

(19)
(12)

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(43)

2002 - 0026135
2002 04 06

(21) 10 - 2001 - 0060560
(22) 2001 09 28

(30) JP - P - 2000 - 0029 2000 09 28 (JP)
6978

(71) 가 가
가
5 7 1

(72)
5 7 1 가 가
5 7 1 가 가
5 7 1 가 가
5 7 1 가 가
5 7 1 가 가
5 7 1 가 가
가 2080 가 가 가

(74)
:

(54) 가

(17) LCD (14) TFT 1 . TFT (92), (94), (16), . TFT
TFT , (14) IC (64c) TCP (64)
(16) (24a,24b) .

2

LCD , TFT , , , , ,

1a			LCD		.
1b			LCD	TFT	.
2		1		LCD	TFT
3	2	-			.
4	2	-			.
5		2		LCD	TFT
6	5	-			.
7	5	-			.
8		3		LCD	TFT
9	8	-			.
10		4		LCD	TFT
11	10	TFT		COF	.
12	10	X -X			.
13	10	X -X			.
14	11		COF		.
15	10	TFT			.
16		5		LCD	TFT
17	16	TFT		TCP	.
18	16	X -X			.
19	16	XIX - XIX			.

20	17	TCP	.
21	2	TFT	.
22	21	XX - XX	.
23	21	XX - XX	.
24a	1	2	TFT .
24b	24a	B - B	.
24c	24a	C - C	.
24d	2	2	TFT .
24e	24d	E - E	.
24f	24d	F - F	.
24g	3	2	TFT .
24h	24g	H - H	.
24i	24g	I - I	.
24j	4	24g	H - H .
24k	4	24g	I - I .

* *
 10 : LCD 12 :
 14 : 16 :
 17 : 18a,18b :
 54,64 : 54a,64a :

가 LCD ,
 가 LCD .

가 LCD (92) LCD (94) TFT (92), TFT (92) LCD (90) ICs (96) (90) (94), TFT LCD

2) LCD (74) LCD (78) TFT (72), JP - A - 7 - 36061 (70) (72) 1b (74), (7) (72) 1 (72)

78) (80) TFT (76) TFT (thin film transistor; 76), TFT (76) (83) (81) LC (80), (80) (72) (82) TFT (76) (74) (72)

(88a,88b) (72) (proximal end) (84) TCP (tape carrier package) (78) IC (86) (overlying)

(72) (78) (88a) (86) (88a,88b) LCD (72) (78)

, TFT LCD

1 CD TFT TFT L

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가 ,

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2 , TFT , LCD

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3 , TFT , LCD

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TFT , IC, TFT , LCD , TFT , LCD

,1

2 , 1 , (10) LCD

TFT (14) (12), (12) (14), (12)
 (16), (16) (16)
 LCD 1a 1b (18a,18b), (16) (14) (18a,18b)
 (14) TFT (18a,18b) 가 (20) IC (18a,1
 8b) (14) (18a,18b) TFT (18a,18b)
 (18a,18b) (16) 가 (16) (16) (18a,18b)
 가 (24a) (24b)
 (14), (16), (18a,18b) (12) AI
 TiN 2
 , 3 (20,24a,24b) (14) (16)
 (28) (25) (26) (14) (26) (20,24a,24b)
 가 (16)
 1 (18a,18b) (14)
 (12) TFT (10) , TFT (10) 2
 (18a,18b) (scribe line) . TFT
 (14) , (14) (16) (shunt)
 TFT TFT
 , 4 가 , 2 3 TFT (strage) 가
 (IPS) TFT LCD
 TN (twisted - nematic) LCD
 (16) 가 (18a,18b) 가 LCD
 5, 6, 7 , 2 (10) LCD
 TFT (32a) 1 (18a)
 (32b) (14) (16)
 7 (32b) (25) (26)
 (34) (via - plug) (16) TFT
 (32b) Sinto " (Sintron;)" .
 (32b) (34) (16) (24b) (16)

() .

