

(19) (KR)
 (12) (B1)

(51) . Int. Cl. ⁷ G02F 1/1333	(45) (11) (24)	2004 10 01 10-0450701 2004 09 20
(21)	10-2001-0087518	(65)
(22)	2001 12 28	(43)

(73) .
20

(72) 454 207-1107

37271-79

(74) .
:

(54) _____

, / (scribe break)

1

2

7

1 ,
2 ,
3 ,
4a 4c 3 - , - , - ,
5 , 1 ,

6a	6d	5	-	-	,	-	,	,	1
7		2			,				
8a	8d	9a		9d	7	-	, XI - XI, XII - XII, XIII - XIII, XIV - XIV	,	,
2						.			
<						>			
200 :		201 :							
202 :		204 :							
206 :		208 :							
210 :	1	214 :							
218 :		220 :							
224 :		226 :							
228 :	2	234 :							
236 :	2	1							
238 :	2	2							
240 :		242 :							
246 :	1	1							
248 :	2	2							
250 :		254 :							
256 :	1	258 :							
260 :	2	262, 264 :							

(LCD)

가

가 가

가

가

()

() ,

(AM-LCD : Active Matrix LCD)

가

1

(6)
(5) ,
(22)

(P) (, ,) (8)

(7)
(17)

(14)

(22)

,

(13) (T)가

(15)

(P)

(P)
(17)

(15)
(indium-tin-oxide : ITO)

(24)

(88)

(13)

(15)

2
 st1 , TFT (TFT)가
 st2 , (Alignment layer) (Rubbing)
 , (rubbing)
 가 , (Display)

st3 (seal pattern) , 가

st4 (Spacer) ,
 가 ,

st6 (st5).
 st1 st5 ,
 ,
 ,
 가 가 ,
 st7 cm2 μm ,
 ,
 ,
 ,
 / (scribe/break) ,
 ,
 ,
 3
 3
 2) , 가 (11) (5) (22) , (2)
) (13) (13) (13) (24)
 , (15) (P) (15)
 (P) (26) (17) (30) (32) (36,38)
 (T)가
 (24,26) , 가 (24,26) (D) ,
 , (24,26)
 , (13,15) (60) (24,26) (62) (24,26)
 st8 (5) , 가 / (link line)(42,46)
 (D) , (scribe/break),
 , 4a 4c 4c
 4a 4c 3 - , - , - ,
 , 4a , , (22) , (AI),
 (42) , (42) (3 13) ,
 , (30) (3 13) (24)
 , (42) (24)
 2700

(22) (24) (SiN_x) (42) (SiO₂) (30) (3 13) 1
 , (31) 4000 , , , ,
 , 4b (31) (34) (30) (31) (island)
 (32) (32) (34) (a-Si:H), (34) n+
 p+ , (Ti) (32) (34) (22) (Cr), (W), (Mo),
 , (36,38) (15) (36) (36) (15) (34)
 (26) (26) (36) (32) (38) (46) (46) (46) 1500 가 .
 , , , (32) (36,38) (carrier) 가 .
 (34) (32) (15) (22) (BCB) (Acryl) (re
 el) , 2000 가 . (50) .
 sin) , (50) (38) (54) (52) (56) (24)
 , (26) (4c) (IZO) (P) (17) (22) (26) (ITO)
 - , 가 . (24) (62) .
 (38) (60)

가 . , 6000
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 1

1 (scratch) 2 (dummy line)

1 2 ; ;
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 2 ; , ;
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 1 , 1 ,
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 1 , 2 ;
 2 ; , ;
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 ; ; 1 ,
 1 , 1 ,
 2 , 2 ;
 - - - 1 - - - 1
 5 1 , (99) 가 ()(100) ,
 (100) , (100) (101) 가 ()(106) ,
 , (106) (106) (P) . (122)
 (P) (106) (134) (102) , (102)
 가 , (108) . (122) (124) ,
 , (122) (122) (122) (104) (126)
 (118,120) (124) (122) (T) (112)
 (106) (106) , , 1 (109,116)
 (109,116) (124) , , (109) (112)
 , 2 (116) , 1 (109,116) (112)
 , (109,116) (124)
 0b) (102) (124) (140a, 14
 , , (100) (101) , (124)
 가 , (109,116)
 , , (102)
 6a 6d , , 가

