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3 4 1

5a 5f 6a 6f 1

7a 7b 2

8a 8b 3

9a 9b 4

10a 10b 5

11a 11b 6

(flat panel display) 가

(liquid crystal display)가 가

(R), (G), (B) 가

1

, 1 (11) (12) (12) ,
 (SiN_x) (SiO₂) (13) (14)
 (12) (13) (15a, 15b) .
 (15a, 15b) (16a, 16b) (12) (T) (16a, 16b)
 (16a, 16b) (12) (16a)
 (17) (16a, 16b) (17) (16b) (17c) 가 .
 (17) (18) (18)
 (17c) (16b) .
 , 1 (11) 1 (11) 가 2 (21)
 , 2 (21) (22)가 (T) 가
 (22) (18) (18) 가
 (T) 가 (photo current)가 (22)
 (23a, 23b)가 (23a, 23b) , ,
 (24) (23a, 23b)
 , (18) (24) (30) .
 가
 (misalign)
 ,
 , 가 ,
 (thin film transistor on color filter : TOC)
 ,
 , 가 (align key) ,
 TOC 가 ,
 가 .

가
 1 가
 가
 1
 2
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 1
 1
 1 2
 가 가
 가
 2
 2 (120) (100) (110) (110) 가

4 가 (210) (211)
 1 (231)가 (3 212a 212b) 2
 (232)가 (231, 232) (233)
 (235) (239)

1 TOC 가 (233)
 (231, 232) (231, 232) (231, 232)

1 TOC 5a 5f 6a 6f

5a 6a (210) (212a, 212b) 2 (232) (231, 232)
 211) 1 (231) 가 (212a, 212b) 2 (232) (231, 232)
 (212a, 212b) 가 (212a, 212b) 2 (232) (231, 232)

32) 가 (212a, 212b)

5b 6b (212a, 212b) 2 (232) (213, 233)
 233) (214a, 234a)

6b (320) 3 (321) 1 2 (231, 232)
 32) 5b (311) 가 (310) (233)
 (231, 232) (234a)

5b (310) 6b (320) (stepper)

(214a, 234a)

5c 6c (5b 214a, 6b 234a) (214)
 (214) 1 가 ()

5d 6d (214) (210) (215, 235)
 () ()

(216) (217c)

5e 6e (218a) (218b) (218a) (218b)
 (5d 217c) (217c) (217a, 217b) (218a) (218b)
 218b) (214) 가 (231, 232)

() (218a) 2 (214)
 (218a, 218b)

(T1)

239) 5f 6f (218a, 218b) (210) (219, (218b) (219c) (219) (219) (219) (benzocyclobutene) (220) (219) (219c) (218b) (indium - tin - oxide) (indium - zinc - oxide) (220)

1 TOC

2 7a 7b 2 가

7a 7b (410) (412a, 412b) (432)가 (413, 433) (419) (420) (413) (420) (419) (T2)가 (419c) (T2) (420) (419) (432)가 (433) (435) (439)

5a 2 5f 6a 6f 1 1

2

3 8a 8b

8a 3 (510) (512a, 512b)가 (513) (513) (519) (519) (520) (520) (T3)가 (519c) (T3) (520) (519) (532)가 (510) (8a 512a 512b) (535) (539)

가 1 2 3 (532) (532) (532)

, 가 가 ,

가

(57)

