

(19)
(12)

(KR)
(A)

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G02F 1/136

(11)
(43)

2002 - 0090430
2002 12 05

(21)
(22)

10 - 2001 - 0028968
2001 05 25

(71)

3 416

(72)

621 - 23

904 1203

7 - 1 1107

4759 2 206

(74)

:

(54)

2 μm

9a

, , , , ()

1 1 ,

2 1 - ' ,

3a, 4a, 5a 8a ,

3b 3a b - b' ,

4b 4a b - b' 3b ,

5b 5c b - b' c - c' ,

6a 6b 5b ,

7a 7b 5c ,

8b 8a d - d' 5b 5c ,

8c 8d c - c' d - d' ,

9a 9b 8c ,

10a 10b 8d ,

11a 11b c - c' d - d' , 8c 8d ,

12a 12b 11a ,

13a 13b 11b .

(stepper)

(stitch)

가

가

가

가

(stepper)

1

(reticle)

가

(shot)

가

(overlap)

(stit

ch)가

가

(focusing)

(shot)

가

2 μm

가 가

1 2

1

, 2 1

(10) (Cr) (Mo) (221, 241, 261)
 220, 240, 260) Al - Nd 가 가 (22), (22)
 가 (24) (22)
 (26)

(10) (SiNx) (30) (22, 24, 26)
 (30) (70) (24) (74) 가 ,
 (74) (241) (240)
 (24) (30) n (40)
 (40) n+
 (55, 56)

(55, 56) (30)
 (Cr) (Mo) (650, 660, 680) Al - Nd 가
 (651, 661, 681)
 (22) (62), (62)
 (55) (64), (62)
 가 (68), (64) (26) (64)
 (56) (66)

(62, 64, 66, 68) 가 (40) (70) (76, 78) 가 (76, 78)
 70) (66) (68) (70) (30)
 (661, 681) (660, 680)
 (240) (74) 가

(70) (76) (660)
 (82), (74, 78) (240) (680)
 (86) (88) , ITO(indium tin oxide) IZO(in
 dium zinc oxide)

(68) (661, 241, 681) (66), (24)
 (Mo) (660, 240, 680) ITO IZO (Cr)
 (82, 86, 88)

, (82) 1 2 (22, 24, 26) , (22) 가 .

, (stepper) . A B 1 2 3a 13b ,

, 3a 3b (10) (220, 240, 260) (221, 2
41, 261) Al - Nd , A B
() () (220, 240, 2
60) (221, 241, 261) (22), (24) (26) 가

, 4a 4b (30), (40),
(50) , A B
(40) (50) (26)
(30) (40) (50) .

, 5a 5c (600) Al - Nd (601) , A
B (601) (600) (110a, 110b, 120a, 121b)
(focusing) (62a, 62b, 65b, 66b, 68b) .
b, 120a, 121b) (110a, 110b, 120a, 121b) 가
가 A B 6
a 7b 가 .

6a 6b 5a b - b' , 7a 7b 5a c - c'

, 6a 7a (600) Al - Nd (601) , (3
(100) . B (100) (31b), B (100)
1'b), (31" b) 가 . (31a) B
, A (35') (35") 가 (35) A B
(35') 2 μ m (35) (35')

2 μ m .

, 6b 7b , A (100) (32a) B
A (100) , B
(32b) 가 .

, 5b 5c , (100) (110a, 110b, 120b, 121b)
A B (110a, 110b, 120b, 121b) (600)
(601) (22) (62a, 62b), (62a, 62b)
(26) (65b), (26) (
66b), (62a, 62b) (68b) .

, (62a, 62b, 65b, 66b, 68b) 가 (50)
(26) , (55, 56) (40)
. , (40) .

(31a) A 가 (62a, 62b, 65b, 66b, 68b)
(focusing) (shot) 가 (35)
, .

, 8a 8b , (70)
A B (24), (
66), (68) (74, 76, 78) (
24), (66), (68) Al - Nd (241, 661, 681) .

, 8c 8d , (70) ITO(indium tin oxide) IZO(i
ndium zinc oxide) (80) , A B (130a, 130b,
131b), (140a) (140b)
(80) (82a, 82b), (86a) (88b)
. , (130a, 130b, 131b)
9a 10b .

9a 9b 8a b - b' , 10a 10b 8a c - c'
, (shot) ,

9a 10a , (70) ITO(indium tin oxide) IZO(indium
zinc oxide) (80) , (100) A (100)
(41a) (41'a) B (41b) 가 .
(100) , B (45') (45") (4
5) B 가 .

, 9b 10b , B (100) (42b),
(42'b) B (100) , A
A (42a) 가 .

, 8c 8d , (100) (130a, 130b, 131b, 140a, 140b)
A B (130a, 130b, 131b, 140a, 140b)
(80) (82a, 82b), (86a) (88b) .

가 (shot) 가 (35) (41a) A
(focusing)
, (shot) . ,

11a 11b ,
(130a, 130b, 131b)
, 가 .
(82a, 82b) .

12a 13b .
12a 12b 8a b - b' , 13a 13b 8a c - c'
, (shot)
.

12a 13a , (70) ITO(indium tin oxide) IZO(indium zinc oxide) (80)
, (100) .
A (100) (51a)
(51'a) B (51b) 가 . (100) , B

12b 13b , B (52a) A
, B (52b), (52'b)
(100) . , (52b)
(55') (55") (55) B 가 .