6a	6d	5	- , - , -	,	1		
, 6a			, (100)	(AI),			
8)		(5 106)	, (1 106)	(109)	(102)	(104)	(10 108)
, 1		(104) (109)	2700	(102)	(109)	(102)	(108)
SiN _x)		(108) (SiO ₂)		(110)	4000	가 .	(1)
(110)					(110)	(island)	
, (114)		(104)			(a-si:H)		(112)
act layer)		(112)	(p+ n+a-Si:H)				(ohmic cont
, (116)					1	(109)	2
, 6b		2000	가 .				
(Cr), (W),		,	(112)		(114)	(116)	(100)
(118)		(114) (122)	(Mo), (Ti)			(118,120)	,
, (122)				(124)			(124)
, (126)							
, (109,116)				(124)			,
(124)		(122)	(124)	1500			
, (122)		(118)	(124)				
, (114)				(120)			2
				(112)			(116)
channel)		(112)		(118,120)	(carrier)가		(tive c
, 6c							
(SiO ₂)				(122)	(100)	가 .	(SiN _x) (12
8)					2000		
, (108)		(128)	(126)	(120)	(130)	(129)	,
							(132)
, (108)				(108,126)	(130,132)		
, 6d		()		(128)			
		(IZO)			(100)		(ITO)
(120)							,
, 가							
(136)				(P)	(134)		
, (138)				(108)	(126)		
, (102)						420	(14
0a,140b)							
2		(116)	(124)	2700	가 .	(109)	2000
		7920			1	10700	가 .
,				3000			
, (124)							
-- 2 --							
2							
, 7		2					
			가 .				

(214)	(218)	(220)	(carrier)가
,	(224)	1	(210)
1	(210)	2	(206)
8c	9c	,	(224)
(228)	(200)	(SiN _x)	(218,220)
,	(230)	(222)	2
(228)	(232)	(SiO ₂)	,
2	(238)	(220)	(234)
,	(226)	(236)	2
2	(248)	(238)	,
(250)	,	(240)	,
TO)	8d	9d	(210)
,	(IZO)	(242)	1
(220)	,	(246)	2
,	가	(224)	,
(206)	(P)	(210)	(210)
,	(208)	1	(200)
1	2	1	,
,	(206)	(252)	,
1	(256)	1	,
,	(226)	2	가
1	(210)	가	2
,	(224)	가	,
1	(210)	2	가
,	(258)	(246)	,
(256)	2	(248)	가
,	가	(201)	,
(258)	2	(210,228)	(201)
,	(206)	2	,
,	(260)	(210,228)	,
,	(206)	(228)	(224)
,	(212)	(224)	,
(206)	(230)	(210)	,
,	2	1	,
,	(228)	(218)	,
2	2	2	,

(57)

1

2.

1 ,

3.

1 2 ,

1

,

2

4.

2 ,

(a-Si:H)

5.

2 ,

6.

1 ,

7.

1 6 ,

(ITO)

(IZO)

8.

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1

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1

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2

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9.

8 ,

10.

8 9 ,

(ITO)

(IZO)

11.

