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(43)

10-2004-0008089  
2004 01 28

(21) 10-2003-0048536  
(22) 2003 07 16

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DC

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SW :  
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GW , y , x (가 ) x y ( ) DW

가 , 가 AR

가 ( )

GW DW GC DC

가 , GC 가 DC 가

GDr GCOM GC GDr

, x (가 ) x y ( ) ( )

1

1 cm 가 5.08

2

1 GW DW PNL1 GW y, x (가 ) y ( ) ( )

가 가 가

GDr DDr 1 GW PNL DW

1 GW1 GW GW2, GW3, GW4 GW5, GWm GW6, 가 가 GW1, GW2, GW3, GW4, GW5, G Wm, GWm-1, GWm GC1, GC2, GC3, GC4, GC5, GC6, GCm-1, GCm GC1, GC2, GC3, GC4, GC5, GC6, GCm-1, GCm GDr

1 DW DW1, DWn AR DW1, DWn AR

1 AP가 (矩形) GA1( , 1 GA1 ) GC GA2( , 2 GA2 ) VCL SW VCL VCL VCP

IC DA1( , 1 DA1 )

1 DA1 ) DDr DW DW DDr DC (

2

가 P 1 DC1 1 2 DC2 D

1 DC1 2 DC2 DP , ,

가 가

가 DP가 DP DP=sin 1xP 1

DP , P P

DP 가

DDr GW ( ) GDr 1 ,

GDr PNL GC GDr PNL

GDr Y 1

AR ( ) GC1, GC2, GC3, GC4

( 1 ) GA1 GC1 GC5, GC6, GCm-1, GCm GC57가 GC2 GC6 GCm GC3 GCm-1 GC4

1 C4 DA1 GC5 GC1, GC2, GC3, G

3 1 I-I ( ) ( )

3 PNL GC5, GC6, GCm-1, GCm GC GC GC4 GCm-1, GCm GC1, GC2, GC3, GC4가 GC3,

(1) (1)

1 (2) 1 (3)

2 (4) 2 (4)

1 1 2 1 2

1 1 2 2 2



2 GMC1, GMC 3 GMW1, GMWk

9 1 , 8 IV-IV

1 GW1 GC1 3 GMW1  
GMC1

Wk , 1 GWk GCK 3 GM  
GMCK가

(3) GC 1 (2) 1 (3) 1 GC (2)  
GMC

2

10 2 GL

PNL

GW PNL GW (1) GCOM ( ) GCOM

DW , DA2 , PNL DDr 1 DA1  
2 DCOM

SW PNL GCOM GCOM , GW  
SW GCOM GW

GW SW , VCL GW SW

11 10 V-V PNL GW4, GW5 , SW4, SW  
5가 GW4, GW5 SW4, SW5 SW4, SW5 (4)

12 10 - PNL GW(GW4, GW5) , S  
W(SW4, SW5)가 GW(GW4, GW5) SW(SW4, SW5)

GW(GW4, GW5) GW(GW4, GW5) 1  
(2) 1 (3)

SW(SW4, SW5) GW(GW4, GW5) SW(SW4, SW5) VCL VCL

SW(SW4, SW5) 1 (2) (3)

(3) (3) VCL GW(GW4, GW5) 1 (2)  
(3) (2) VCL SW(SW4, SW5) S

W(SW4, SW5)

VCL , VCL 2 (4)

12 , GW SW가 GCOM SW  
VCL 가 . GW SW , SW

GL PNL GW 1 .  
VCL , GDr

13 PNL .

13 , T 12 .

VCL .

, 13 , DA1 GW 2 SW DA2 GCOM .  
GDr 1 , DA1 2 DA2 GCOM

, 13 , DCOM , GCOM 1 TFT  
가 , ,

GDr

, GDr GDr , GDr ,

GDr GDr , GDr ,

DW가 가 , SW , DW GW  
가 . SW , SW ,

VCL VCL 가 .  
VCL

14 PNL .

14 , T U 12 .

GDr 1 , DA1 2 DA2  
14 GDr 가

GDr GW SW

14 , 2 GA2 .

15 , 15 , .  
Dr .