11a 11b , (100) A B
(150a, 151a, 150b, 160a, 160b) (80)
(82a, 82b), (86a) (88b) .
, (shot) ,
가 .

(focusing)

가

(57)

1.

2.

1 ,

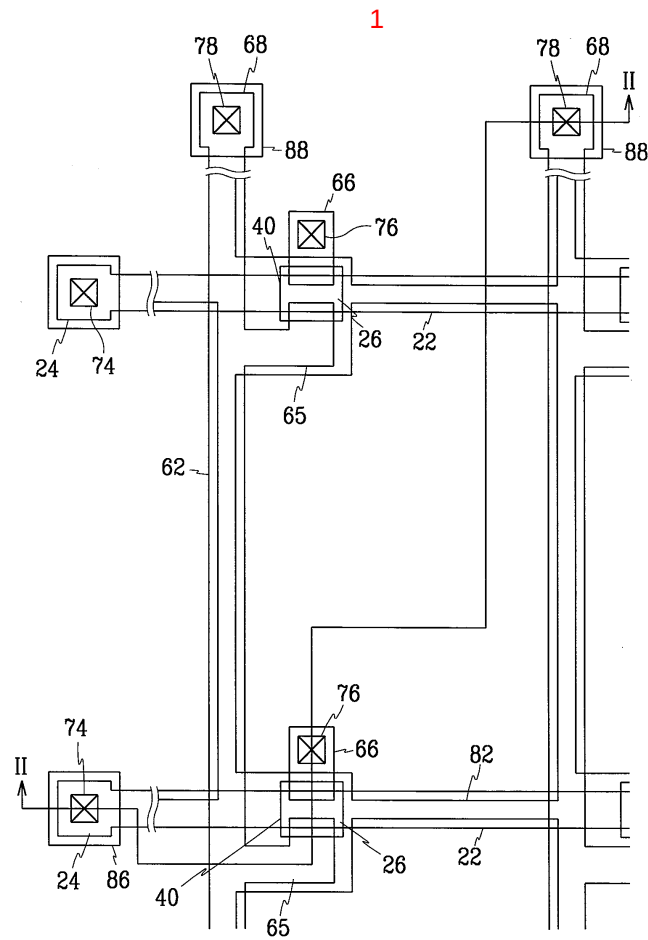
2 μm

3.

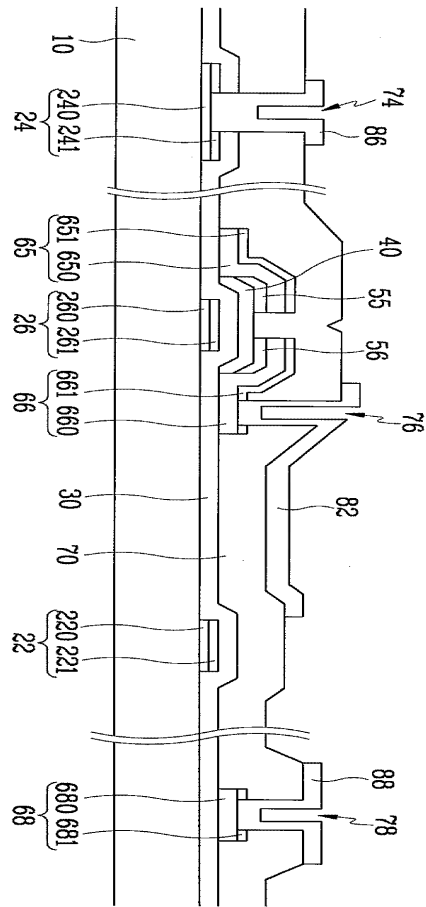
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4.

