

(19)
(12)

(KR)
(A)

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(21)	10-2003-0042407		
(22)	2003 06 27		
(71)	.	20	
(72)		933-7	APT305-701
		1109-4	607-909
(74)			
	:		
(54)			

, Narrow Bezel
(Compact) , AMOLED

, AMOLED

3

- 1 AMOLED .
- 2 AMOLED .
- 3 AMOLED .

4 AMOLED .
 5 AMOLED .
 6 AMOLED .
 7 AMOLED .
 < >

30 : 40 :

42 : 43 :

44 : FPC(Flexible Printed Circuit) 45 :

,
 .
 D) CRT(Cathode Ray Tube) , (Liquid Crystal Display, LC
 가 가
 (Organic Electro luminescence Device :
 EL ') ,
 , EL 가
 AMOLED(Active Matrix Organic Light Emitting Diode)가
 AMOLED ITO ()
 , () , (e
 ncapsulation)
 , ITO 가 (Ca, Li, Al : Li, Mg : Ag)
 가 가
 (exciton) , (radiative reco
 mbination)
 ,
 가 가 (HTL) (ETL)
 가 (EML)
 , (HTL) 가
 (EIL)) 가 LiF 가 5 ~ 10 가 ()
 , 가
 (color tuning) 가 가 .

1 AMOLED .

1 (13) , AMOLED (10) (12) ITO (13)가 , (13)
 () () .

12 (12) (18) (19) (18)
 (Red), (Green), (Blue) (Hole Injection Layer, HIL)(14), (Hole Transporting Layer, HTL)(15),
 가 (Emitting Layer)(16), (Electron Injection Layer, EIL)(17)

18 (18) (16) (19)
 (Desiccant)(21)가 (20) (20)

20 (20) (encapsulation) (10)
 (Sealant)(21) .

1 AMOLED 가
 , AMOLED 2 .

2 AMOLED .

1 2 , AMOLED (10) (23) TCP(2
 4)가 . TCP PCB (25) , AMOLED
 , PCB (25) AMOLED

CP AMOLED (10) TCP가 TCP , T
 가 (20) , 가

1 AMOLED PCB 가 ,
 , AMOLED

AMOLED (Compact) , AMOLED ,
 .

1 ,
 ,
 ,
 ,
 .

1 ,
 / 가 .

가

FPC(Flexible Printed Circuit)

FPC

가

Narrow Bezel
(Compact)

AMOLED

AMOLED

AMOLED

AMOLED (30)

(33)

(31)

(32)

(38)

(39)

(Hole Injection Layer, HIL)(34),
(Emitting Layer)(36),

(Hole Transporting Layer, HTL)(35),
(Electron Injection Layer, EIL)(37)

(Red), (Green), (Blue)

(32) ITO
(Ca, Li, Al : Li, Mg : Ag)

(39)

(38)

(40)

(30)

(Sealant)(41)

(40)

(encapsulation)

AMOLED

(32)

/

(42)가

(40)

(40)

(Timing Controller)

(Memory) 가

(40)

(40)

(30)

(43)

(30)

(36)

(43)

(40)

(42)

(30)

(36)

(40)

(30)

(40)

FPC(44)

(40)

FPC(44)

(45)가

AMOLED

AMOLED

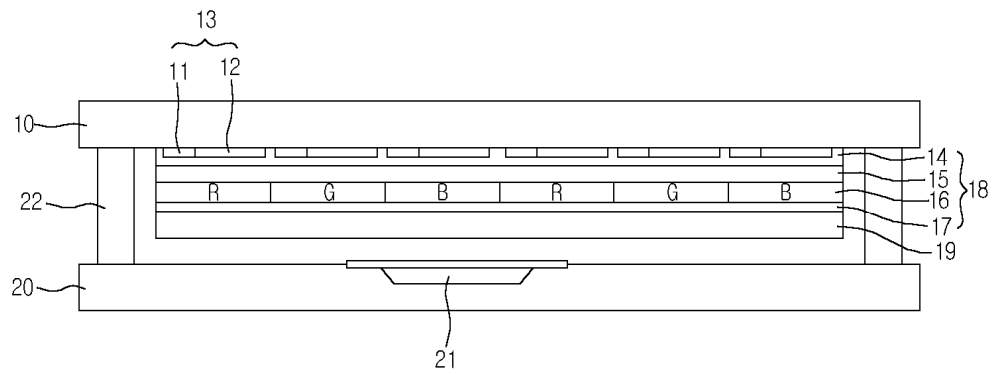
4 AMOLED , 5 A
MOLED .

