

5 2 .
 6 3 .
 7 6 II-II' .
 8 4 .

*** ***

101, 201,301,401:
 101a, 201a, 301a, 401a: 1
 103, 203, 303, 403:
 104, 204, 304, 404:
 106, 206, 306, 406:
 107, 207, 307, 407:
 114, 214, 314, 414:
 104a, 204a, 314a, 414a: 2

(flat panel display device) (twisted nemati
 c mode) (liquid crystal display device) 가 (liquid crystal displa
 (refractive anisotropy) ,
 y panel) 가 .
 (In Pla
 ne Switching mode LCD)가
 1 , 1a , 1b
 1a I-I' .
 , 1 (10) (1) (3)
 (1) (3) 가
 (1) (3) (1a'), (5) / (2a,2b)
 (thin film transistor;9)가 , (1a') / (2a,2b)
 (1) (3) , (8)

(6) (7) (1) (3) (4) (6) (1)

(9) (4) (2b) (7) / (2a,2b) (14)

(11) (8) (4) (7) (2a,2b) (7)

(20) (9) (1) (3) (23)

(21) (23)가 (10) 2 (20)

() (12a,12b)

1 (10) 2 (20) (6) (7) 가

(13)

가 (10,20) 가 (13) 가

1 2 가 (1) (13) (6) (7) 가

가 (plane) (1) (13) (gray inversion) 가

가 (1) 가

가 (3) (1) (9) (13) / (1) (2a,2b) (1a') (1) (3)

(3) (7) (3) 가 (13) / (2a,2b) 가 (1)

(1) (13) 가 1

가 가

가 DC 가

가 16.7msec

C 25μsec 20V 가 D

-5V가 가 -5V (1) (4)

가 DC (E)가 (4) 가 3 4V

DC

가 (i)

mage sticking)

2 (B) (W)가 가 (chess pattern) 10

(W) (B)

DC (25)

(line image sti

3 4 1 , 3 , 4
 3 II-II' .

(101) (103) 1 (100) 1
 (104) (104) (114) (101) (104)
 (114) () (Cst) / (102a,
 (101) (103) (101a'), (105) (101a')
 102b) (thin film transistor;109)가 (102b) (11
 (102a) (101) (103) (107)
 4) (107)

(104) (114)
 (107) (106) (106)
 (103) 가 가 (107)

1 (101) (104) (101) 가
 (101a) (104) 가 2 (104a)

4 2 (104a) (101) (110) (104) (104)
 (104a) (101) (108) (104) (104), 2 (101)
 1 (110) (108) (114) (101)
 04) (114) (111) (108) (Cst) (1

2 (120) (121) (123)가 (121)
 1 (110) (104) (101) (123a)
 (123) (123)

1 (110) 2 (120)

가 가 , 2 (104a) (101) 가 (101a) (101)
 V 가 , (104) 가 -5V , 3 4

1 (101a) 2 (104a) 가 (101) (101)
 (101) 가 , (104) (113)
 , 1 (101a) 2 (104a)

(104) (101) (104) (101)
 (121) 가 / (101) (104)

6 2 , 가 1 (4)

2 (206) (207) (zigzag)
 (200) (206) (207)

main) , (multi domain) (birefringence) (multi do
 (color shift) 가 . ,

(203) (206) (207) 1 30° ,
 , (201) 가 1 (201a) (204) 2 (204a)
 6 7 3 6 III-III'
 3 1 가 1 (2)
 , 3 (300) 1 (301)
 (303) (304) (314) (301) (304)
 (314) () (Cst) (304)
 (301) (303) (301a'), (305) / (302a,302b)
 (thin film transistor;309)가 (301a') (302a)
 (301) (303) (302b) (314)
 (307)
 , (304) (314)
 (304) (307) (306) (301) 가 1 (301)
 (314) 가 2 (314a)
 , 7 (301) (304) 1 (310) (301) (304)
 (304) (304) 1 (310) (308) (301)
 (314) (304) (301) (314) 2 (314a)
 (304) (308) (Cst) (304) (314)
 2 (314a) (311)
 , 2 (320) (321) (323)가 (321)
) 1 (310) (304) (301) (323a) ()
 323) (323) (323a)
 , (301) (314) 1 2 (3
 01a,314a) 가 가 가
 , (306) (307) 가
 8 4 가 3 (6) , , 4
 14a) (400) (401) (414) 1 2 (401a,4
 (406) (407) (406) (407) (color shift)
 가
 , 1 2
 1 2
 (color shift)

(57)

1.