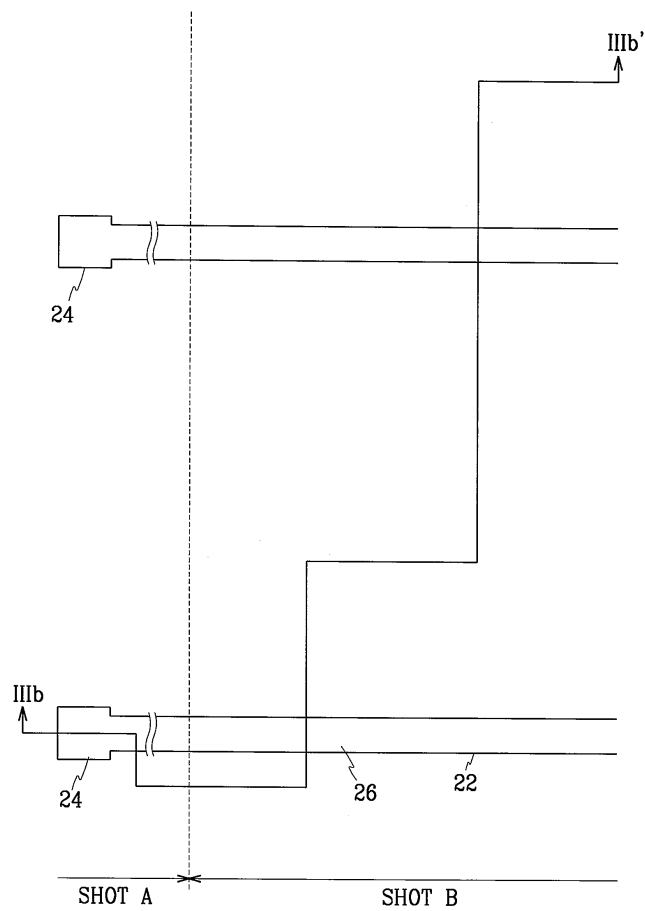
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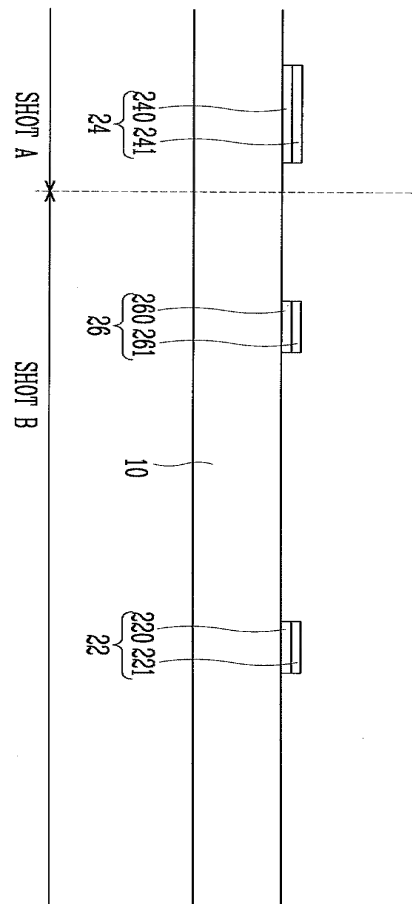
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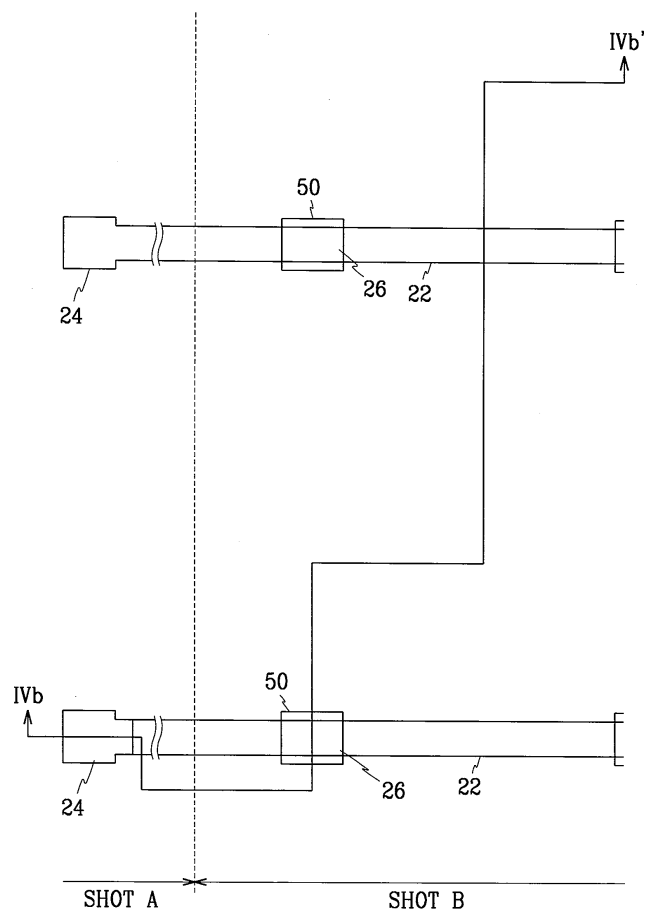
3a



