

.) 가 .

2 IPS .

2 , IPS (60) (10)
, (10, 60) , (50) 가 (10) (22)
(24) . IPS , (22) (24) (56)
(50) .

3a 3b , IPS (off)/ (on) (52)

3a , (52) 가 .

3b , (22) (24) (52a)
, (22) (24) (52b) (24)
(26) 가 .

4 IPS .

, (P) , (120, 130) , (120, 130)
, (120, 130) (S) . (T)가

(T) (120) (122) , (122) (118) ,
(130) (132) , (132) (134)
(118) (active layer) (ohmic contact layer) .

(P) , (120) (139) , (139)
(138) .

, (137) (P) 1 (137a) , 1 (137a
) (137b) (136) , (136) 2

7b) , (S) , 1 () , 2 2 (13

, (120, 130) () ()
140, 142)가 (140, 142) , (144, 146)
(141, 143) (140, 142)

, IPS (138) (136)
) , (138) (136
TO(Indium - tin - oxide) , . |

, IPS , (138) (122)
, (136, 137a, 137b) (132, 134)
, () .

가 IPS 가 .

, IPS , 4 , (138) (136)가 ,

, IPS (136) 5 (138) (191)가 가
 5 4 -
 , IPS (136) (138) (191) IPS (191)
 5 , IPS (138) (130) (130)
 (136) (138) (191) (192, 193)가 ,
 (138), (130) (136) (191) ,
 (136) (138) (191) ,
 a, 137b) (130) (138) (120) (136, 137)
 (130) , 4 (139)
 (139) () (130) (130)
 (crosstalk)가 .

가 , (crosstalk)
 가 , 가

1 ;
 ; 가 ; 2
 ;
 ; 1 ;
 가 ; 2 ;
 ; 1 ;
 ; 2

(Micro Deflection mode : MD, MD .)

MD , MD 가
 IPS , MD
 (deflection) (diffraction)
 6a 6b , 2 (block) MD
 (276) 6a

MD 가 가 , (276) (236) 가 , 4
 , (250) (236) (276) 가 4 가 (domain)(D1, D2, D3, D4) 가
 D1 가 , D2, D3, D4 , (236) (276)
 D4) 가 가 (D1, D2, D3, D4) D , (D1, D2, D3,
 , , , , 가 .
 , D (P) D1, D2, D3, D4 D 가 가 가
 , D D 가 , , 가 가
 , 9 10 , 2 MD
 9 MD , 10 . 9 10
 , 6a , 2 MD
 , 9 , MD
 (210) 가 (Al) (220) (222) .
 , (Mo) (hillock) (Al alloy) , (Cr)
 , (220) (222) (210) ()
 , (218) , (232, 234) 가 (236, 23
 7a, 237b) (218)
 , (236, 237a, 237b) (232, 234)
 (232, 234)
 , (236, 237a, 237b) (232, 234)
 , (218) (210) , (photo lithography)
 , (232, 234) 가 (236, 237a, 237b)
 , (236, 237a, 237b) (232, 234)
 (232, 234) (236, 237a, 237b) (Cr), (Mo), (W), (Ta)
 , (236, 237a, 237b) (232, 234)
 , (218) (210) , (photo lithography)
 , () (232, 234) (232, 234) (210)
 가 (210) (234) ()
 가 (236, 237a, 237b) , (236, 237a, 237b) ITO IZO

2 , , 가 ;

2.
1 ,

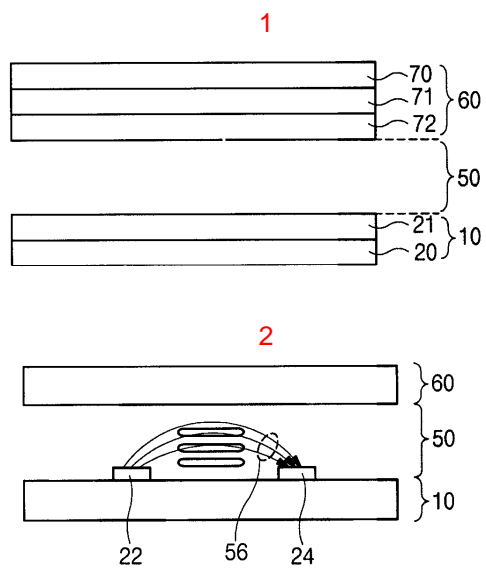
3.
1 ,

4.
1 ;