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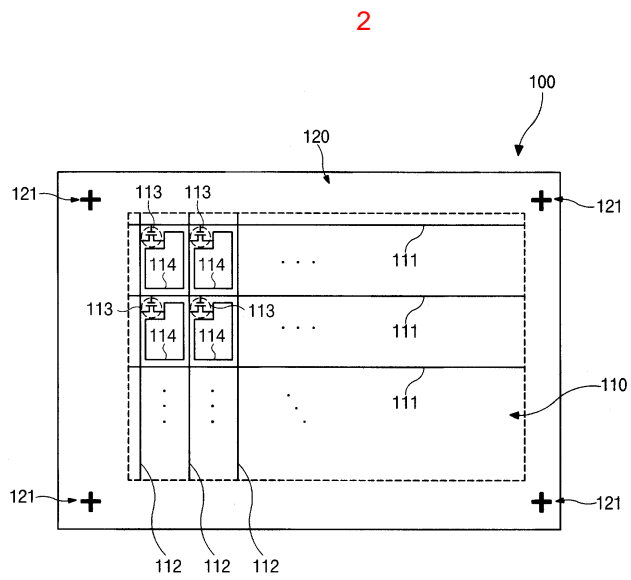
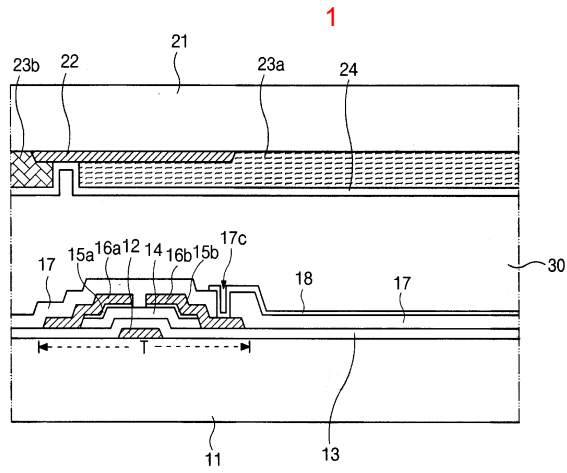
8

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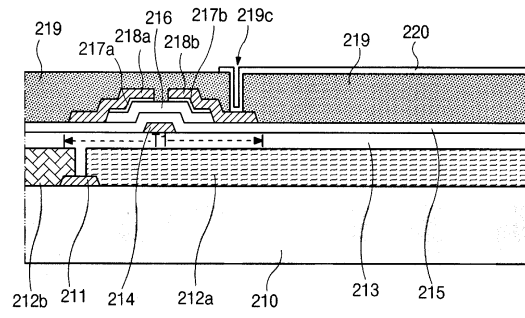
1