1 2 ;

1

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2

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5.

4

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1

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(stripe)

7.

1

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(zigzag)

8.

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9.

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2

가

10.

1 ,

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11.

1 2 ;

1

1 2 ;

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2

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, , 1 2

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1 2

12.

1 2 ;

1

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1

, 1 , 2

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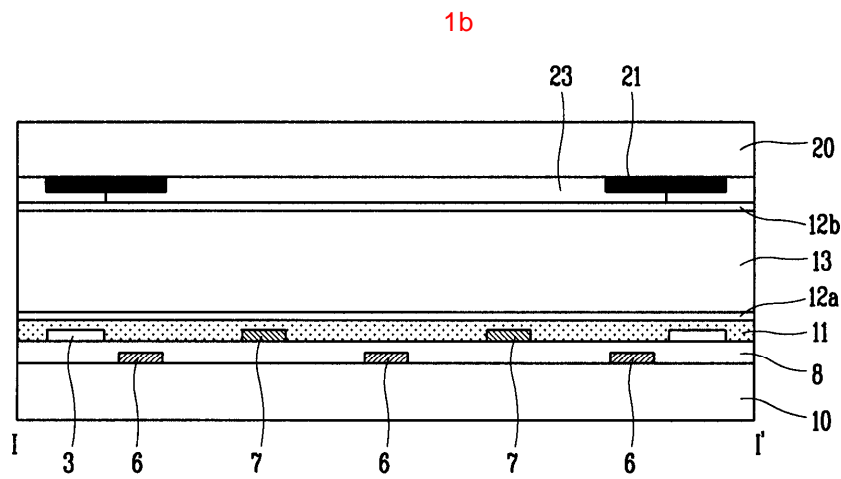
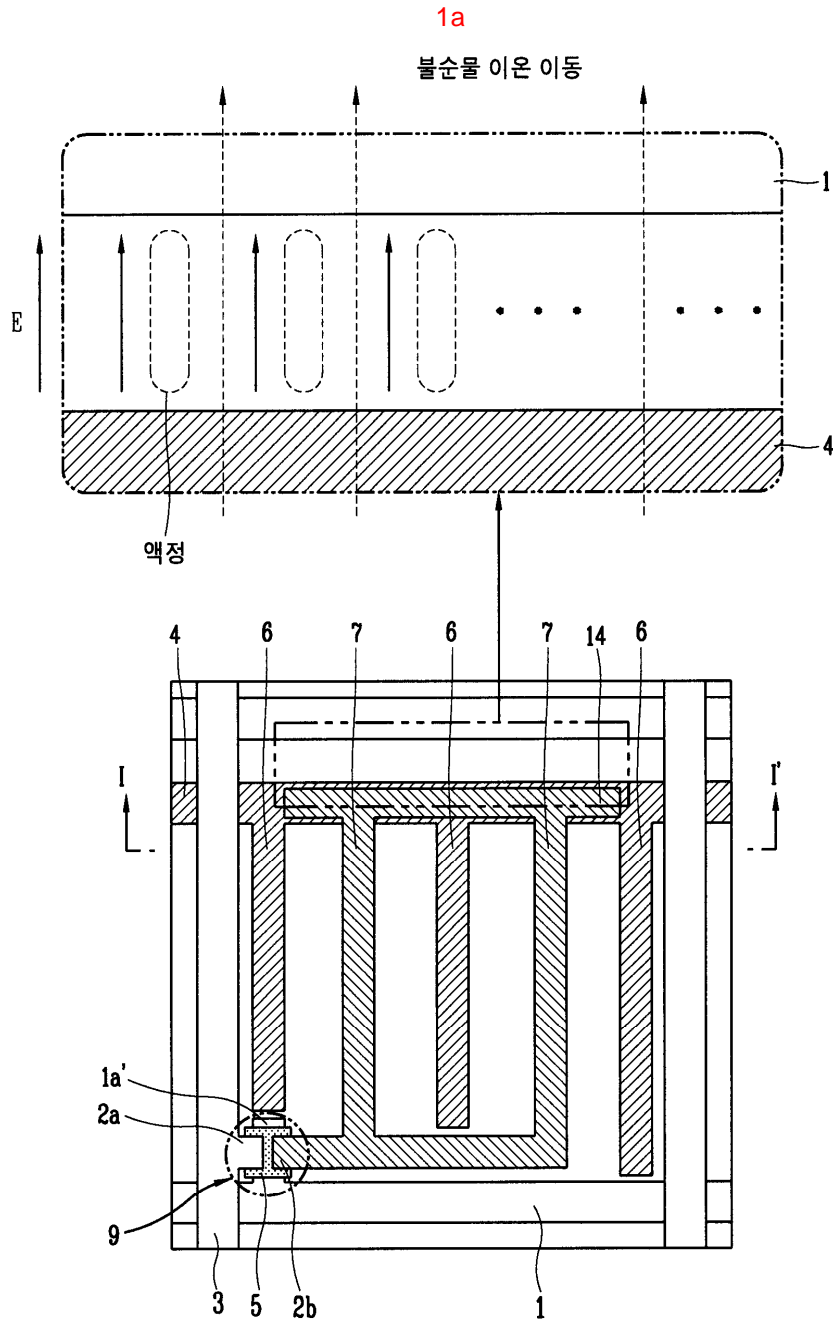
2

