

(19)
(12)

(KR)
(A)

(51) 。 Int. Cl.⁷
G02F 1/1337

(11)
(43)

10-2004-0015528
2004 02 19

(21)

10-2002-0047808

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2002 08 13

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3 530-21

5 202

101 905

(74)

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(54)

1 , 1

8

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2

3a 3c

4

* * *

40 : TFT 50 :

73 : 75 :

79 : 80 : CF

90 : 95 :

100 :

가 , LCD
(Lipuid Crystal Display Device), PDP(Plasma Display Panel), ELD(Electro Luminescent Display), VFD(Vacu
um Fluorescent Display) 가 가

(Cathode Ray Tube) LCD()가 가

(Long Range Order) 가

1 (21) (Gate Line)(14) (Data Line)(16) (13)(Thin Film Transistor)가 .

1 (21) 2 (22) (24) (23)가 1
2 (25) .

(畫素)

2 (30)
(32) (33), (34) (36)
(30) 1 (14) (33) (26) (30) 가
(16) (32) (14) (33) (34) 가
(16) (32) (33) (34) 가
(26) 가 (24) 가 (25) 가 가
(Array) (Color Filter) (Cell)

(Deposition) (Photolithography), (Etching) 1
(Thin Film Transistor; TFT)

(Black Matrix) (Red), (Green), (Blue) 2
ITO(Indium Tin Oxide)

1 2 (Cell Gap)

(TN : Twisted Nematic) 가

TN (pitch) 가 가

ast ratio)가 TN (off) 가 (Contr 가

가 가 가

가 (Multi-Domain) 가

(In-Plane Switching) , OCB(Optically Compensated Birefringe
nce Mode) (Display)

TN 가

(pretilt angle)

3a (201) (photolithography) (116) (122) (photo resist) (202) (201)

3b (122)

3c (122)

4 (7) 1 (1) 1, 2 (1, 2) 1, 2 (1, 2) 1 (6) 2 (2) 2 (rib) (4) (3) 2 (10) (9) (6) (3) (4) (10) (6) (3) (1) 1 (3) 2 (2) 2 (4) (6) (10) 가 (10) 가

가

가

가

가

1

1

5 TFT CF 6 8 10 11 7 9

5 (, TFT (40)) (Array)
 (G1 Gn) ,
 (D1 Dn) , (G1 Gn) (D1
 Dn) (,) (90)
 (95 (90)
 .
 , (90) (G1 Gn)
 (Source) (D1 Dn)
 (Drain) (90)
 (D1 Dn) TFT (40) (Gate Pad) (G1 Gn)
 (Data Pad)
 .
 , 2 (, CF (80)) TFT (40)
 (Pad) . CF (80) (75)
) 가 (Black Matrix) (79) , , ,
 (73) ()
 .
 TFT (40) CF (80)
 .
 가 TFT (40) CF (80) , , , ,
 , , , ,
 .
 , (Dispenser) (Doctor Roll) (A
 nilox Roll) 2 ,
 .
 TFT CF
 , TFT CF (Baking) ,
 .
 6 , TFT (40) , (100) (90)
 (Overlap)
 , (Dispenser) (Doctor Roll) (Anilox Roll)
 , TFT (40) (90) (100) (P) (90) (P')
 . (90) (100)
 , (100) 가 , (100) (100) (P')
 (P) (Rubbing Roll) 가 가 , (100) (100)
 (100) 가 가 , (100) (Random)
 (P')
 .
 , 가 가
 ,
 .
 7
 , TFT CF (1S) , CF (Cell Gap)
 (Spacer) CF (3S) , TFT (4S) (Seal) (2S) , TFT

(5S)

(6S)

(7S)

(9S)

8

, TFT (40) CF (80)

(80)

6

TFT (40)

(100)

(50)

(100)

CF

(100)

(P)

(50)

(P')

가
가

TFT (40)
(pitch)
(50)

가
가

CF (80)
(Random)

(100)

9

5

(95)

10

11

(100)

(100)

(10)

(90)

(10

0)

가

가

가

가

가

가 가

(57)

1.