Dr , 1 GW GCOM GCOM

, GCOM Dr 가

15 , Dr

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16 Dr

GDr DDr PNL

DC1a, DC2a DC1a 가 PNL DDr GDr DC2a 가

DC1a, DC2a

1a DC1a AR GW AR 2 2 DC DC1a

DDr GW 2 3

DC3a DDr 가 4 GDr

DC3a GW

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17 Dr

DC DDr GDr DW

GDr

DC1b, DC2b DC1b 가 PNL DDr GDr DC2b 가

17 , DC1b GW 5

DC2b , DDr GDr DC1b

, DC1b, DC2b GDr

DC3b DC3b DDr 가 6 GDr

GW

DC1b, DC2b 5 DC DC1b, DC2b

17 5 16 4

, GDr DDr 2 PNL  
 18 17 GDr  
 1 GOUT1 (8)가 GDr DC가 2 (6)  
 G2가 2 (6) G2가  
 DDr  
 DC가 GDr 1 (5) 2 GOUT2 GW  
 GDr 3 (7) GDr G1  
 1 (5) 2 (6) GDr (8) , 1 (5) 2 (6)  
 GDr  
 19 3 DC  
 DC DDr GDr GDr DW  
 19 가 DC1c DC1c DC2c 2  
 가 GDr