2

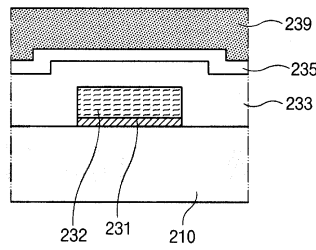
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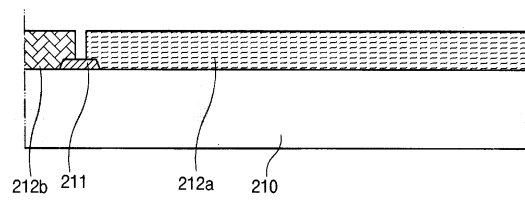
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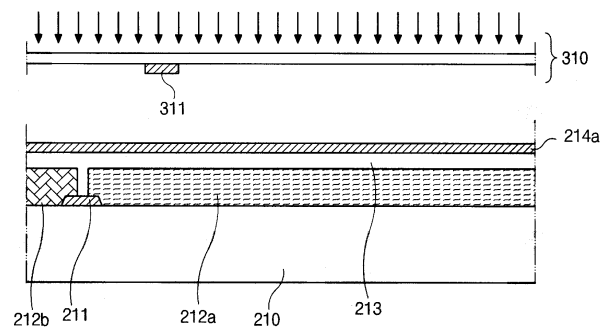
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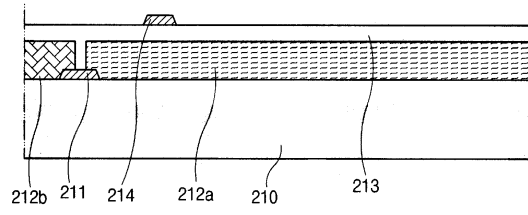
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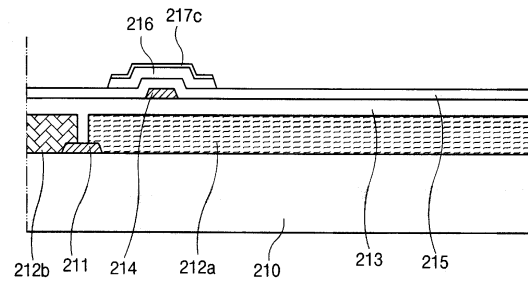
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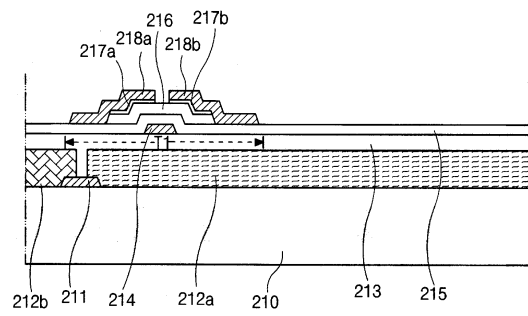
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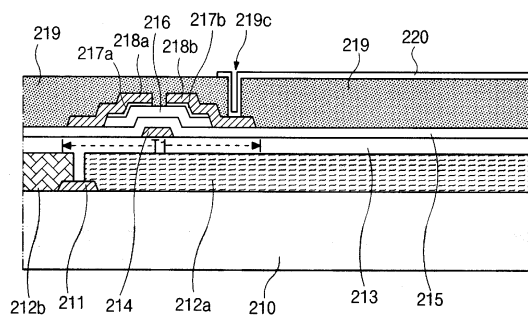
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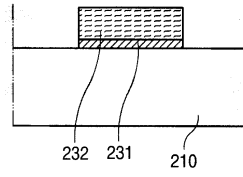
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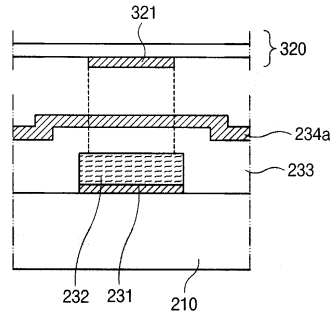
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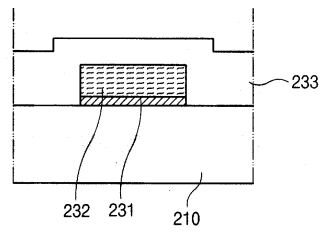
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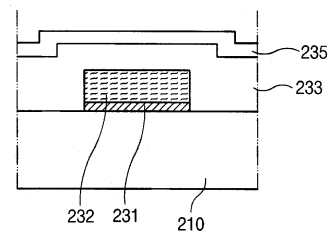
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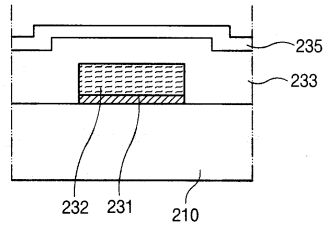
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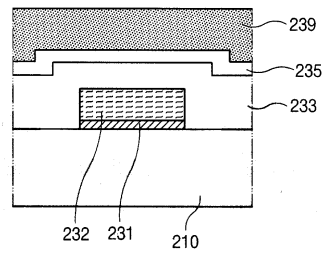
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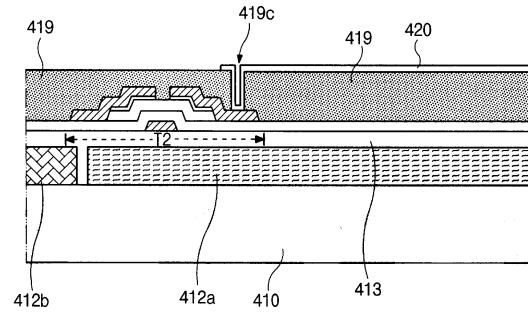
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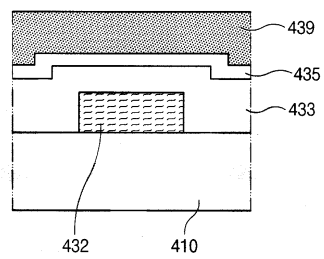
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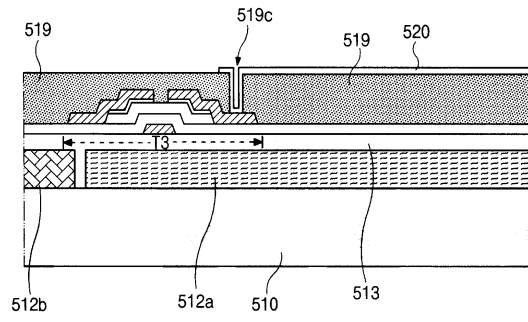
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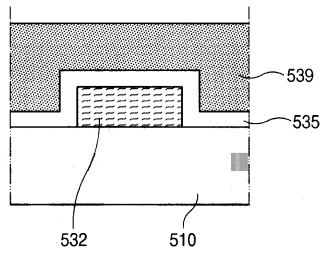
7b