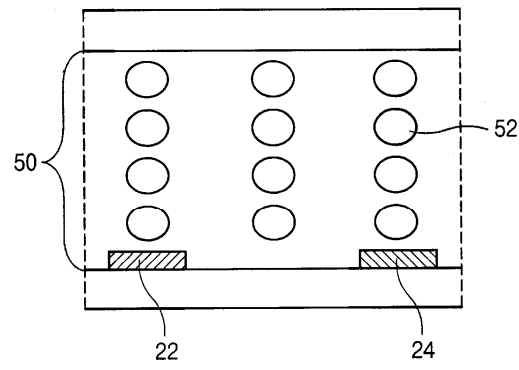
;

, 가 ;

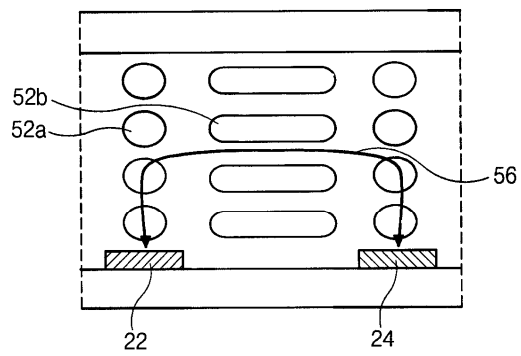
2 , , 가 ;