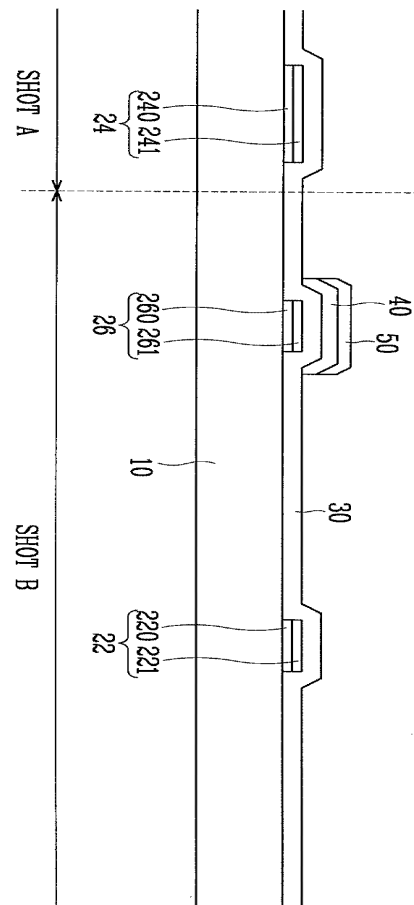
3b



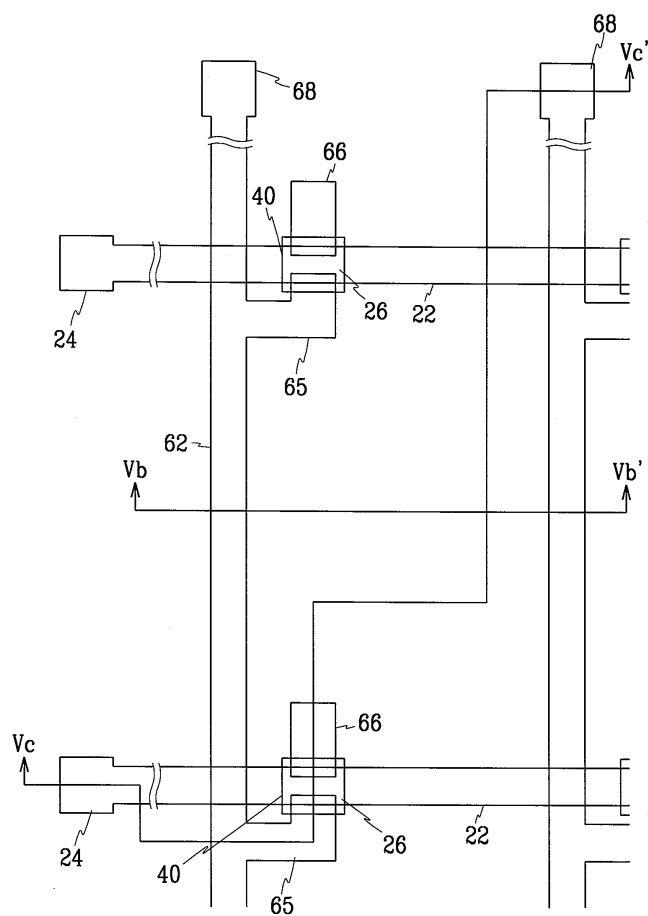
4a



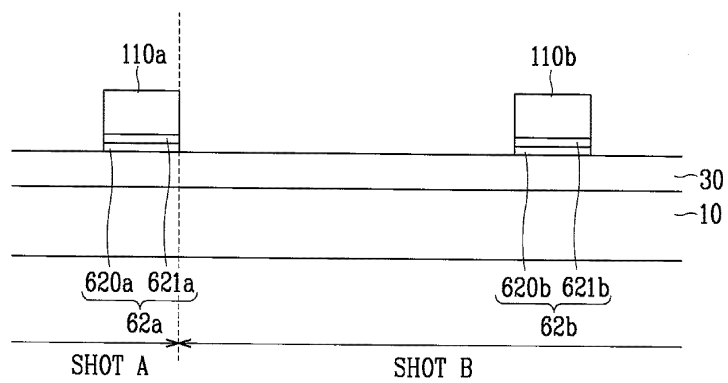
4b



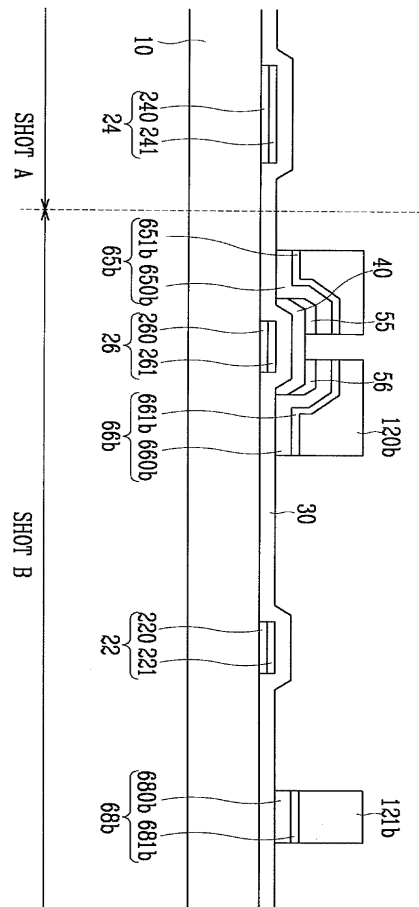
5a



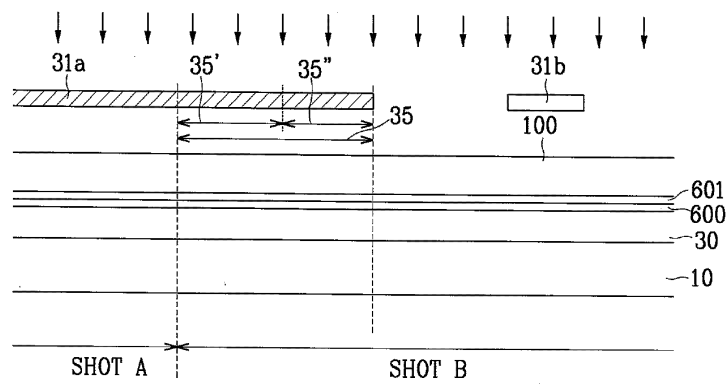
5b



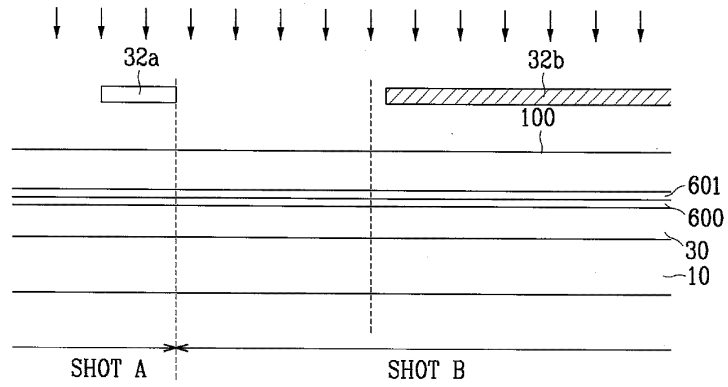
5c



