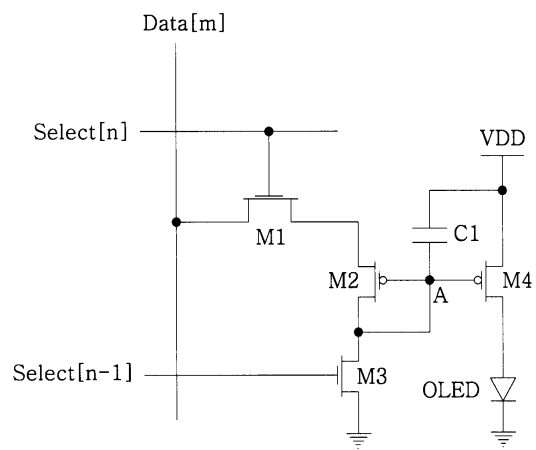
7



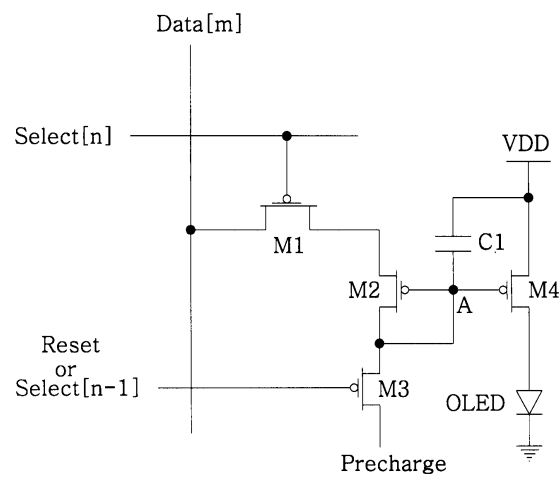
8



9



10



11