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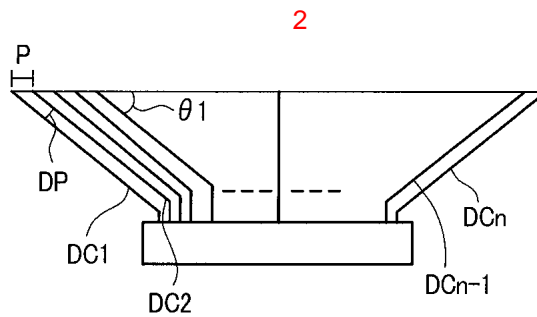
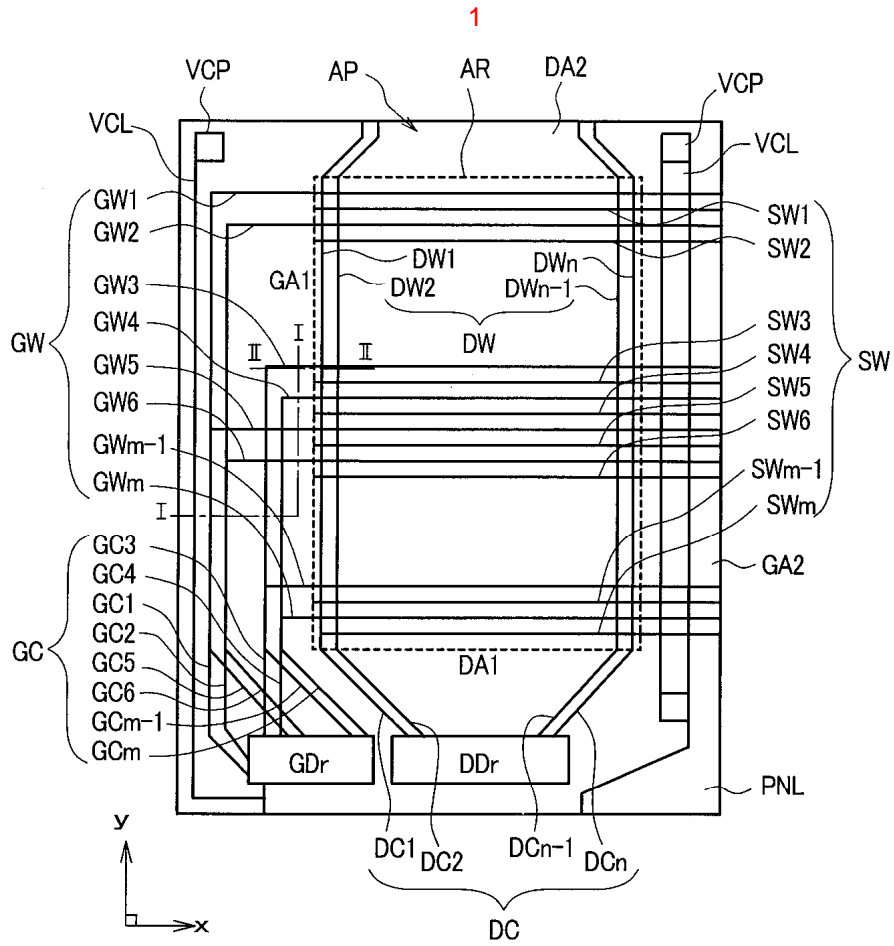
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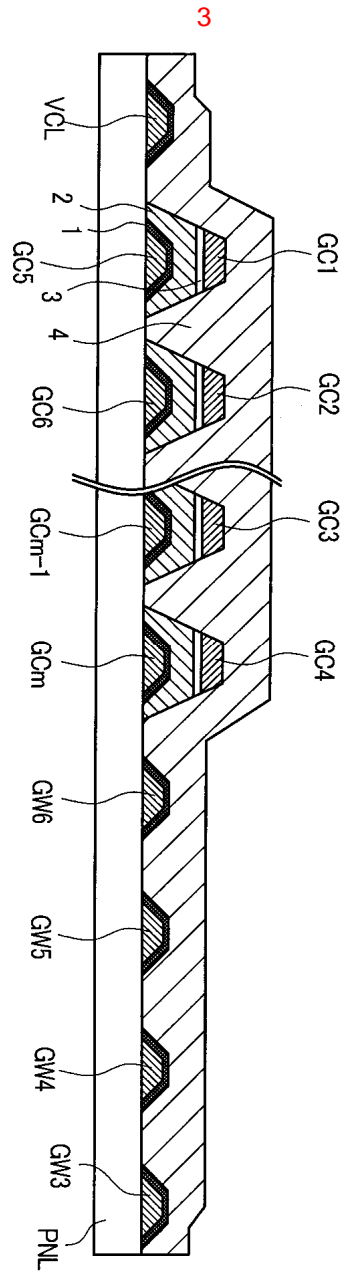
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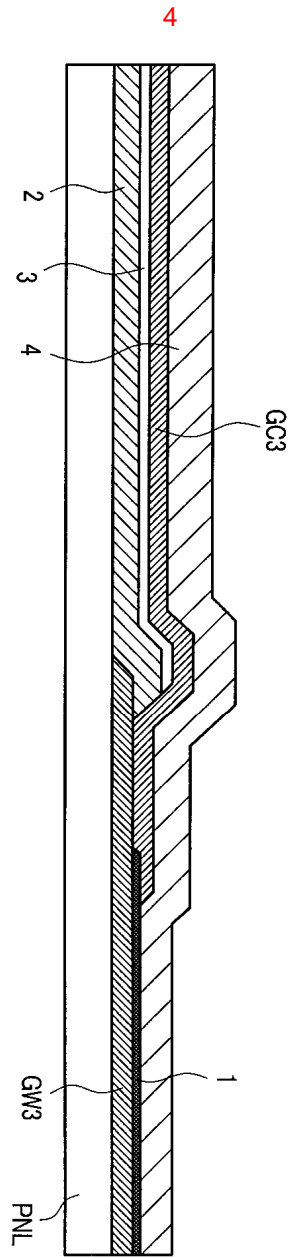