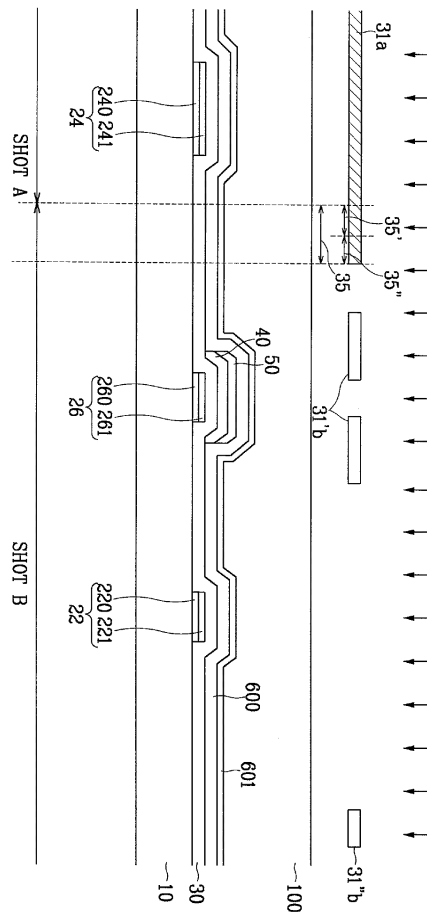
6a



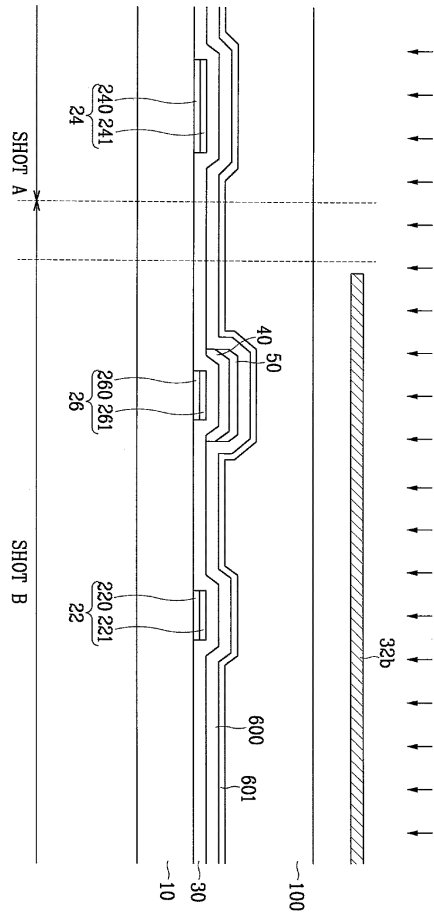
6b



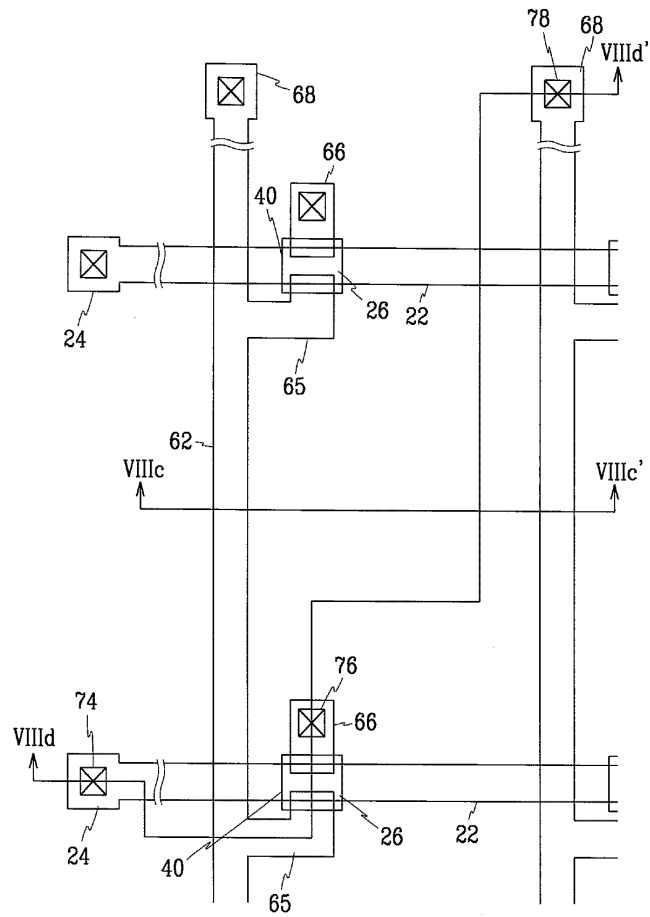
7a



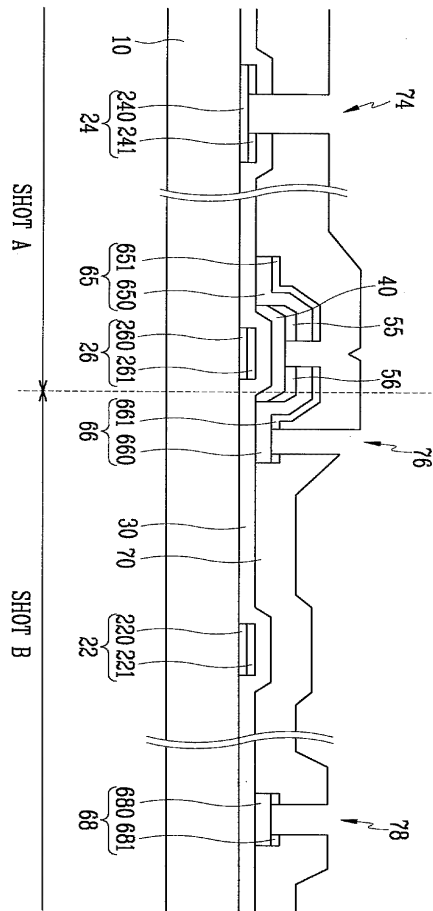
7b



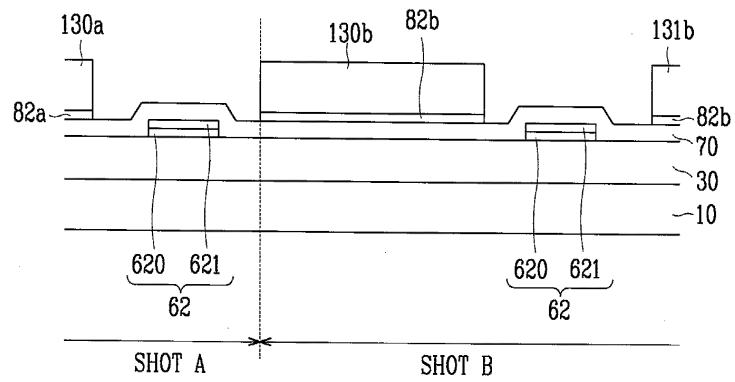
8a



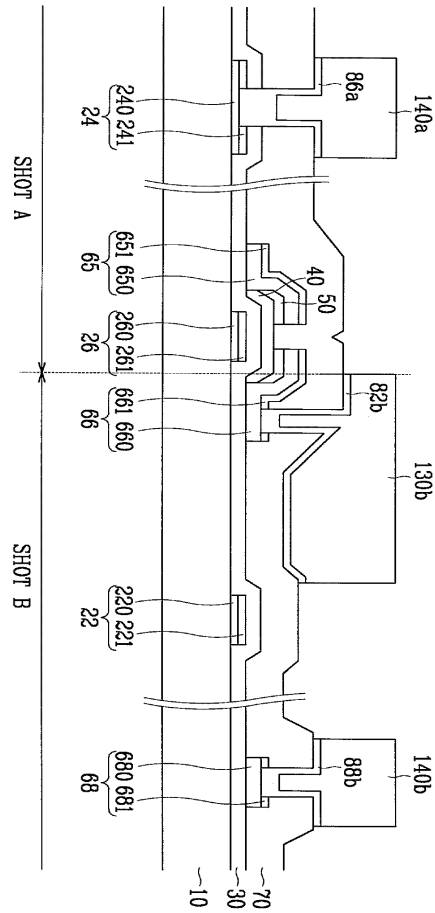