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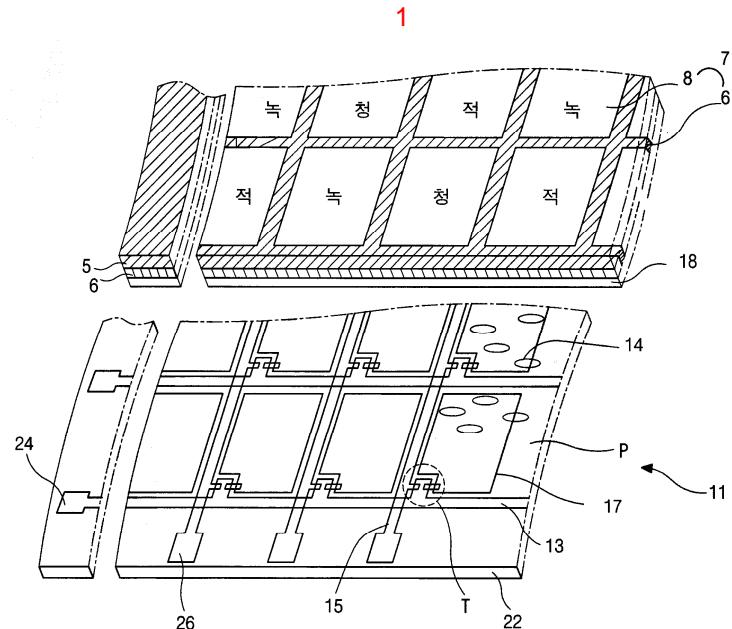
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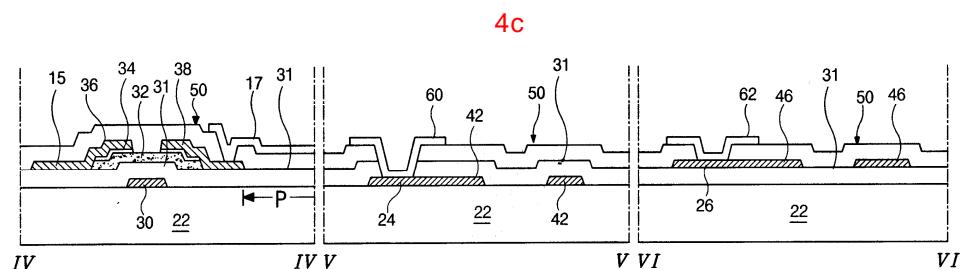
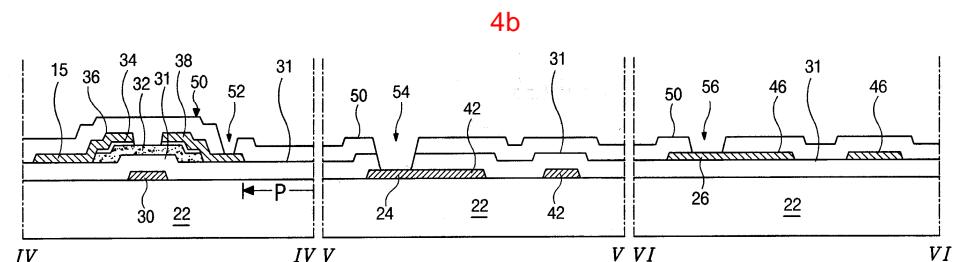
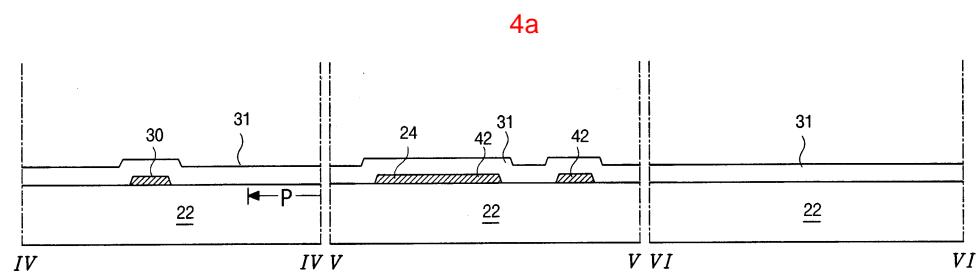