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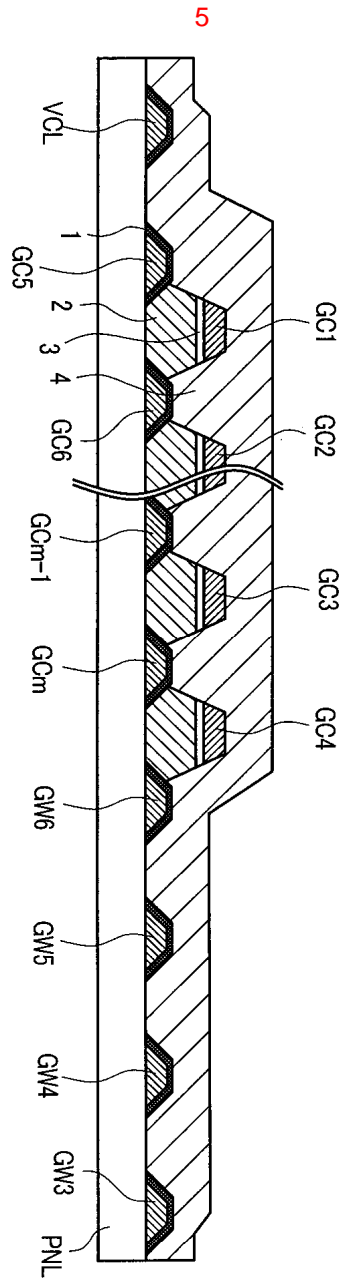
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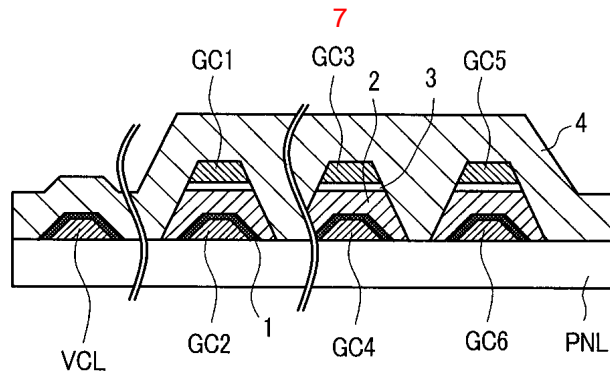
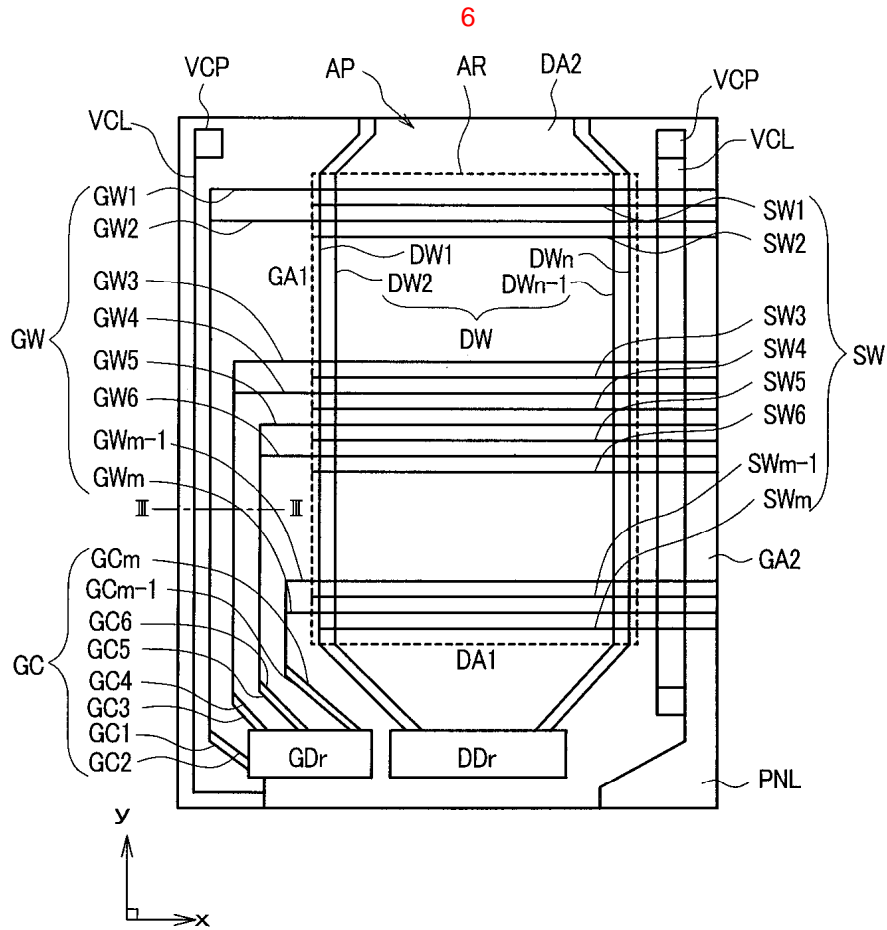
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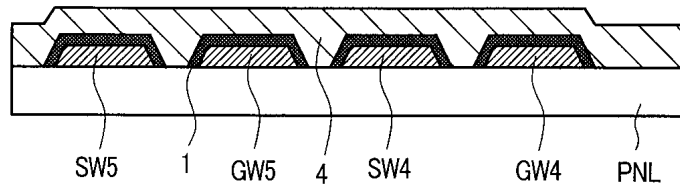