(20,24a,24b) 1 , 6 (14)
 , (28) (25) (26) .
 , (32b) (14) , TFT
 (20)
 (14) (20) . 5 ,
 TFT .

(32a) (16)
 (32b) , .
 8 9 , 3 (40) LCD
 TFT (42b) 2 (42b)
 (25) (26) (34) (underlying) (16)
 (Ag) .

H20E () , 가 Epotech Co

10 , 4 (10) LCD TF
 T , () COF (chip - on - film; 54)
 (14a) , IC (54b) ()
 COF (54) (16a) , IC (54b)
 (58) COF (58) 2

COF (54) 11 COF (54) (54a), (54
 54a) IC (54), IC (54b) (54)
 c), IC (54b) (54d) .
 (54d) 10 (14a) (54e) (54a)
 (54c) (54d) , (54f) IC (54b), (54e), (54
 d) COF (54) Corp. .

, 12 13 , (14) COF (54) (14a), (54d)
 IC (54b) , COF (54) (16a) (58) (54d)
 (16) . 12 (58) IC (54b)
 (54a) IC (54) , (54a)
 , COF (54) TCP 가 , (58) IC (54b)

54b) (54d) 14 , COF (54) COF (54) COF (54) (14a), (12) (16a), (16a), (58) (14) COF (54) (16) IC (58) LCD (16) (14)

15 (crank) (59) (14a) LCD (59) (14a) (16a) (59) 가 (14a) IC (54b) 15

T 16 a) a) 5 (62) LCD TF 5 2 IC (54) (14) TCP (64) (14) IC (64c) TCP (64) IC (64c) (16) IC (64c) IC (64c)

(64f) e) 가 (64b) (64d) (64f) TCP (64) (64i) IC (64c) (64a) (64e) (64g) (64d) (64) IC (64c) (64a) (64e) (64) NEC Corp

가 (64h) IC (64c) (14a) (16a) (14a) IC (64c) (16a) (64h) IC (64c) (64d) 가

TCP (64) IC (64c), (14a), (16a) TCP (64) (64e) TCP (64) 가 (12) (14) (16) TCP (64) 4 COF (54) 20 TCP (64)

21 (17) 2 TFT (14), (16), 2 (14) (19) 가 TFT (inverted stagger) TFT TFT (27) (27a) (27b) n- / (21b) (21a) n- /

23 (25) 가 21 (22) (23) (23) (12) (IPS) LCD

(14), (16), (23), (19) Al TiN 1
 (17), (21a), (21b) Cr ITO
 2 (17) (17)
 (25) (27) (22) (25)
 (16) ITO, LC 가 (signal charge)
 가

1 LCD 24a 24k
 200 nm 가 Al 500 nm 가 TiN (12)
 (20) (19) (18) (14), (23) (16), (24a)
 (24b) TFT 24a 24c
 400 nm 가 (25), 250 nm 가
 (27a) (27), 50 nm 가 n- (27b) (pla
 sma - enhanced) CVD TFT , 250 nm 가 Cr
 TFT 24d 24f (17)
 50 nm 가 ITO TFT (21a), (21b), (22)
 (17), TFT 24g
 24i
 (27b) (channel gap) , TFT 24j n- 24
 k

300 nm 가 (26) (26) CVD
 TFT (20), (20), (24a,24b)
 (20), (24a,24b) (25) , 280 , 21,2
 2, 23 가 TFT

TiN/Al/Ti 1 Al TiN 2 , 1
 3 Cr ITO 2 , TiN
 TiN 25 %
 2 , TFT
 TFT 1 2 , IC
 COF TCP 2

LCD (16) (14)

(57)

1.

TFT , LCD , TFT ,
(12);

(12) (14);

(12) (17);

(14) , (14)
(14) (16);

(16) 가 , (14)
(17) ;

(18a,18b) LCD

2.

1 , (32b,42b)
(16)
LCD .

3.