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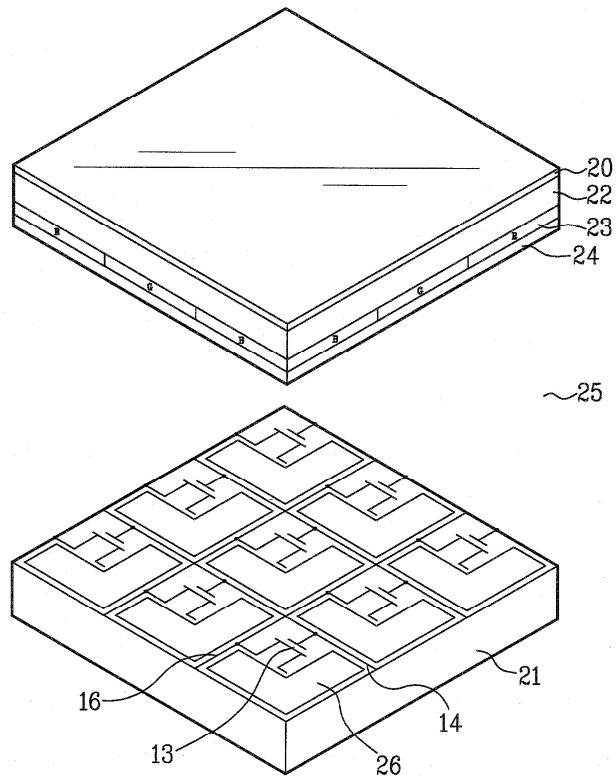
9.
8 ,

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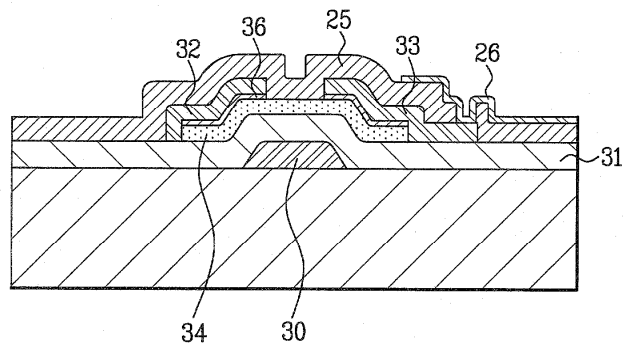
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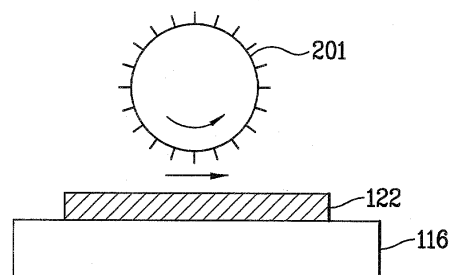
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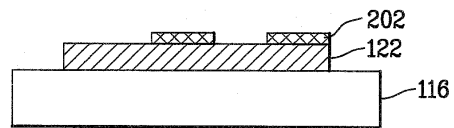