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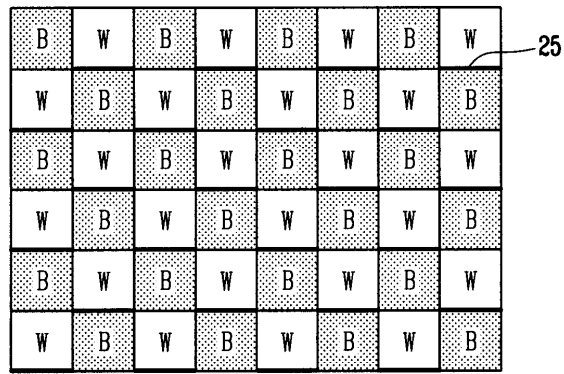
, , 1 2

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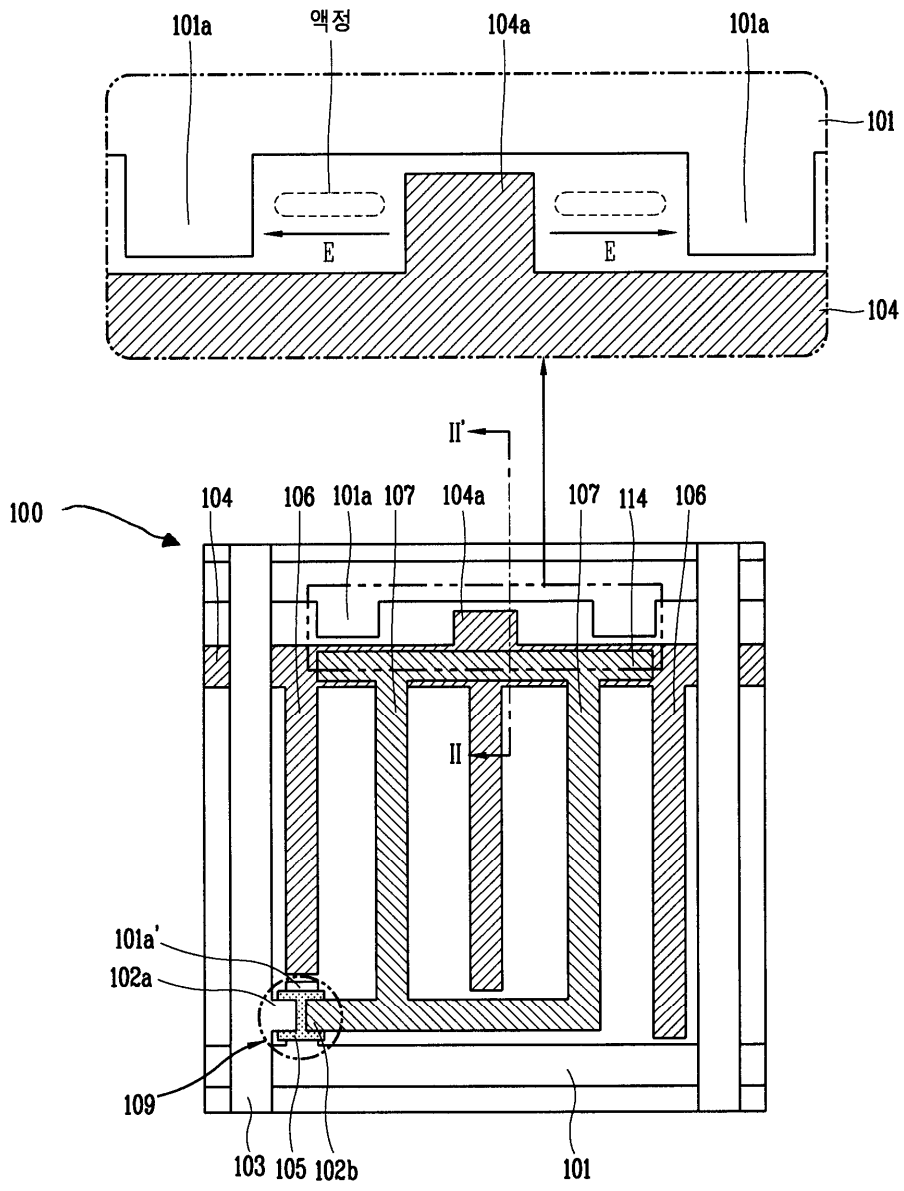
1 2