TFT , LCD , TFT ,
(12);

(12) (14);

(12) (17);

(14) , (14)
(14) (16);

(14) (17) ;

(16) LCD , (32b,42b)

4.

3 ,
(32b)
LCD .

5.

TFT , , LCD , TFT ,
(12);

(12) (14);

(12) (17);

(14) , (14)
(14) (16);

(14) (17)

TFT , (54a,54b), (14) (54a,64a)
IC (54b,64c), (16) (58) (54,6
4) TFT LCD .

6.

5 ,
(58) (54a) IC (54b)
LCD .

7.

5 ,
(14) (59) TFT LCD .

8.

5 ,
IC (64c) LCD .

9.

5

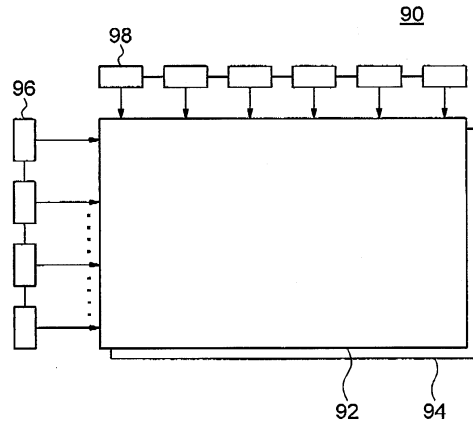
a)

TFT LCD (16)