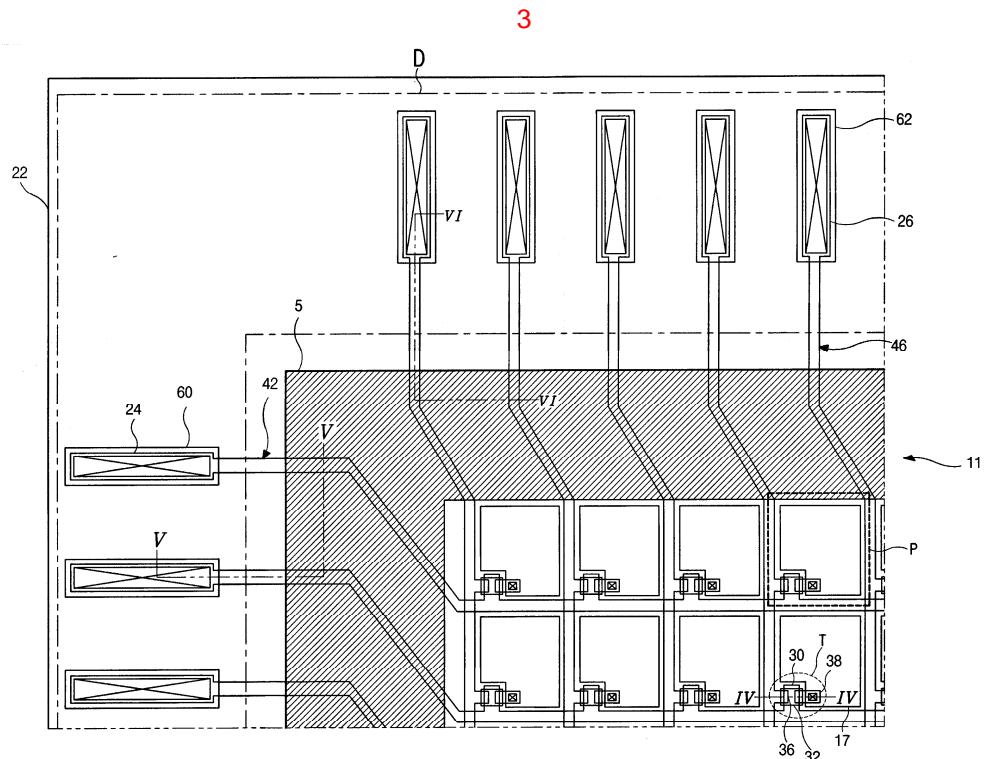
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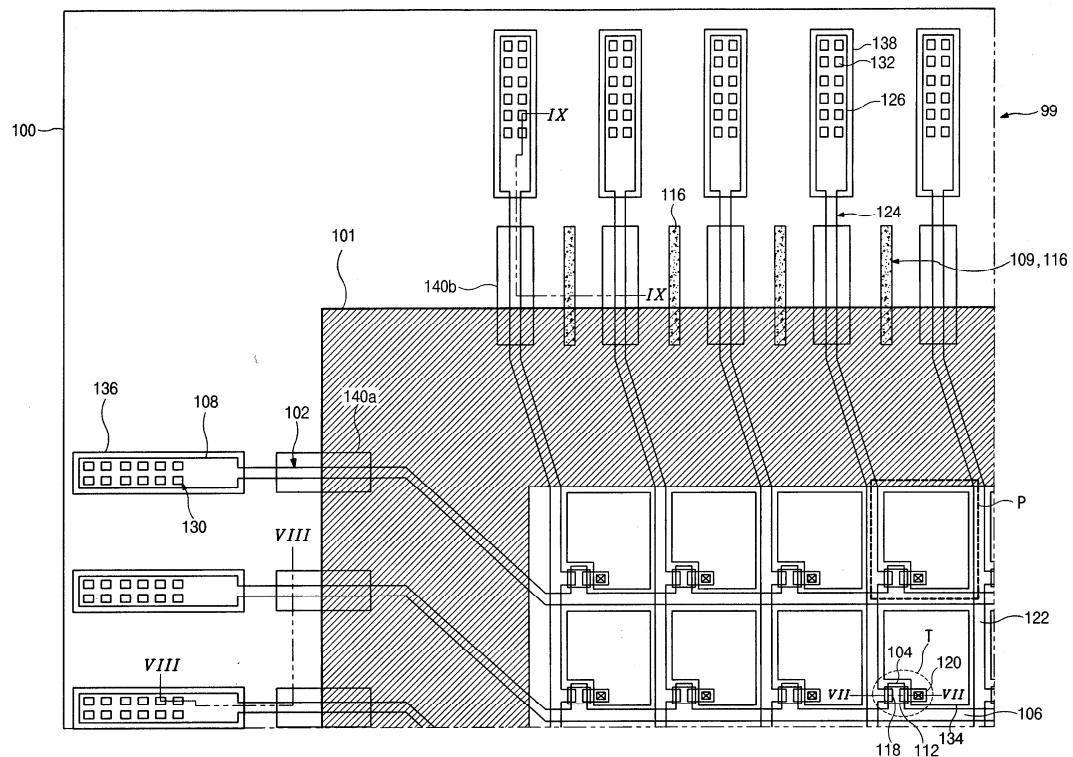
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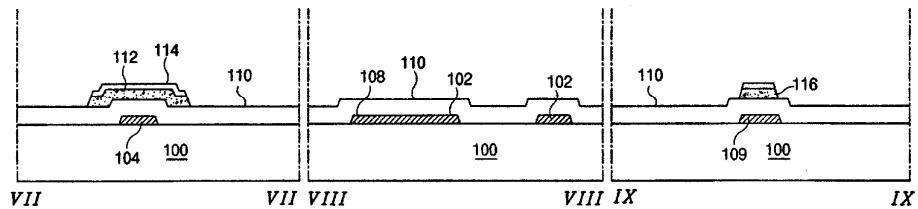