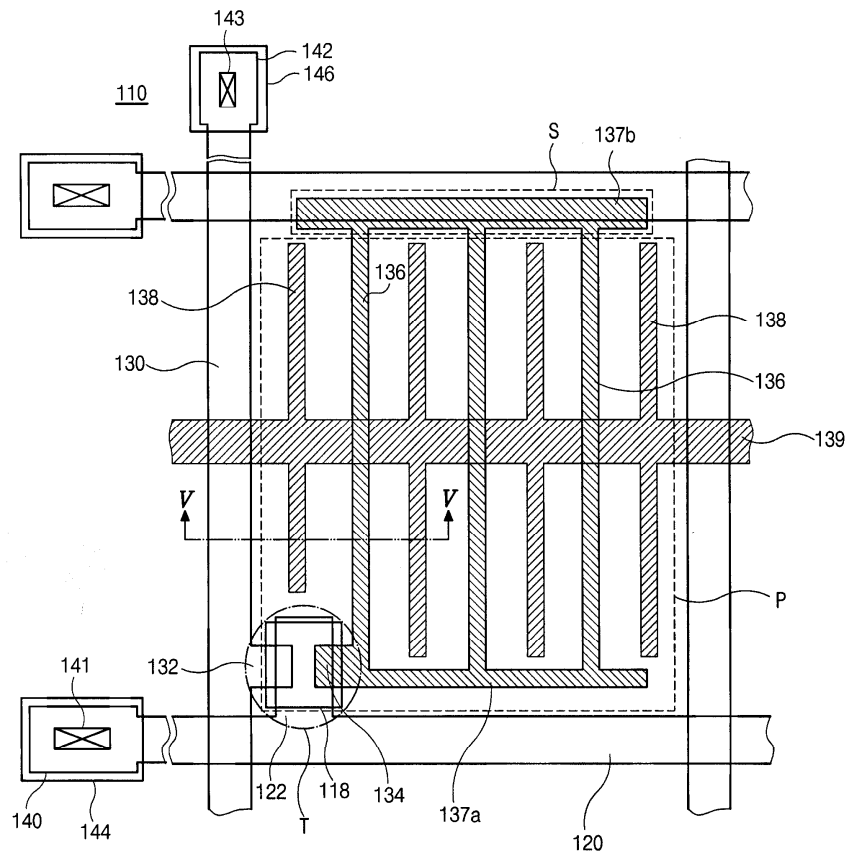
3a

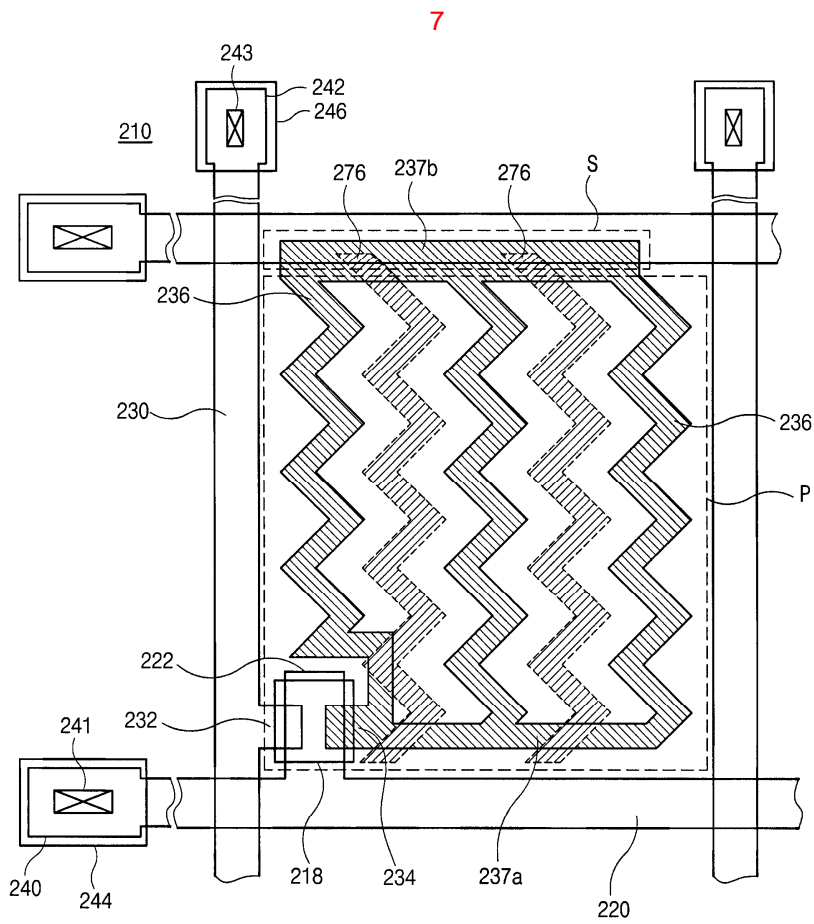
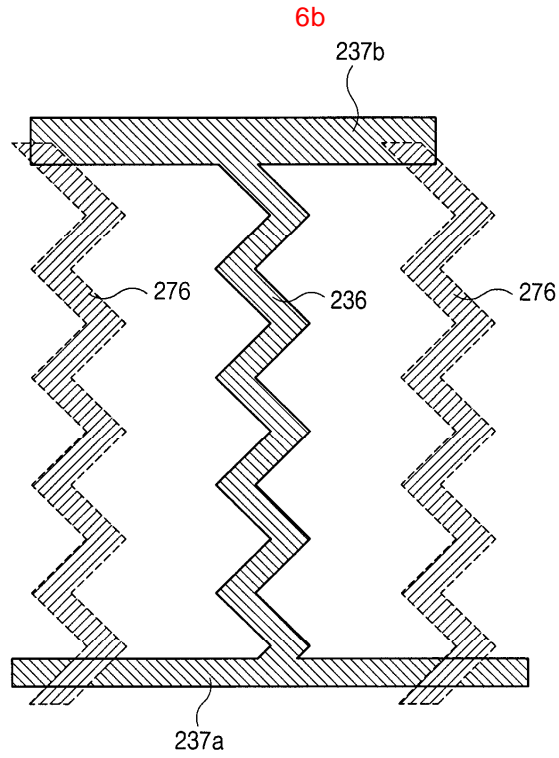


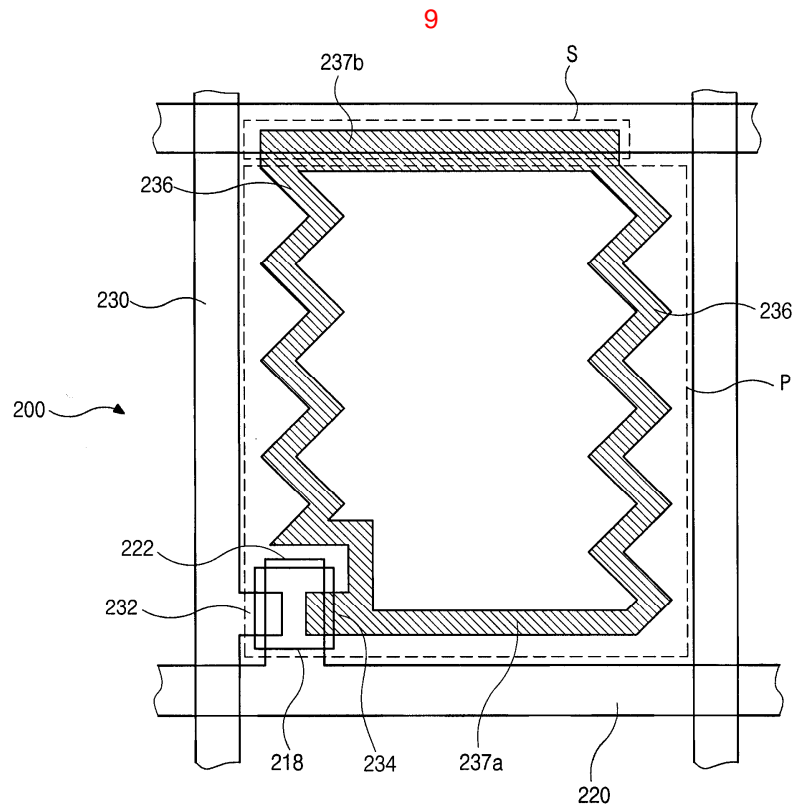
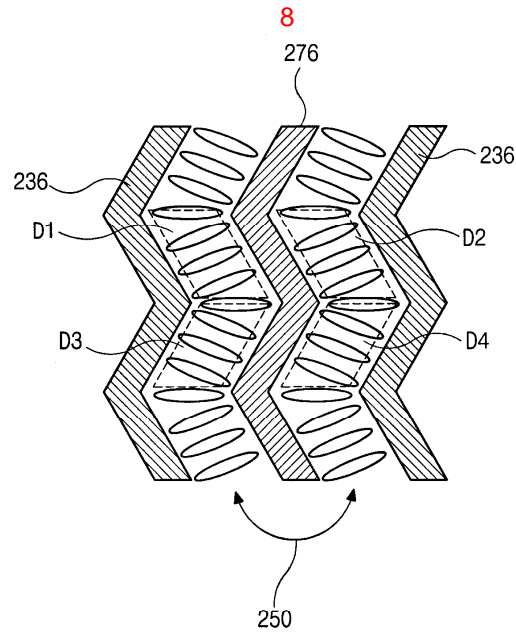
3b