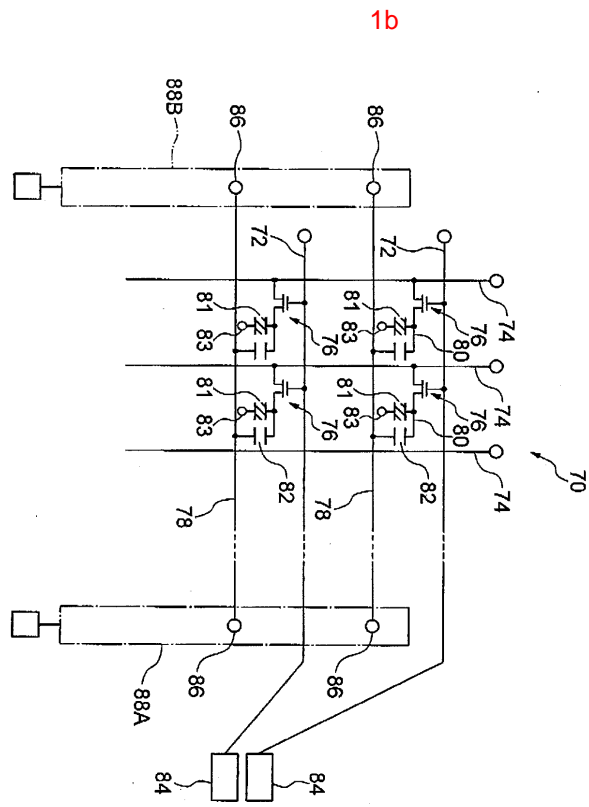
(24

1a

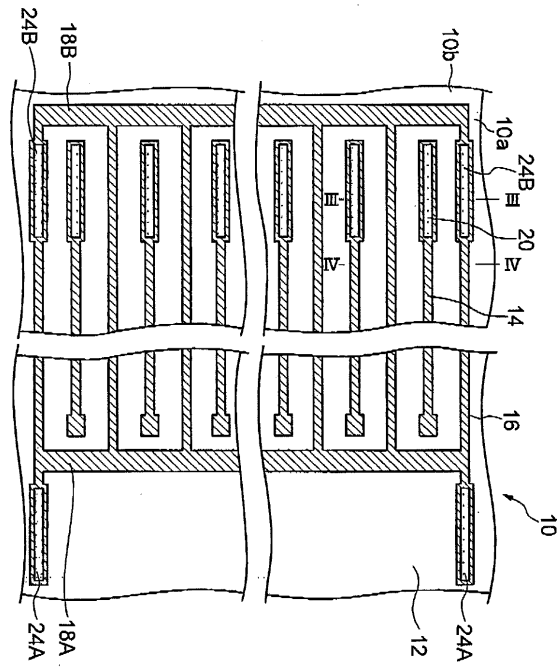
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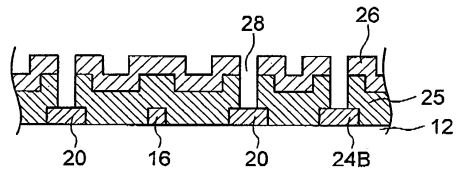
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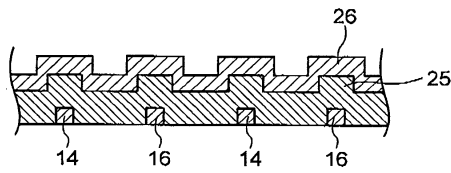
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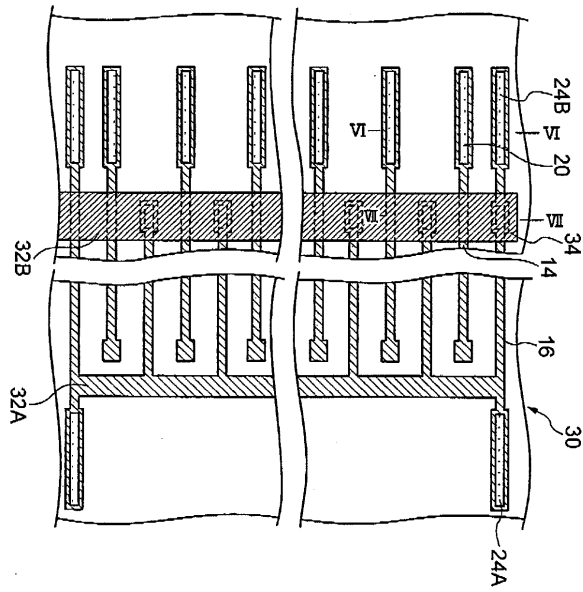
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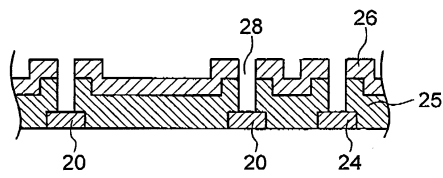
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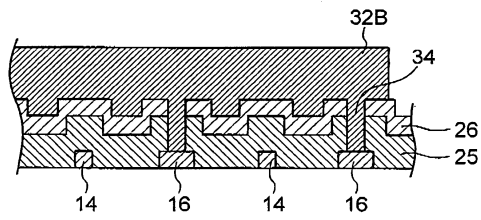