4 5 AMO
LED .

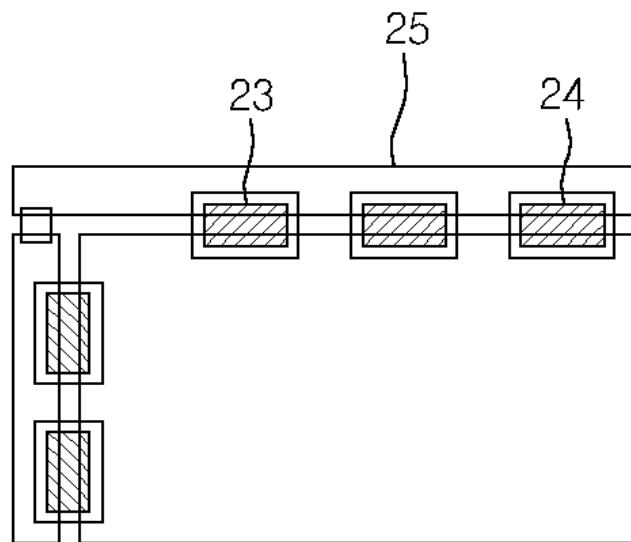
3 4, 5 , (40) (52)가 , ((40) FPC (45) , OLED , (54) 52) 가 가 , (40) OLED (56) (57, 58) (56) (52) (43) OLED (54) (30) (30) (Pixel Array)(62) , (62) (Pixel) (64) , (40) OLED 가 (43) (66, 67, 68)가 . (67, 68, 69) (57, 58, 59) . (40) (30) (41) . , 4 5 , 가 (30) 가 1~2mm (52) 4~5mm 가 , (52) . , 6 AMOLED , 7 A AMOLED , 6 7 , 4 5 , 6 7 가 , 4 5 (70) 가 , AMOLED (Compa ct) , AMOLED . AMOLED (poly) . , , , Narrow Bezel ,

(57)