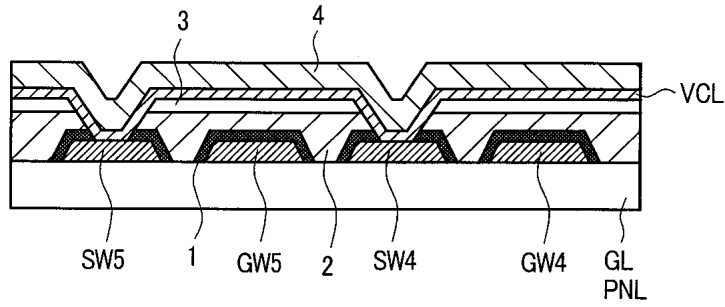




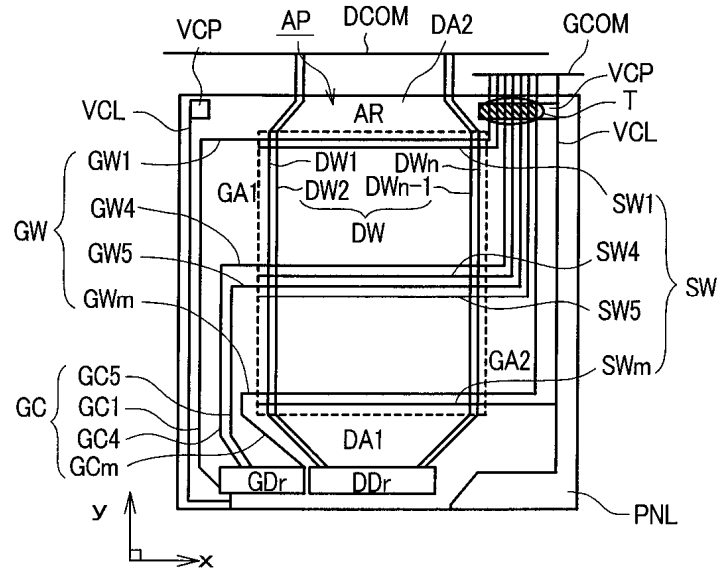
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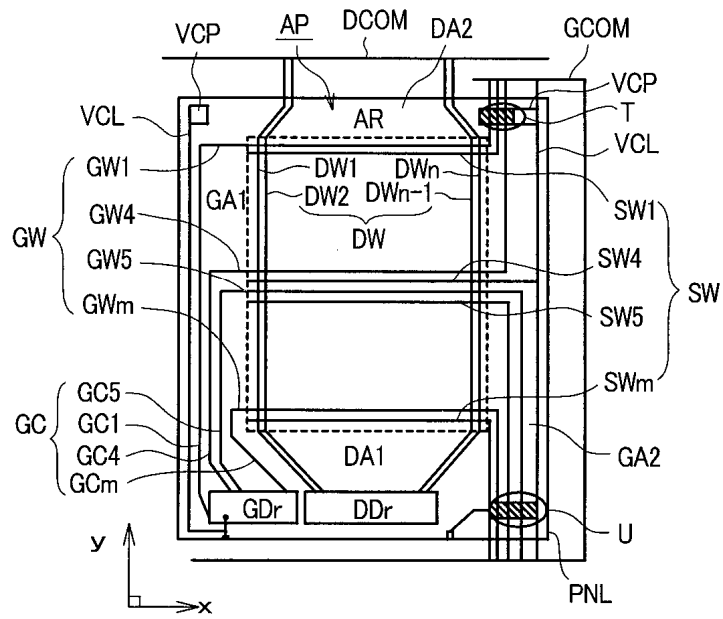
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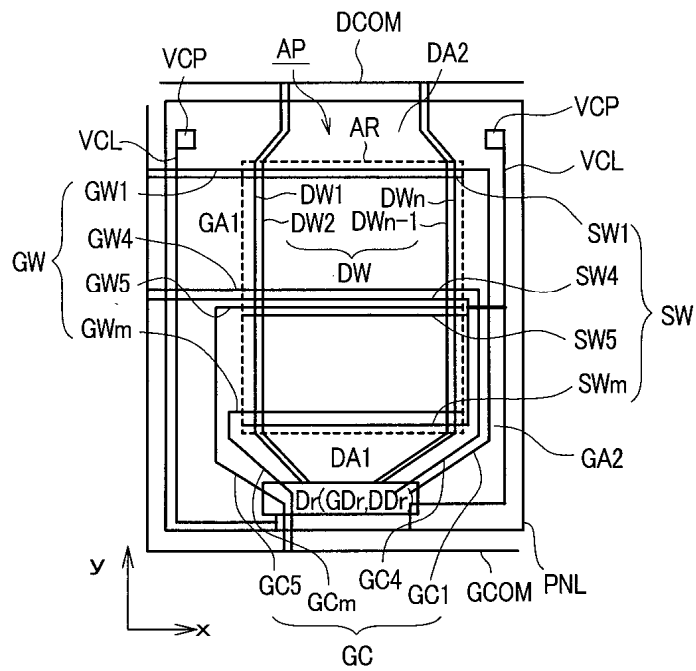