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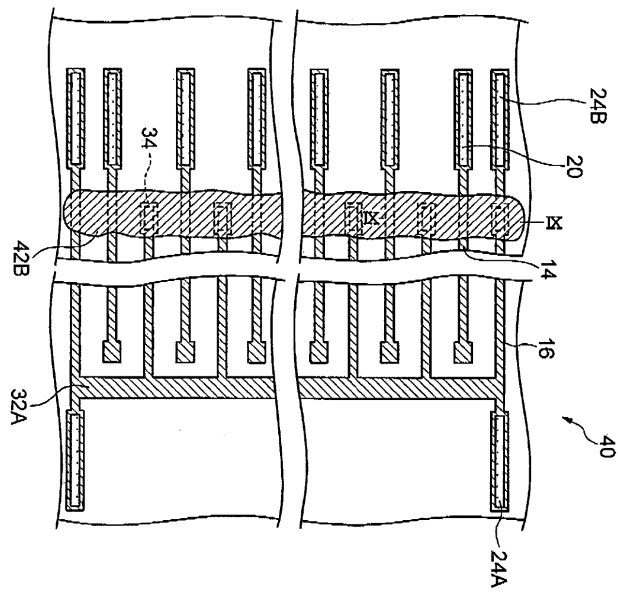
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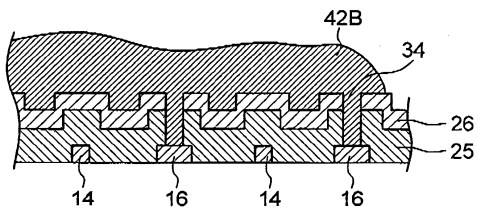
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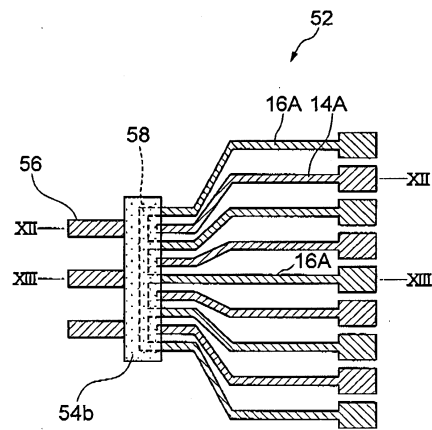
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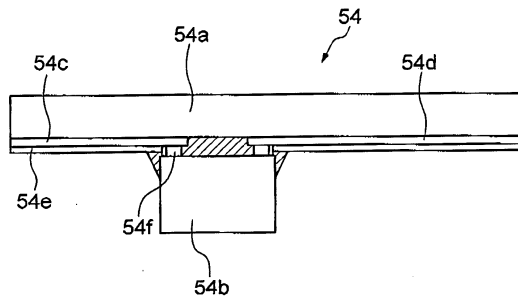
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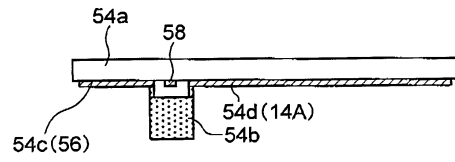
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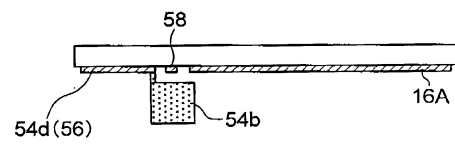
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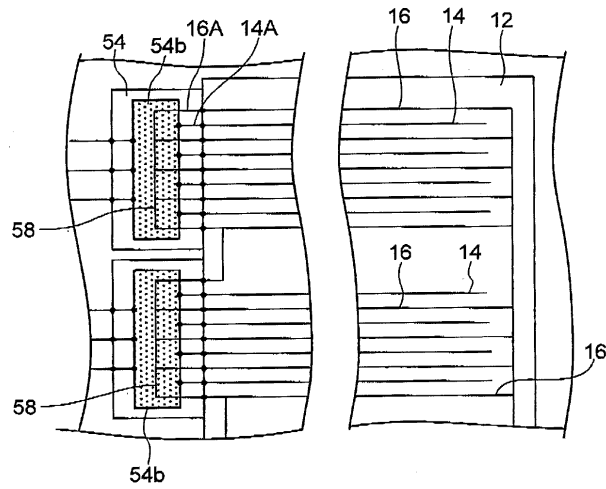