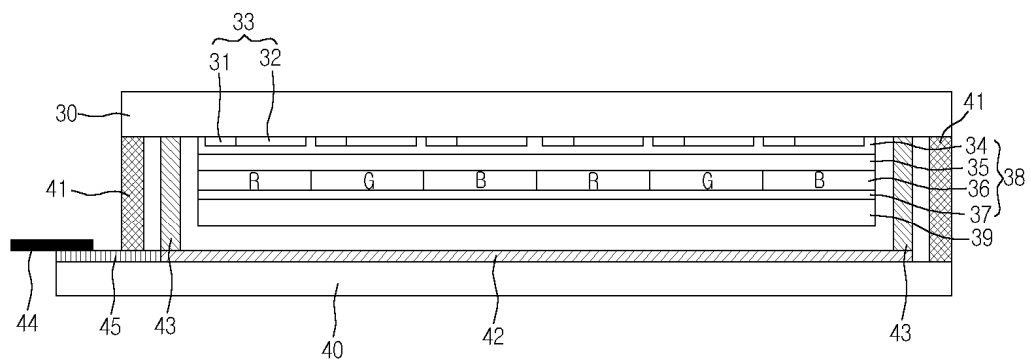
1

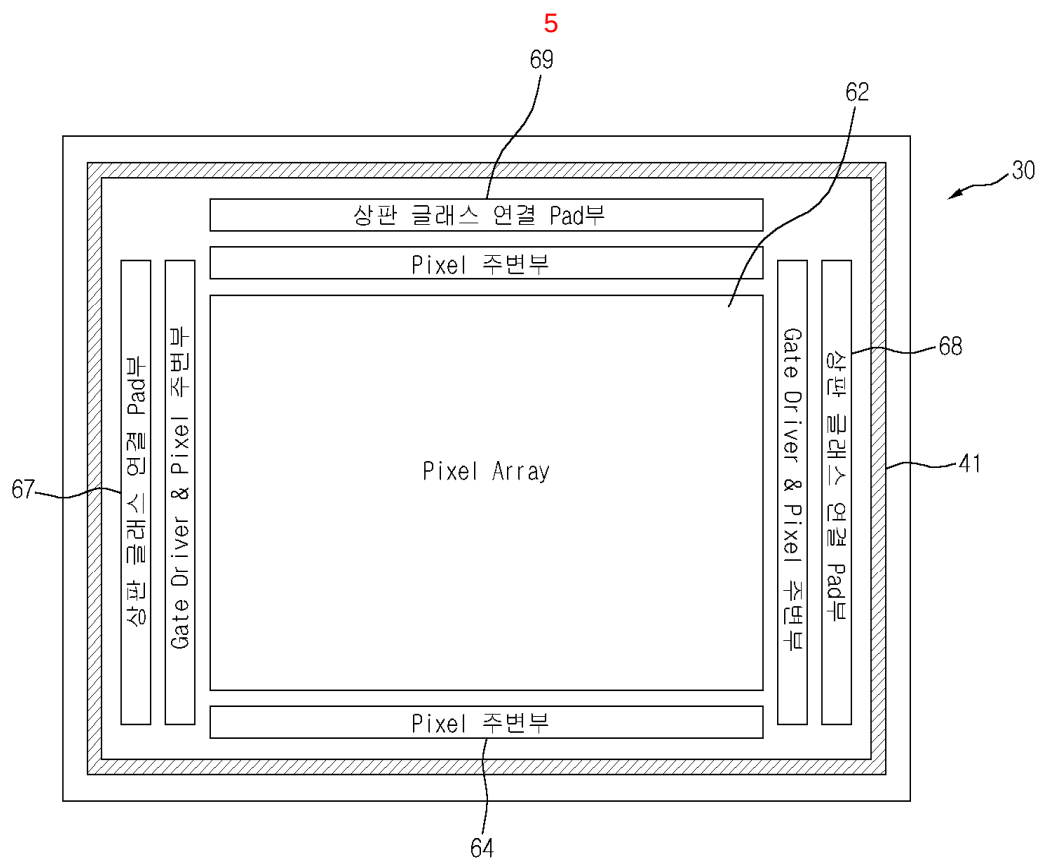
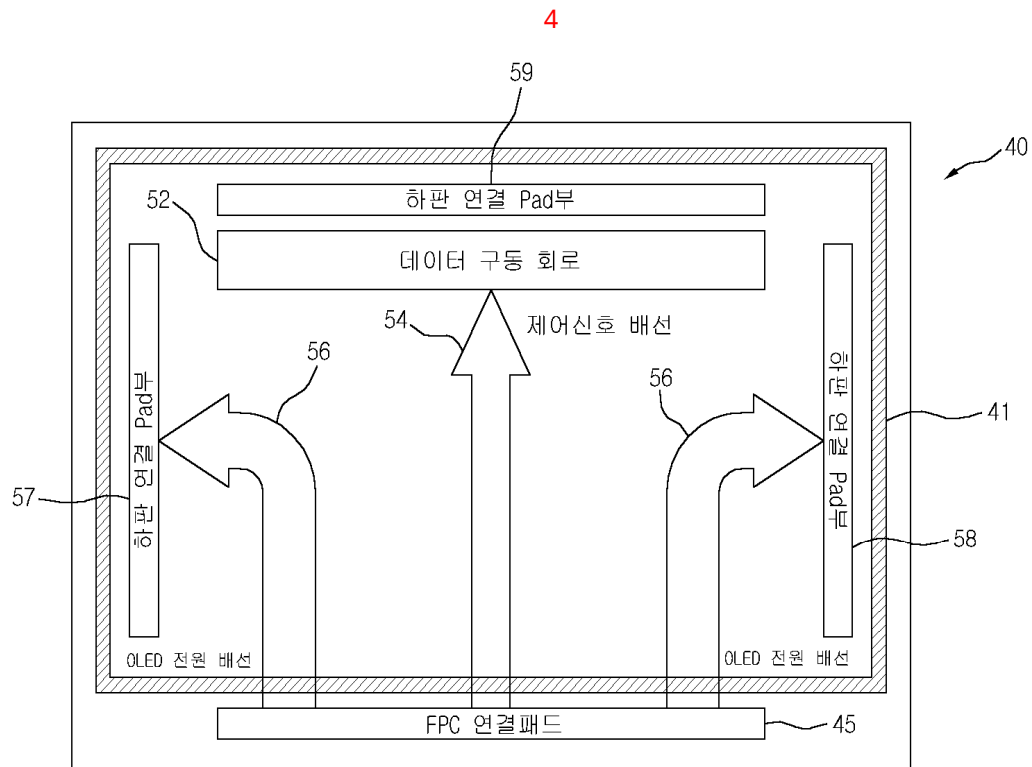