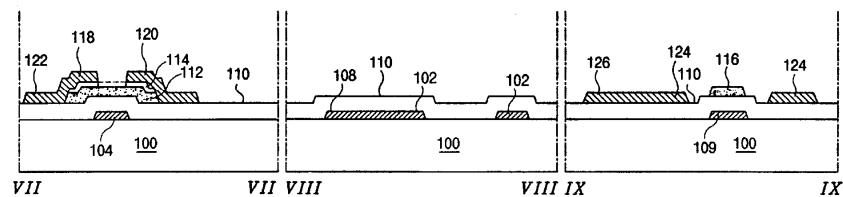
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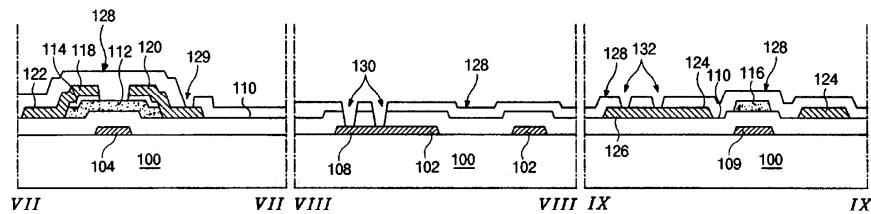
6a