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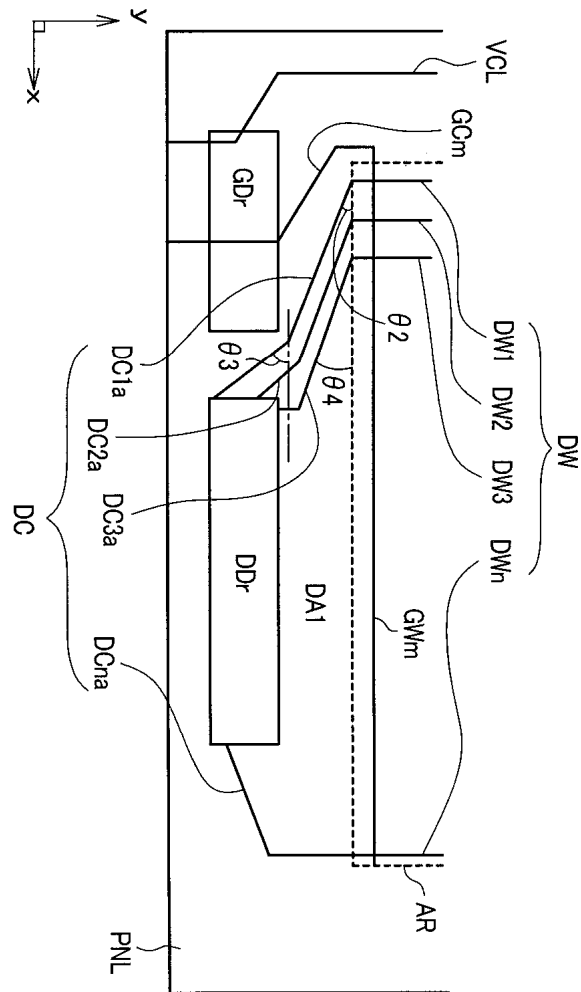
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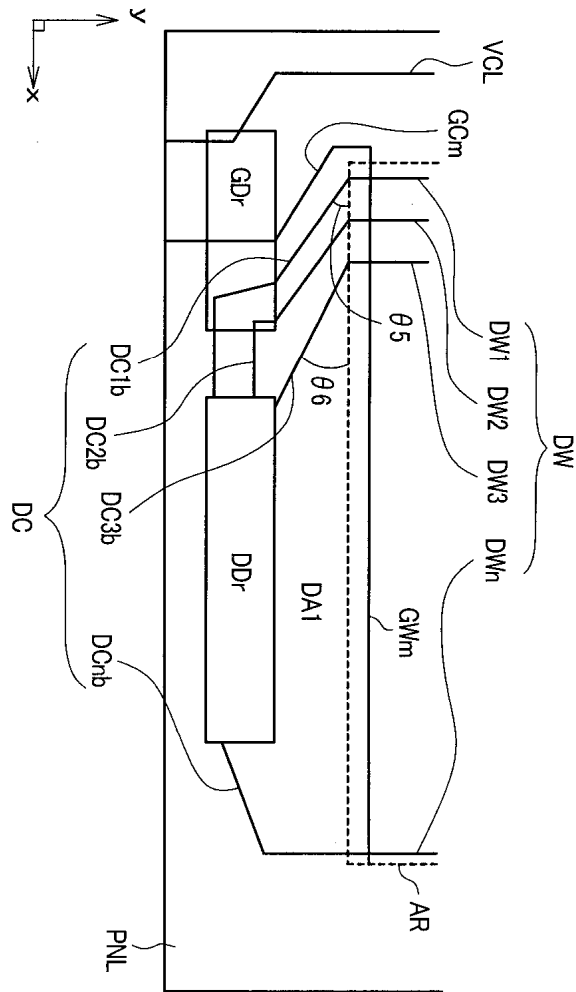
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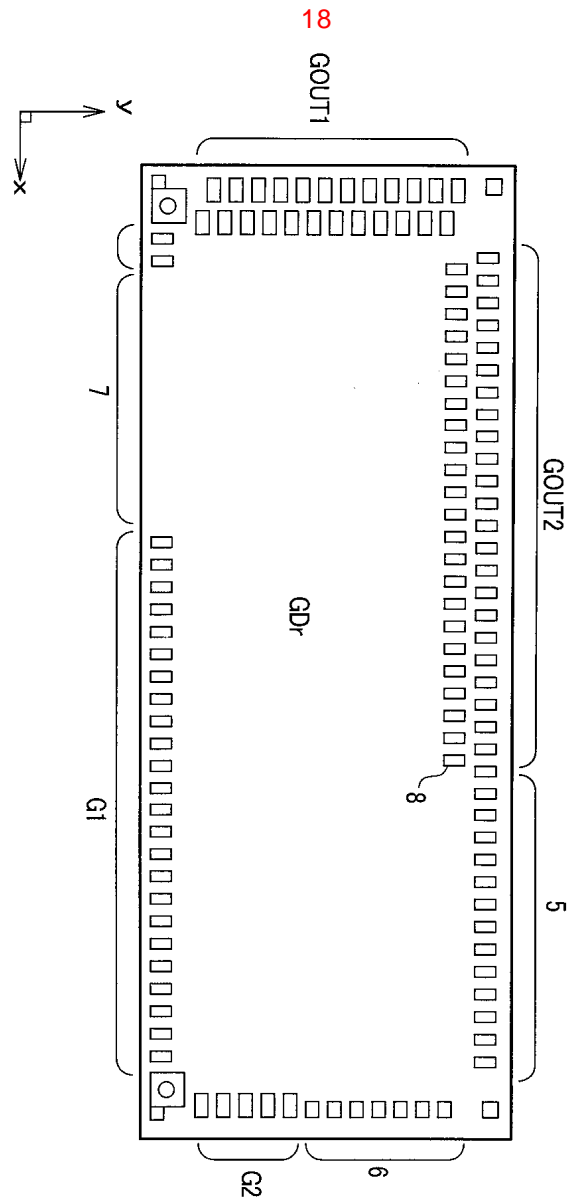