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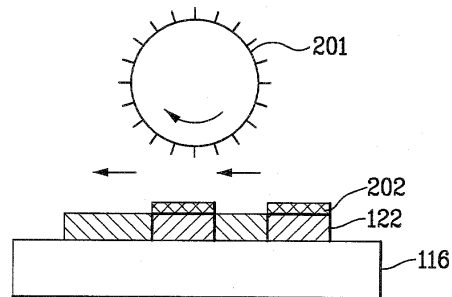
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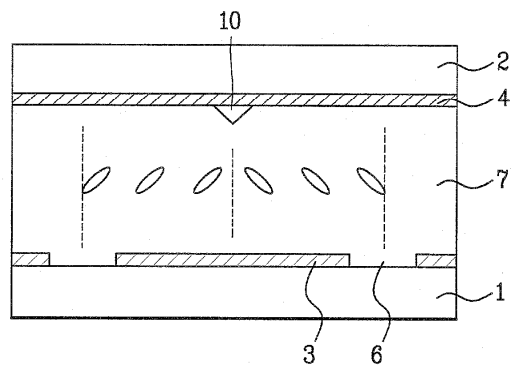
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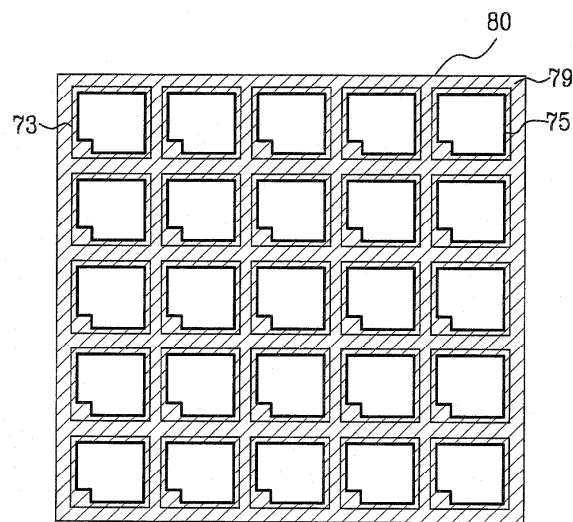
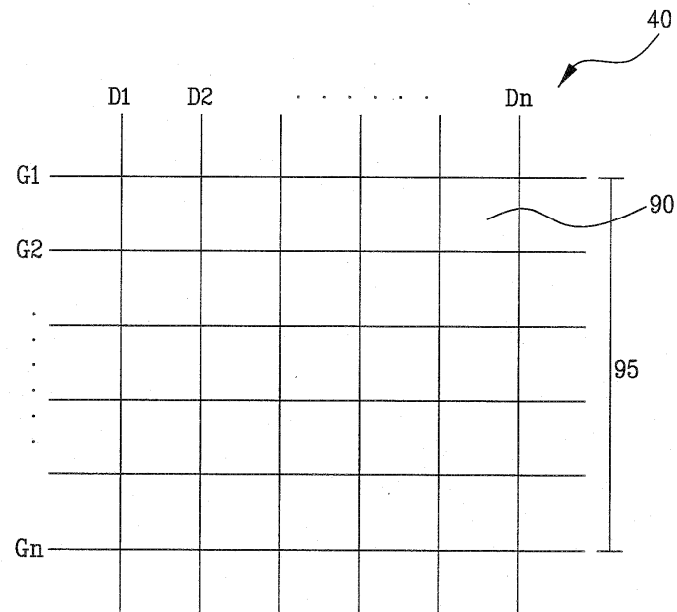
3c