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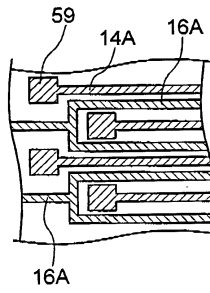
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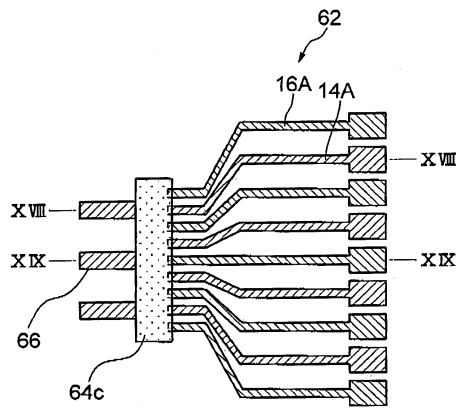
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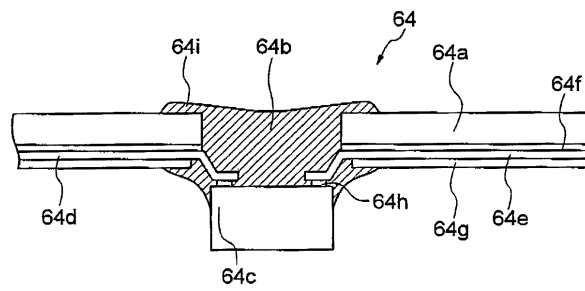
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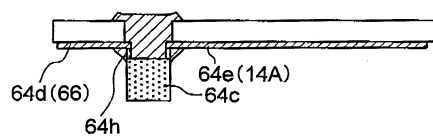
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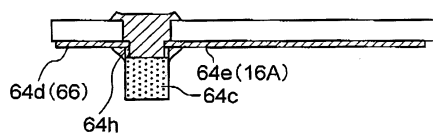
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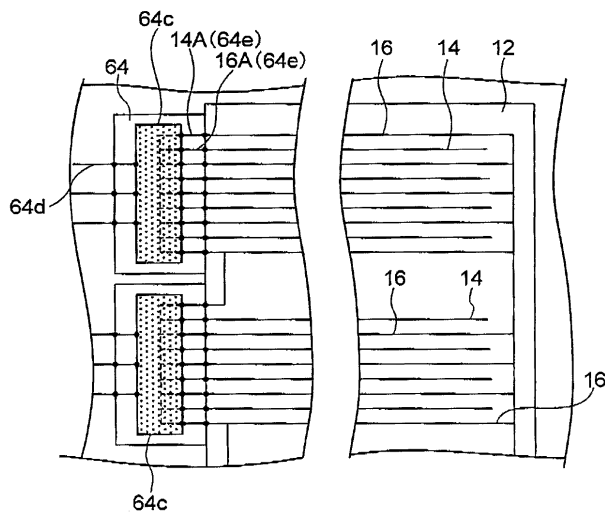