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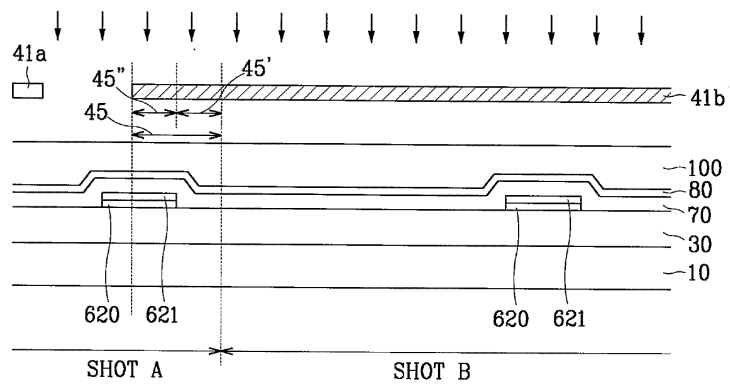
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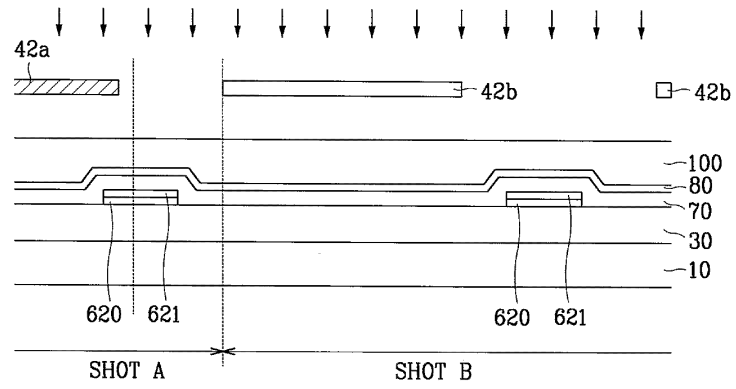
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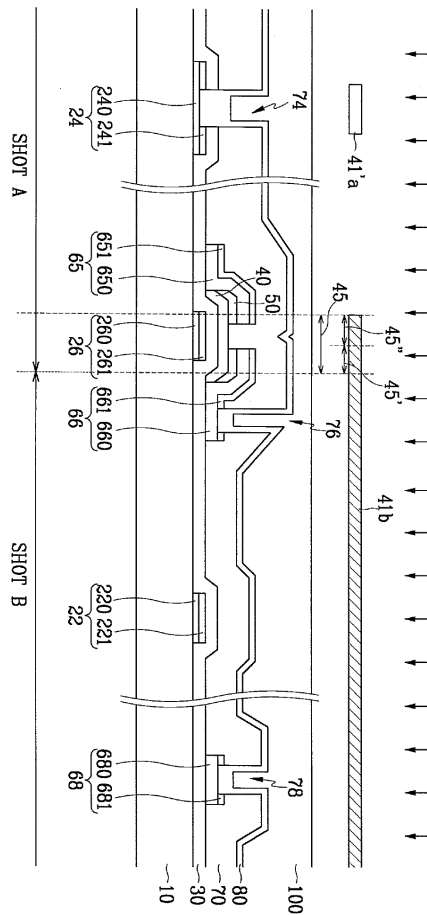
9a