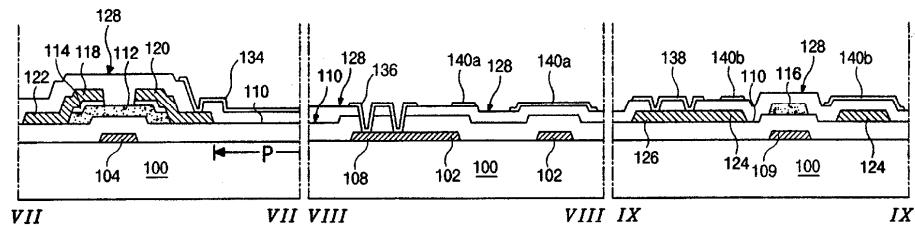
6b



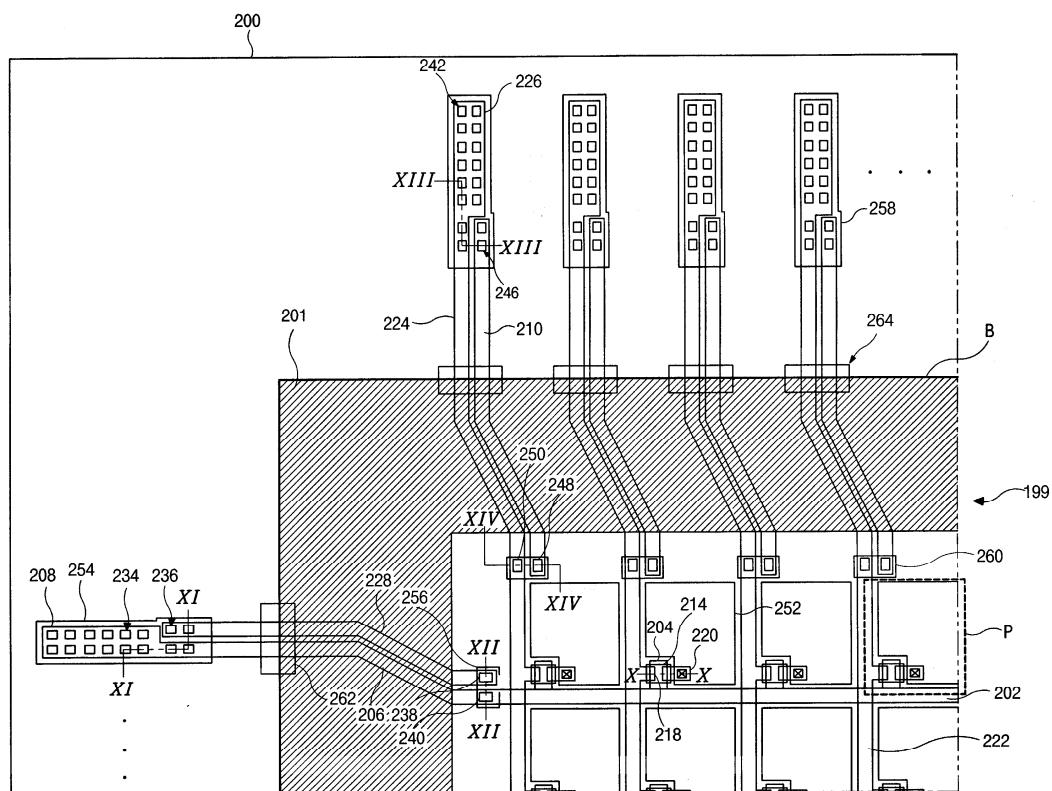
6c



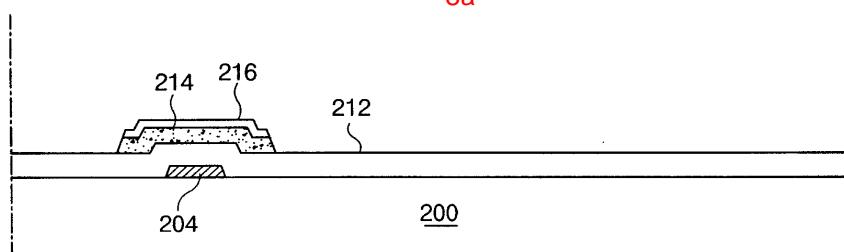
6d



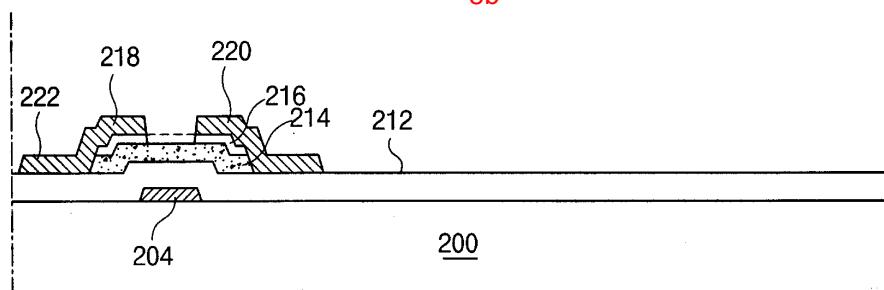
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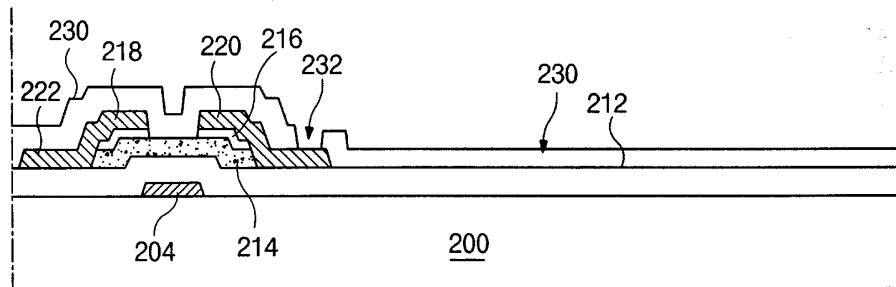
8a