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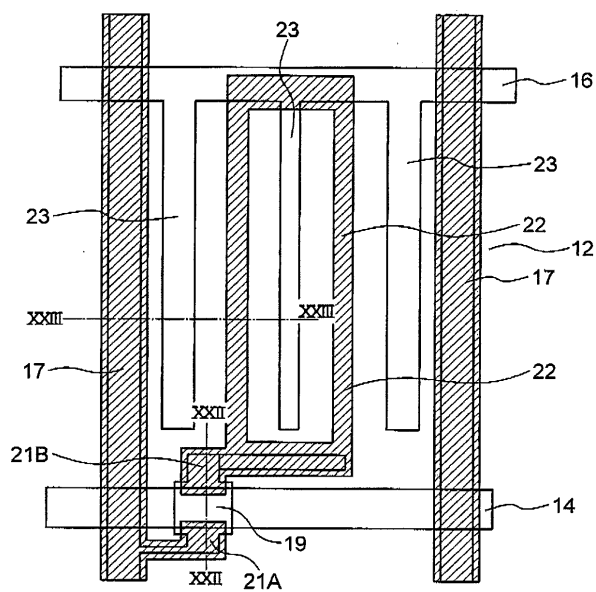
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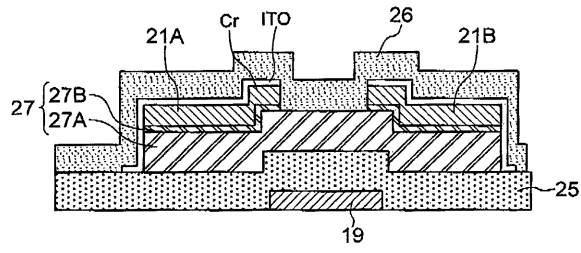
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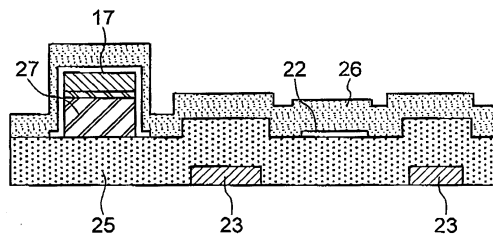
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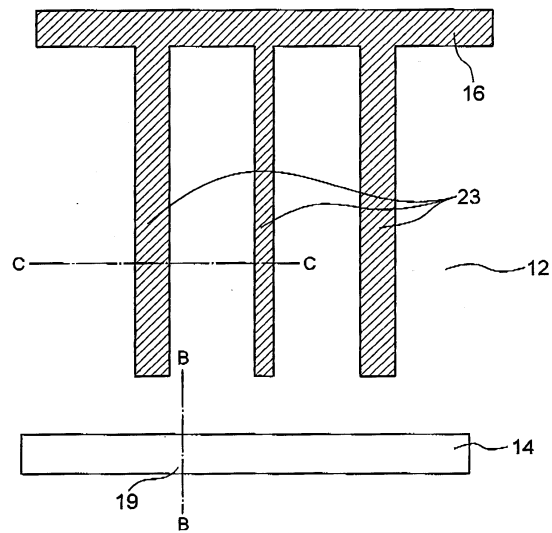
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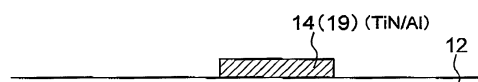
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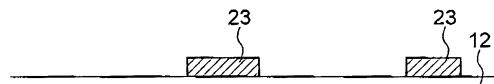
24a