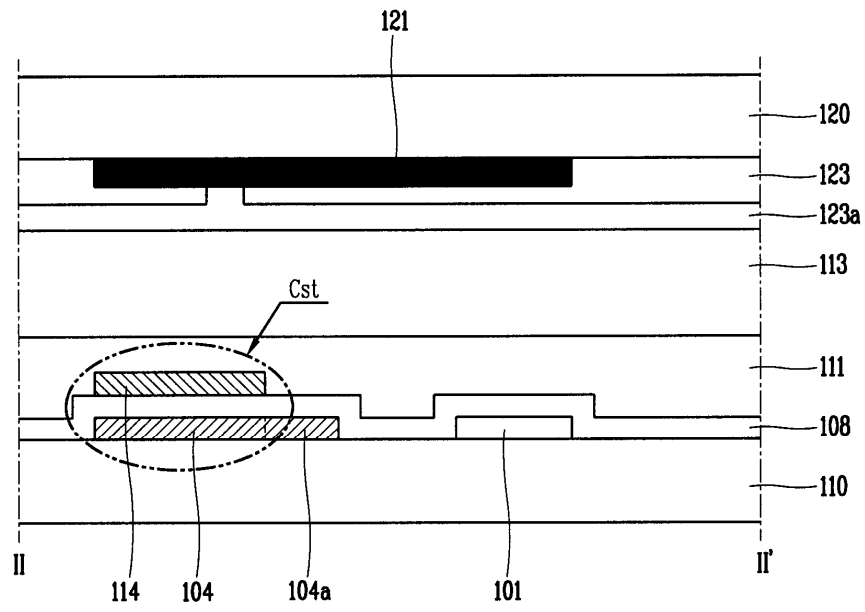
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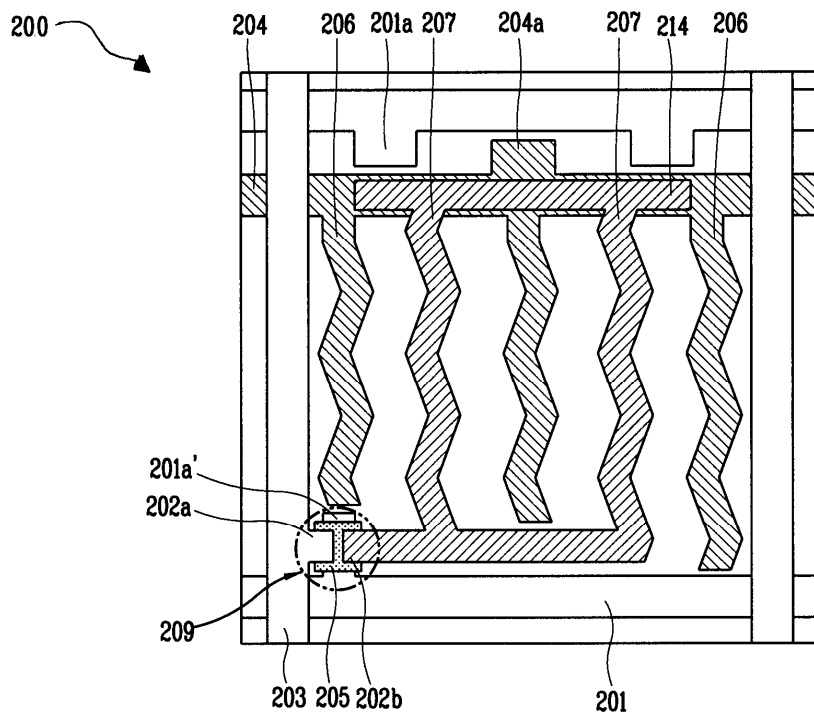
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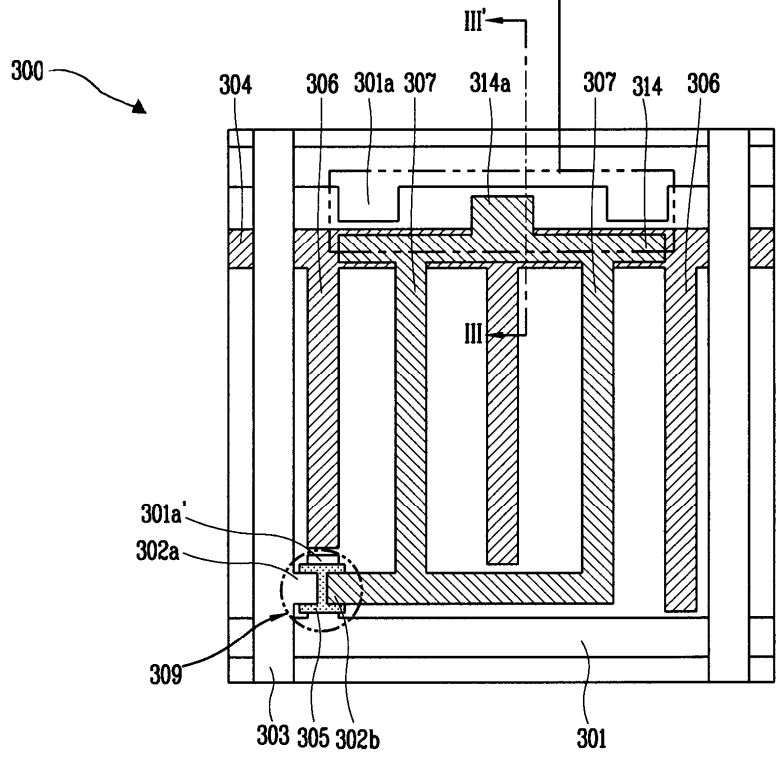
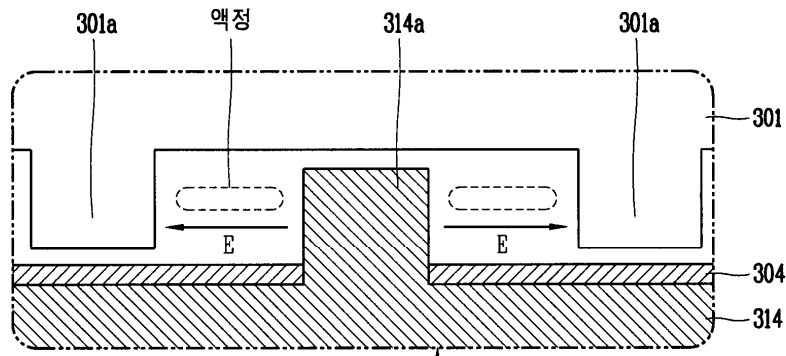