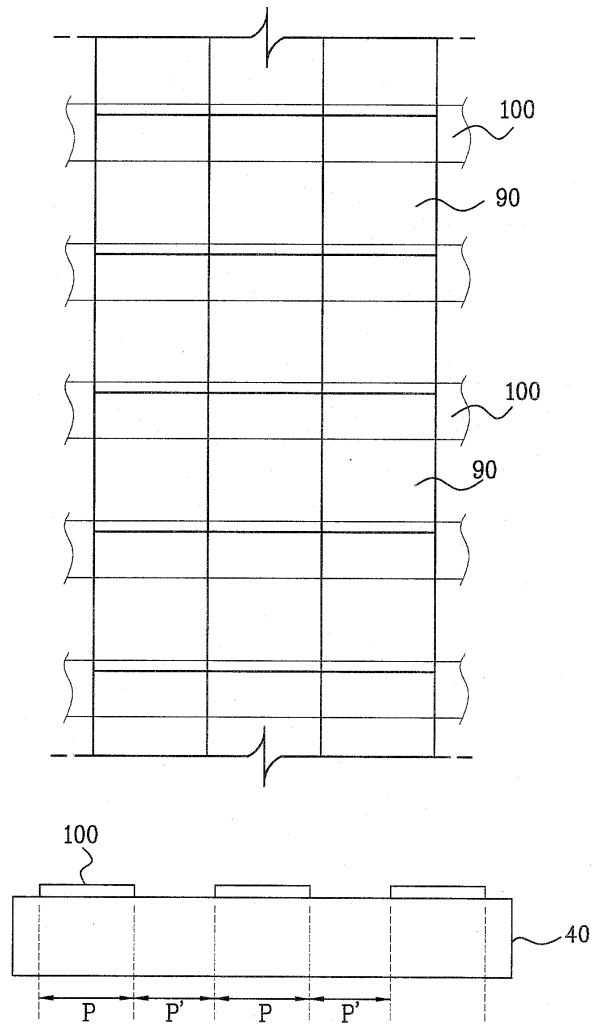
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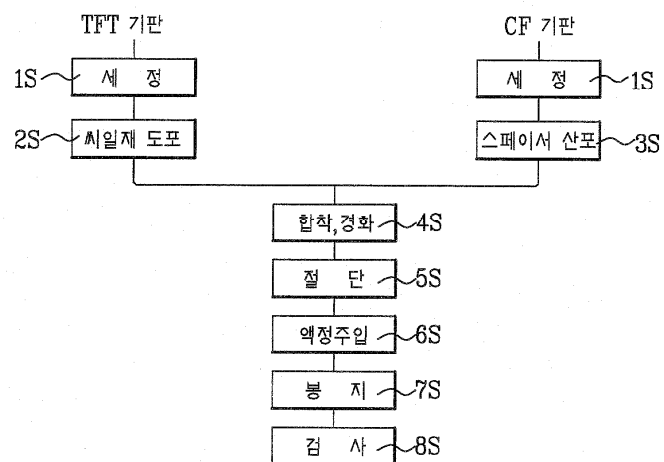
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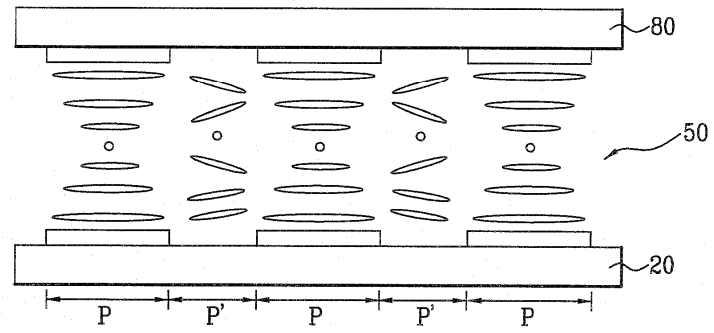
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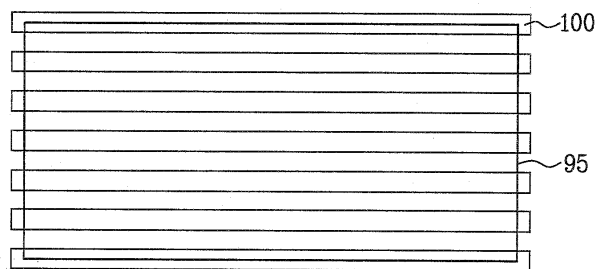
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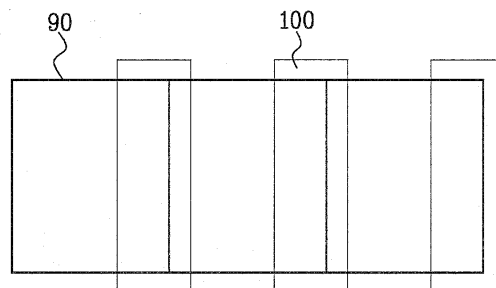
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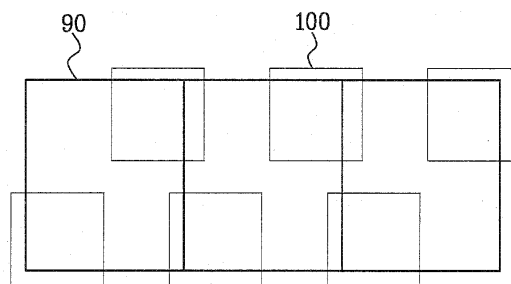
9



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专利名称(译)	液晶显示元件及其制造方法		
公开(公告)号	KR1020040015528A	公开(公告)日	2004-02-19
申请号	KR1020020047808	申请日	2002-08-13
[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	LEE JONGHOON 이종훈 CHOI NACKBONG 최낙봉		
发明人	이종훈 최낙봉		
IPC分类号	G02F1/1337		
CPC分类号	G02F1/133784 G02F1/13394 G02F1/1341 G02F1/136		
代理人(译)	金勇 新昌		
其他公开文献	KR100864924B1		
外部链接	Espacenet		

摘要(译)

液晶显示装置及其制造方法技术领域本发明涉及一种能够通过改变取向层的结构来形成多畴的液晶显示装置及其制造方法，以及具有第一基板的液晶显示装置，该第一基板具有矩阵形式的多个单位像素，并且，液晶层中，图案化取向层上的液晶分子的取向方向与取向层两侧的液晶分子的取向方向彼此不同。8 指数方面 多域，定向膜，宽视角