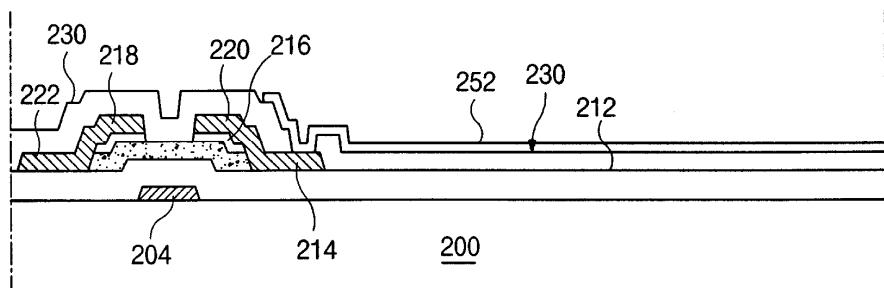
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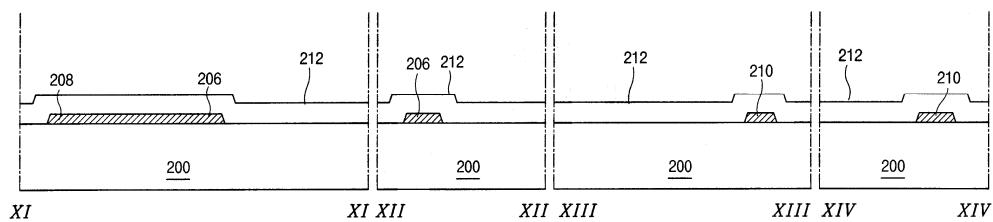
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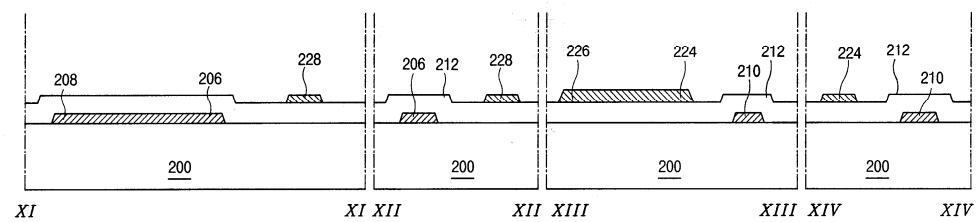
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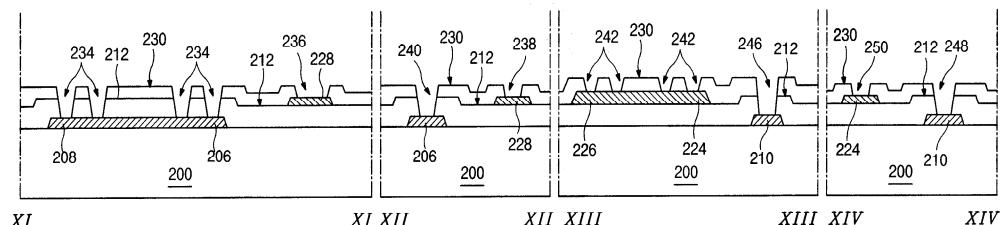
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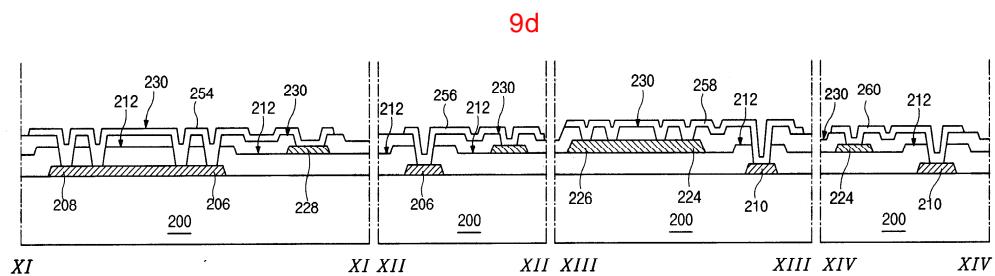


9b



9c





专利名称(译)	用于液晶显示装置的阵列基板及其制造方法		
公开(公告)号	KR100450701B1	公开(公告)日	2004-10-01
申请号	KR1020010087518	申请日	2001-12-28
[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 HYUNTAK 박현탁 LEE CHOONGUN 이종언		
发明人	박현탁 이종언		
IPC分类号	G02F1/1333 G02F1/1345		
CPC分类号	G02F1/133351 G02F1/1345 G02F1/13458		
代理人(译)	贞媛KI		
其他公开文献	KR1020030057141A		
外部链接	Espacenet		

摘要(译)

一种用于液晶显示装置的阵列基板，包括基板，栅极线和基板上的栅极连接线。栅极连接线从栅极线延伸。数据线和数据链接线跨越栅极线和栅极连接线。数据线和栅极线的交叉限定了像素区域。数据链接线从数据线扩展。薄膜晶体管连接到栅极线和数据线。虚设图案设置在相邻的数据连接线之间，像素电极设置在像素区域处。