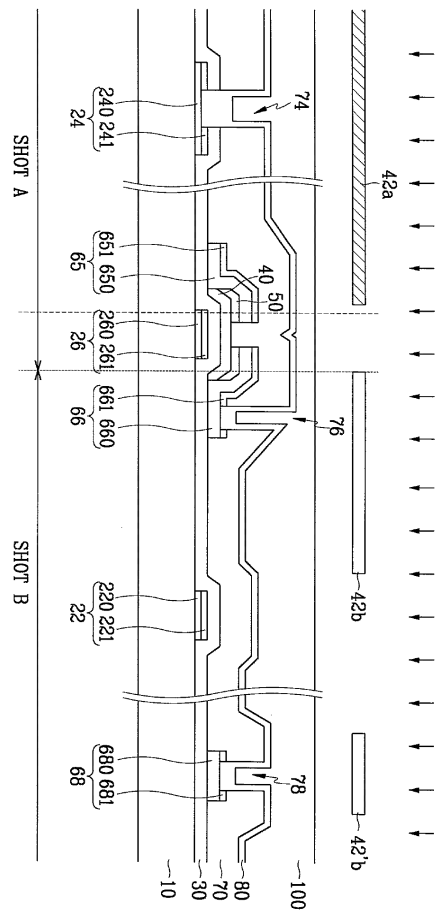
9b



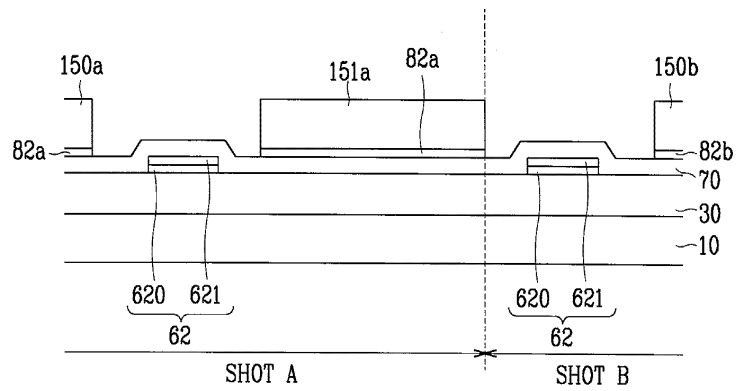
10a



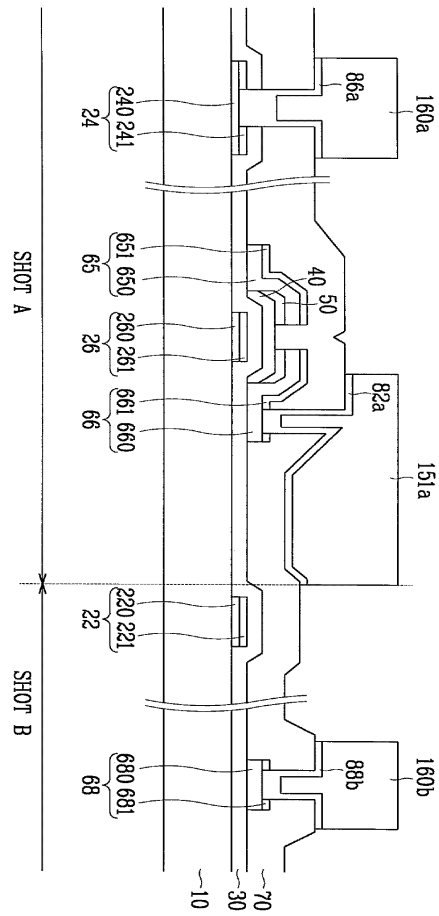
10b



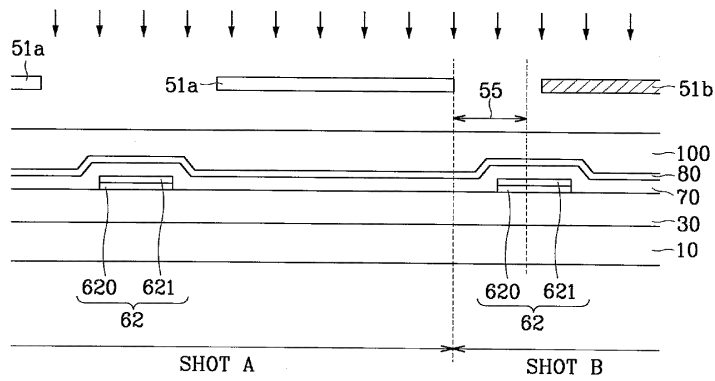
11a



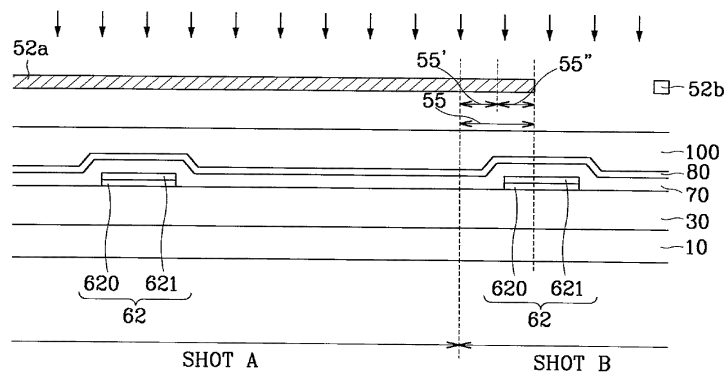
11b



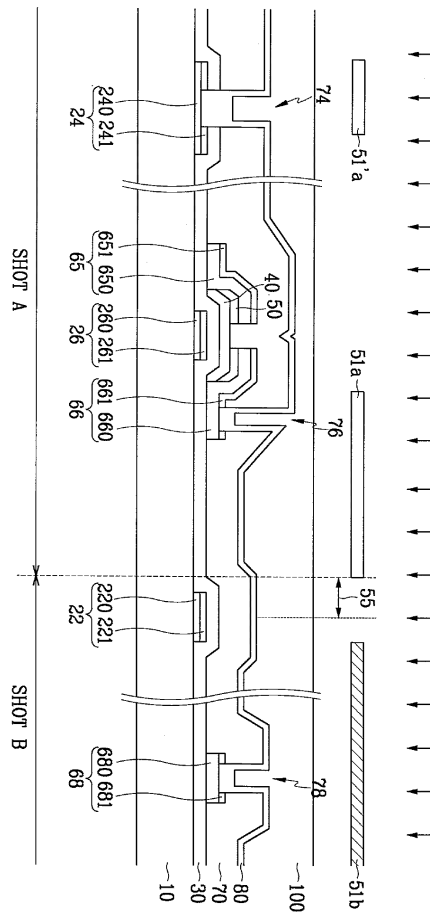
12a



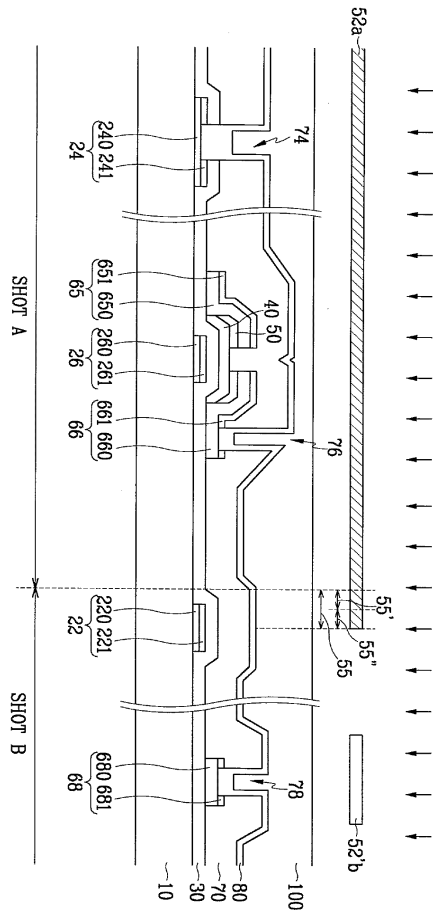
12b



13a



13b



专利名称(译)	制造用于液晶显示器的薄膜晶体管基板的方法		
公开(公告)号	KR1020020090430A	公开(公告)日	2002-12-05
申请号	KR1020010028968	申请日	2001-05-25
[标]申请(专利权)人(译)	三星电子株式会社		
申请(专利权)人(译)	三星电子有限公司		
当前申请(专利权)人(译)	三星电子有限公司		
[标]发明人	KIM KYUNGWOOK 김경욱 CHUNG CHAEWOO 정채우 KIM JONGOH 김종오 HONG KWEONSAM 홍권삼		
发明人	김경욱 정채우 김종오 홍권삼		
IPC分类号	G02F1/136		
代理人(译)	KIM , WON GUN		
其他公开文献	KR100796802B1		
外部链接	Espacenet		

摘要(译)

形成包括栅极线和栅电极的栅极布线。数据线包括数据线和与栅极线绝缘并且与像素区域交叉并限定像素区域的源电极，并且在形成之后形成连接到漏电极的像素电极。在制造用于1cd基板的薄膜晶体管的方法中，栅极布线，数据线和像素电极中的至少一个形成多个区域，使用分割和曝光的分隔曝光区域进行光刻处理。并且防眩光边缘超过 $2\mu\text{m}$ ，使遮光掩模遮挡光线，使光线在除曝光区域以外的其他区域的分割曝光中照射超过曝光区域的边界和边界排列。可以防止由于微范围布线的老化而在分隔曝光区域的边界中产生的针脚现象形成该方法。阴影掩模，防眩光边缘，对齐边距，针迹，分区曝光区域（镜头）。