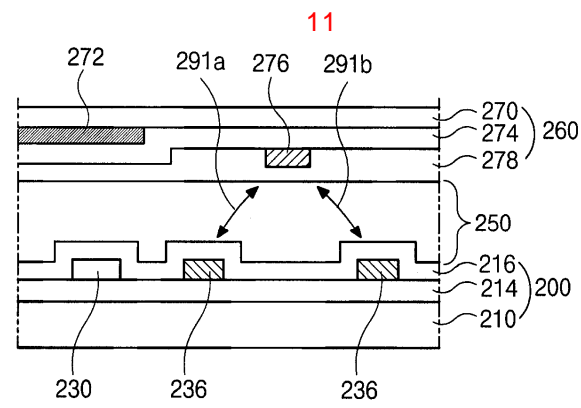
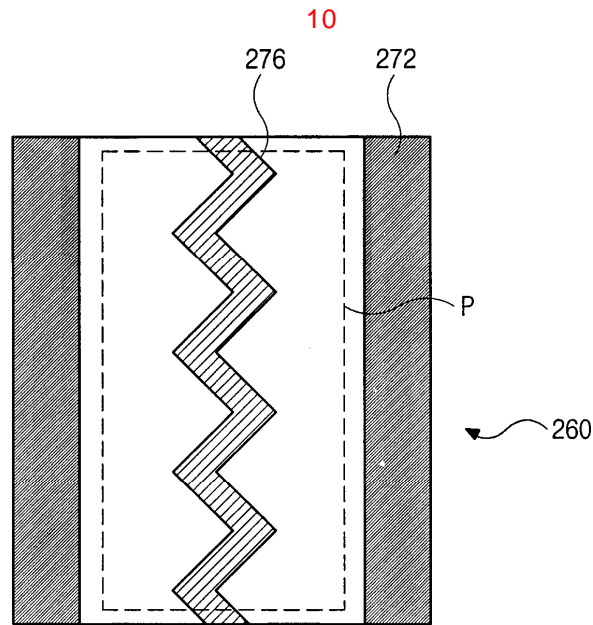


4









专利名称(译)	液晶显示装置及其制造方法		
公开(公告)号	KR1020040099778A	公开(公告)日	2004-12-02
申请号	KR1020030031879	申请日	2003-05-20
[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		
[标]发明人	PARK KUHYUN 박구현		
发明人	박구현		
IPC分类号	G02F1/1343		
CPC分类号	E06B3/99		
代理人(译)	贞媛KI		
外部链接	Espacenet		

摘要(译)

目的：提供一种液晶显示器及其制造方法，以通过形成在液晶颗粒的排列方向上不同的畴来改善视角特性。组成：栅极线（220）和数据线（230）在阵列基板上彼此交叉。薄膜晶体管放置在栅极线与数据线交叉的部分，每个薄膜晶体管由栅极，源极和漏极（232,234）以及半导体层（218）形成。像素电极（236，237a，237b）形成为之字形，并与漏极连接。公共电极（276）以Z字形形成在滤色器基板上，并与像素电极平行地分开。液晶层介于像素电极和公共电极之间。