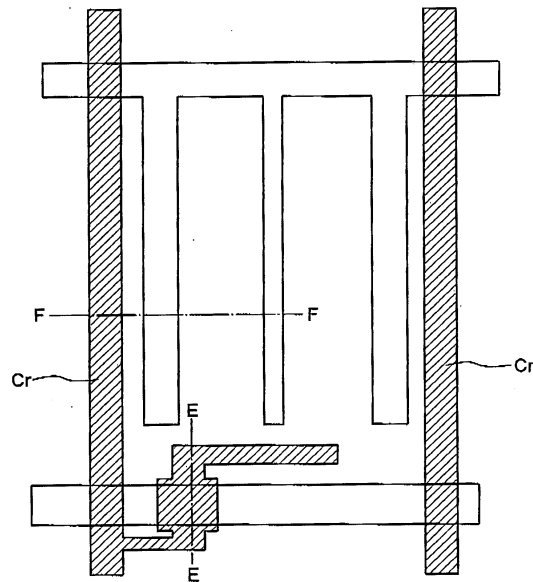
24b



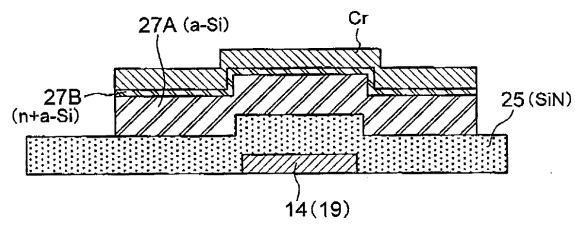
24c



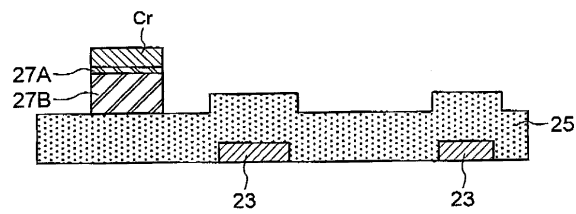
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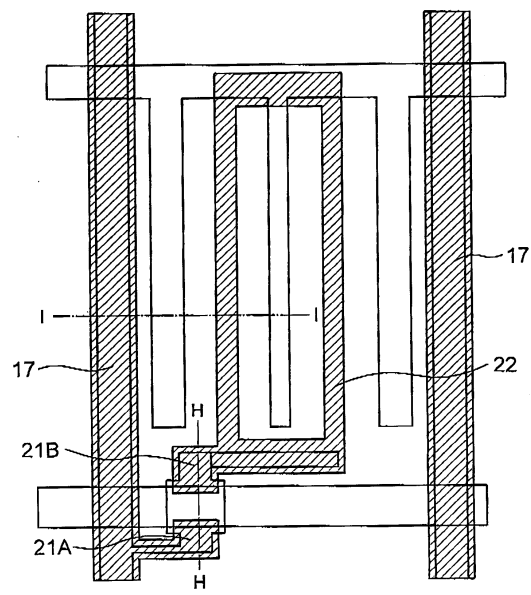
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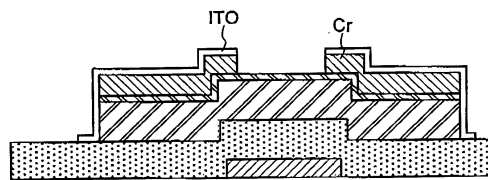
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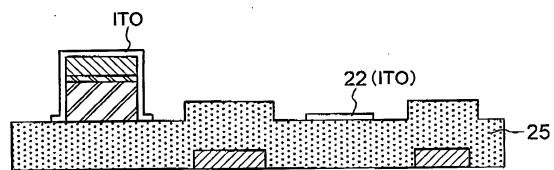
24g



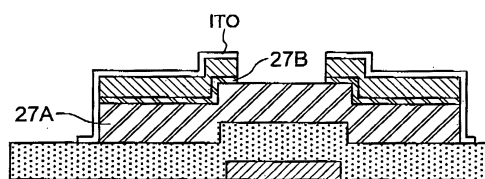
24h



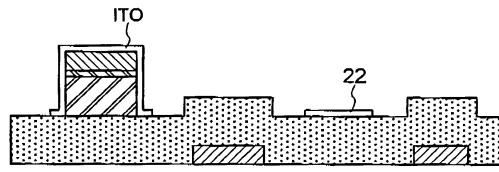
24i



24j



24k



专利名称(译)	具有扫描线和公共线的液晶显示装置		
公开(公告)号	KR1020020026135A	公开(公告)日	2002-04-06
申请号	KR1020010060560	申请日	2001-09-28
[标]申请(专利权)人(译)	NEC液晶技术株式会社		
申请(专利权)人(译)	日元号技术可否让这个夏		
当前申请(专利权)人(译)	日元号技术可否让这个夏		
[标]发明人	KIMURA SHIGERU 기무라시게루 TANAKA HIROAKI 다나카히로아끼 FUJITA AKIRA 후지따아끼라 KUDOU KIYOFUMI 구도기요후미 WATANABE TAKAHIKO 와따나베다까히꼬 MAEDA AKITOSHI 마에다아끼또시 UCHIDA HIROYUKI 우찌다히로유키		
发明人	기무라시게루 다나카히로아끼 후지따아끼라 구도기요후미 와따나베다까히꼬 마에다아끼또시 우찌다히로유키		
IPC分类号	G02F1/1333 G02F1/1368 G02F1/1345 G02F1/1343 G09F9/00 G02F1/136		
CPC分类号	G02F1/1345 G02F1/134363		
代理人(译)	韩国专利公司		
优先权	2000296978 2000-09-28 JP		
其他公开文献	KR100447459B1		
外部链接	Espacenet		

摘要(译)

有源矩阵LCD装置包括TFT面板92，对应面板94和插入其间的液晶。TFT面板包括多条扫描线14和形成在一层中并沿行方向延伸的多条公共线16，以及沿列方向延伸的多条信号线17。用于将公共线16彼此耦合的耦合线设置在TFT面板的像素阵列的外部区域中，例如安装在TFT面板上的TCP 64，并安装在用于驱动扫描线14的驱动器IC 64c上，(24a, 24b)。 - 1 - 2 指数方面 有源矩阵LCD器件，TFT面板，计数器面板，液晶，扫描线，公共线