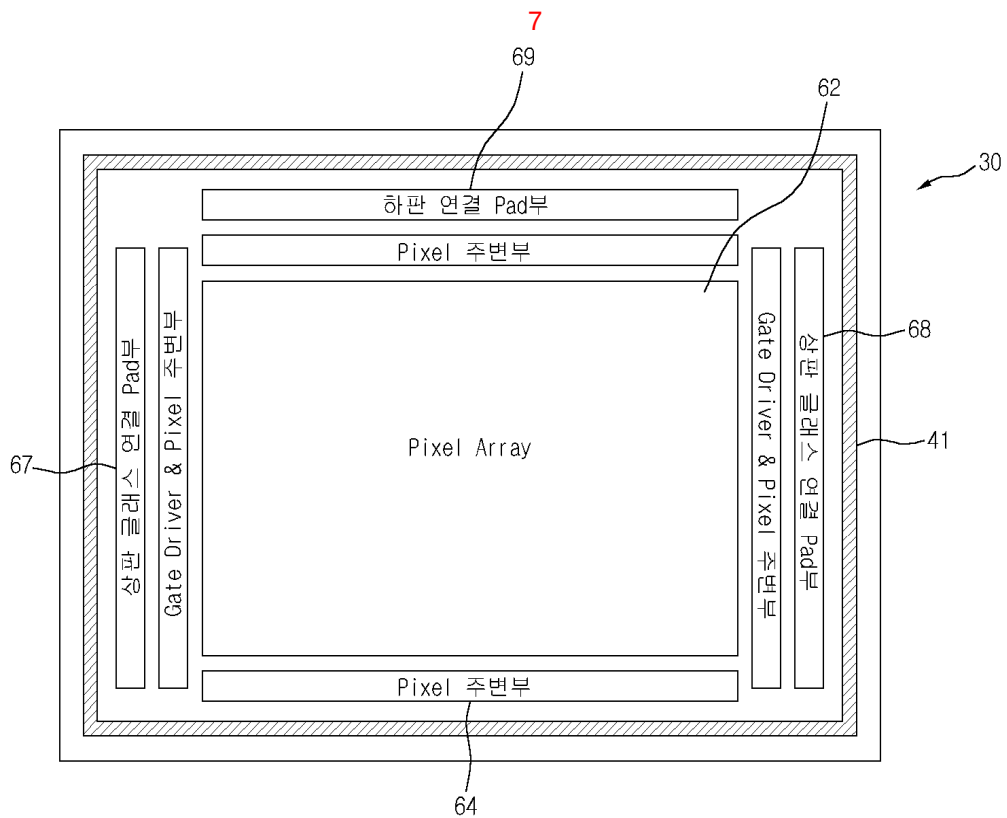
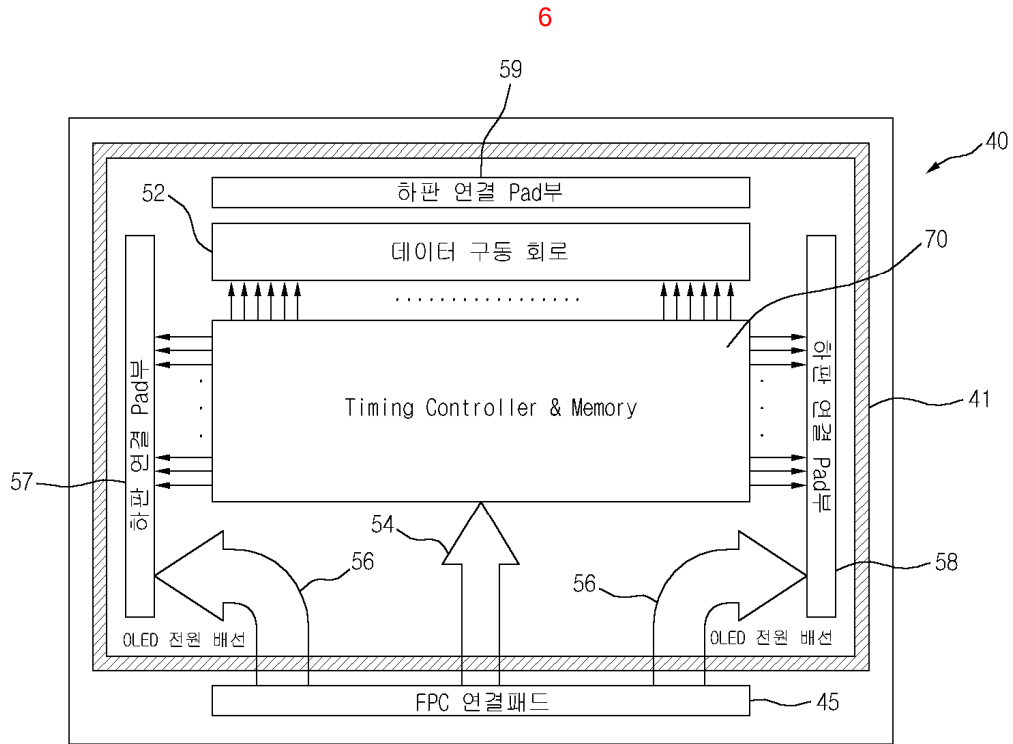
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3