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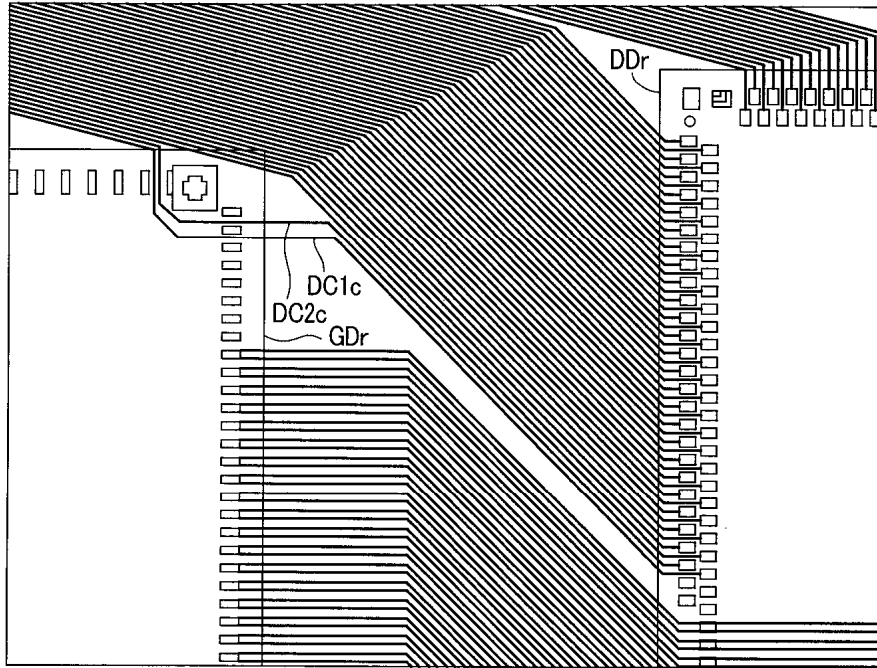