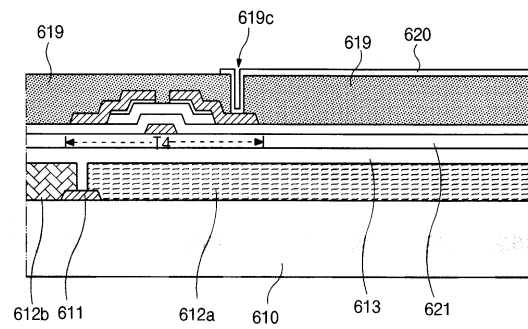
8a



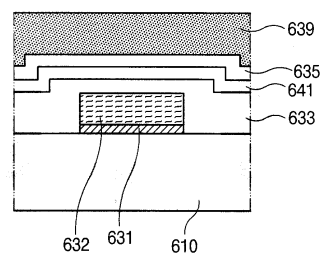
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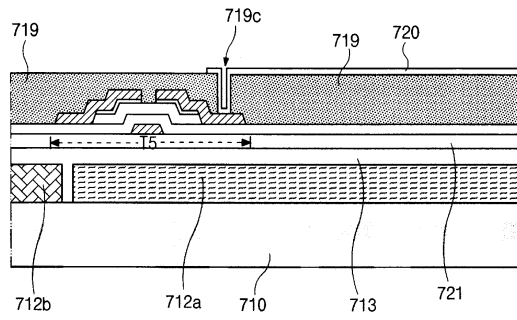
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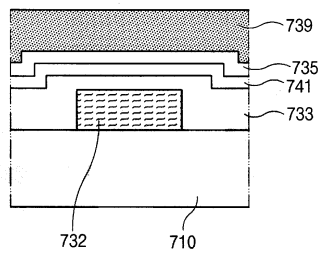
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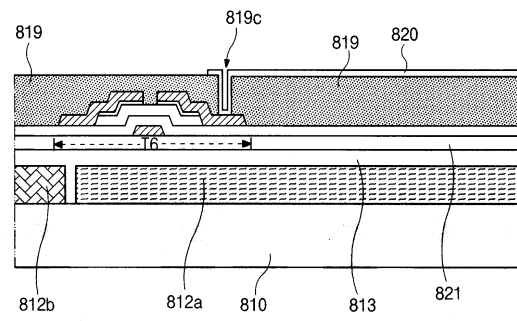
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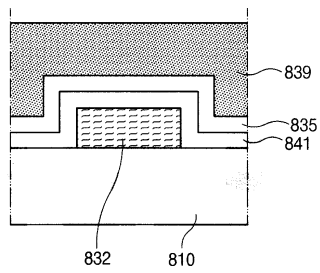
10b



11a



11b



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	KR1020030011985A	公开(公告)日	2003-02-12
申请号	KR1020010045800	申请日	2001-07-30
[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		
[标]发明人	KIM WOONGKWON 김웅권 PARK SEUNGRYUL 박승렬		
发明人	김웅권 박승렬		
IPC分类号	G02F1/136 G02F1/1333 G02F1/1335 G02F1/1362		
CPC分类号	G02F1/133514 G02F2001/133354 G02F2001/136222 G02F2201/40		
其他公开文献	KR100808466B1		
外部链接	Espacenet		

摘要(译)

本发明涉及一种用于包括滤色器的液晶显示器的阵列基板及其制造方法。通过重复沉积和图案化多个薄膜的工艺来形成阵列基板。当在薄膜晶体管下形成滤色器以提高开口率时，其上的滤色器和外涂层较厚，如果在形成滤光器，外涂层等之后由不透明金属材料形成布线，则不能识别对准键，并且可能发生诸如图案未对准的问题。在根据本发明的用于液晶显示器的阵列基板中，在薄膜晶体管下方形成滤色器以改善液晶显示装置的孔径比，以及滤色器材料和黑色矩阵材料，通过形成对准键，防止了处理增加，同时防止在不透明膜的图案化期间图案的未对准。4
指数方面 孔径比，不对中， - 1 -