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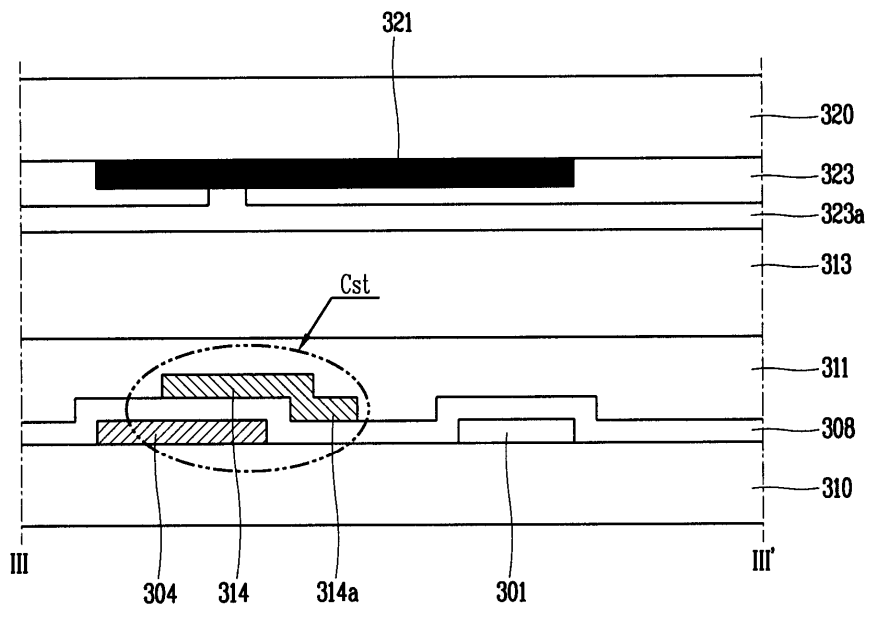
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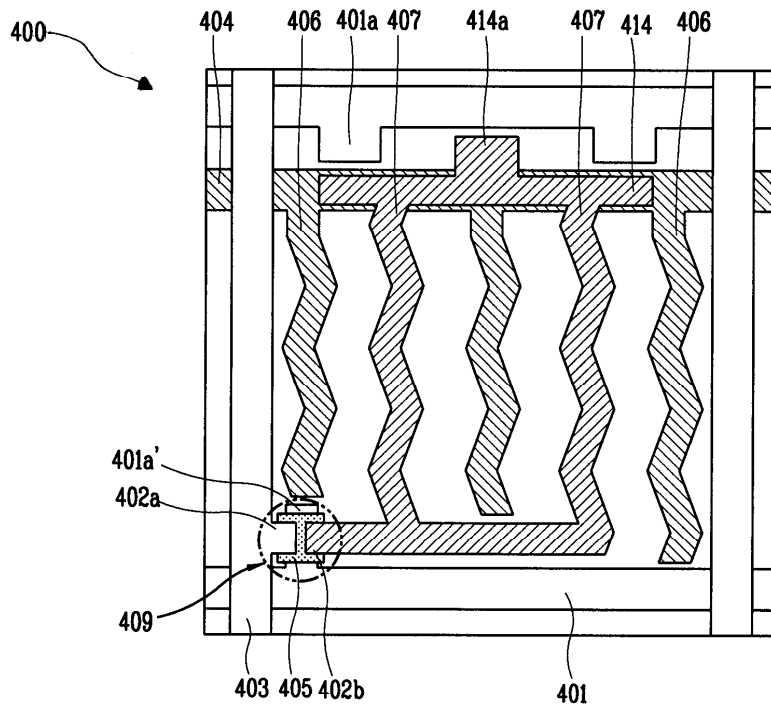
6



7



8



专利名称(译)	用于防止图像保持的横向电场型液晶显示装置及其制造方法		
公开(公告)号	KR1020050001881A	公开(公告)日	2005-01-07
申请号	KR1020030042230	申请日	2003-06-26
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IPC分类号	G02F1/1343		
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摘要(译)

本发明涉及一种能够通过消除余像来改善图像质量的横向电场型液晶显示装置,包括:彼此面对的第一和第二基板;栅线和数据线垂直和横向排列在第一基板上以限定像素区域;一种薄膜晶体管,形成在栅极线和数据线的交叉区域中;与栅极线平行设置的公共线;用于产生平行于栅极线和公共线的电场的第一和第二场效应图案;形成在像素区域中的公共电极和像素电极;并且在第一基板和第二基板之间形成液晶层。 3