专利名称(译)	有源驱动型有机电致发光器件面板		
公开(公告)号	KR1020050003512A	公开(公告)日	2005-01-12
申请号	KR1020030042407	申请日	2003-06-27
[标]申请(专利权)人(译)	乐金显示有限公司		
申请(专利权)人(译)	LG显示器有限公司		
当前申请(专利权)人(译)	LG显示器有限公司		
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发明人	박재용 박준규		
IPC分类号	H01L27/32 H05B33/22 H01L51/52 H01L29/04		
CPC分类号	H01L51/524 H01L27/3276		
其他公开文献	KR100591798B1		
外部链接	Espacenet		

摘要(译)

关于有源矩阵型有机电致发光元件面板，它包括以矩阵形式排列的第一基板，第二基板和密封剂，而多个薄膜晶体管和多个第一电极由相应的像素构成。其特征在于，驱动电路和提供用于驱动第一电极的信号的多布线形成在第二基板中。关于以基质的形式排列的第一基板，在第一电极上依次形成有机发光层和第二电极。形成第二基板，使得上部防止在氧气和水分的第二电极的上部劣化。密封剂粘合地安装第一和第二基板。根据本发明，可以组织窄边框面板。并且它具有增强电路集成度的优点，并且它可以实现轻质叶片类型的AMOLED面板结构并且比现有的AMOLED面板结构紧凑。