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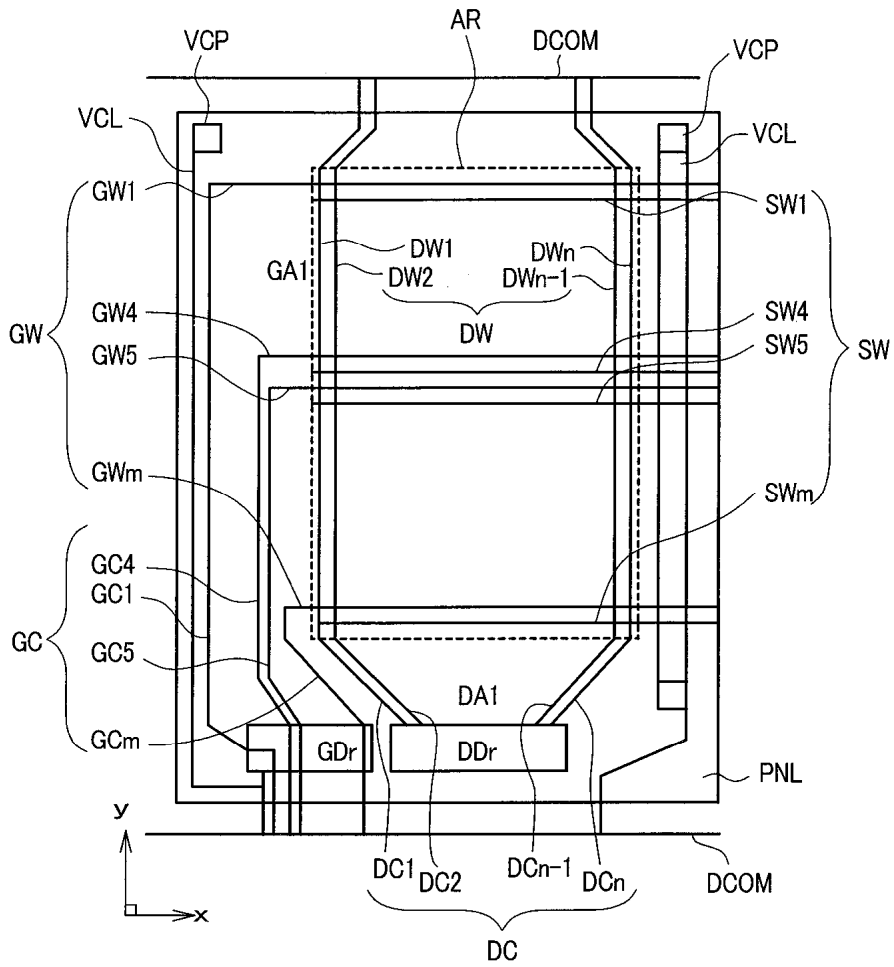




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专利名称(译)	液晶显示器		
公开(公告)号	<a href="#">KR1020040008089A</a>	公开(公告)日	2004-01-28
申请号	KR1020030048536	申请日	2003-07-16
[标]申请(专利权)人(译)	株式会社日本显示器 日立器件工程株式会社		
申请(专利权)人(译)	株式会社日本排气量 地伤装置工程可否让这个夏		
当前申请(专利权)人(译)	株式会社日本排气量 地伤装置工程可否让这个夏		
[标]发明人	ISHIGE NOBUYUKI 이시게노부유키 KOMENO HITOSHI 고메노히토시		
发明人	이시게노부유키 고메노히토시		
IPC分类号	G02F1/1368 G02F1/1345		
CPC分类号	G02F2001/13456 G02F1/1345 H01L2224/05553		
代理人(译)	LEE, JUNG HEE CHANG, SOO KIL		
优先权	2002207691 2002-07-17 JP		
其他公开文献	KR100592457B1		
外部链接	<a href="#">Espacenet</a>		

摘要(译)

一个液晶显示器狭窄地提供外围区域。特别地，提供了控制液晶显示器控制断开或布置到外围区域的接入线的短路。它具有液晶显示器围绕像素区域的外围区域和具有像素电极的像素区域。栅极线和漏极线布线在像素区域中。并且栅极驱动器和漏极驱动器布置在外围区域中。连接栅极驱动器和多条栅极线的多条栅极连接线层叠在外围区域中。氧化膜，保护膜，非晶硅层，电荷保持线。

