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H01L 51/50 (2006.01)

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(22) 2008 06 11
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(65) 10-2009-0128883
(43) 2009 12 16
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KR1020050082644 A
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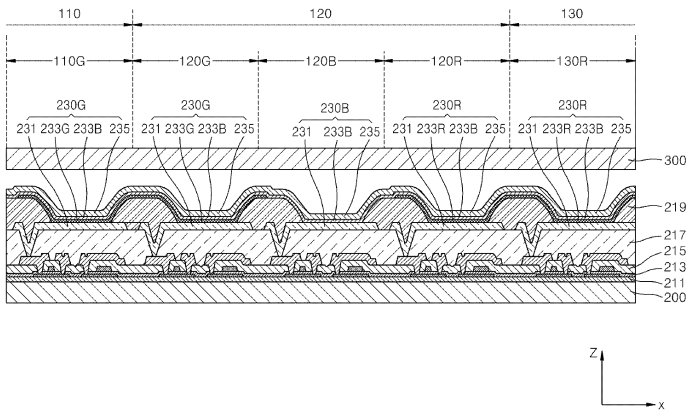

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[0003] 1 2
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[0004] 1 , 2
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[0005] 1 , (11, 12, 13, 14) ,
(11R, 12R, 13R, 14R, 11B, 12B, 13B, 14B, 11G, 12G, 13G, 14G) . ,
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[0006] , ,
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. , 1
2 (11Gm,
12Gm, 13Gm, 14Gm) (10Gm) , 1
2
(10Gm) (l0) .

[0007] , ,
. , 2 ,
x (11Gm, 12Gm) (l0) . 2
(l0) , (l0) 140ppi
QCIF 0.068 .
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[0019] , 90°
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[0020] , 1 2
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[0021] , .

[0022] ,
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[0023] , .

[0024] 3
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[0025] 3 , (100) (110, 120, 130, 140)
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, 3 x . ,
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(x) (110, 120, 130, 140) ,
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[0026] . 3 x (110, 120, 130,
140) x , . 3
( ) (row) 3 x
1 (110), 2 (120), 3 (130) 4 (140) , 1 (110) x
(110R), (110B) (110G) .

[0027] , 2 (120), 3 (130) 4 (140) . , 1 (110) 2
(120) (120R, 120B, 120G) , 1 (110) 2 (120) , 1 (110)
(110R, 110B, 110G) . , 2 (120) ,
(120R, 120B, 120G) , 1 (110) 2 (120) , 1 (11
0) , (110R, 110B, 110G)
. 3 , 1 (110) x (110R),
(110B) (110G) , 1 (110) 2
(120) , x (120G), (120B)
(120R) .

[0028] 3 (130) , (130R, 130B, 130G) , 2
(120) 3 (130) , 2 (120) ,
(120R, 120B, 120G) . 3 , 2 (120) x
(120G), (120B)
(120R) , 2 (120) 3 (130) x
(130R), (130B) (130G) .

[0029] 4 , 3
R, G, B
, R, B, G, G, B, R, R, B, G, G, B, R, .

[0030] 3
4
.

[0031] 4 1 (110) , 2 (120) 3 (130) .

[0032] 4 , (200) (220) , (22
0) (230B, 230G, 230R) .
1 (231) , (200) ( ) 2 (235) , 1 (231)
2 (235) .

[0033] (200) (221), (223), (227), (213)
(215) (220) . (220) 5
, (227) ,

. (220) (200)
(211)
.

[0034] (230B, 230G, 230R) 1 (231) 2 (235) ,
.

[0035] 1 (231) , 2 (235) . , 1
(231) 2 (235) .

[0036] 1 (231) . ITO, IZO, ZnO
In_2O_3 , Ag, Mg, Al, Pt, Pd, Au, Ni, Nd, Ir, Cr
, ITO, IZO, ZnO In_2O_3 .

[0037] 2 (235) , Li, Ca, LiF/Ca,
LiF/Al, Al, Mg 1 (231) 2 (235) ,
ITO, IZO, ZnO In_2O_3
. , Li, Ca, LiF/Ca, LiF/Al, Al, Mg
.

[0038] , (PDL: pixel defining layer, 219) 1 (231) 1 (231)
. (219) , 1 (231)
2 (235) 1 (231) 1 (231) 2 (235)
.

[0039] 1 (231) 2 (235) , . .

[0040] (230B, 230G, 230R) (220) ,
(220) (217)( ) , (230B, 230G, 230R)
(217) , (230B, 230G, 230R) 1 (231) (217)
(220) .

[0041] , (230B, 230G, 230R) (300) . (300)
.

[0042] (x) ,
. , 1 (110) (110G) x
2 (120) (120G) , 2 (120)
(120B) (120R) . 3 (130)
(130R) 2 (120) (120R) .

[0043] , (120R, 130R)
(233R) (233B) . (120G)
(233G) (233B) . (120B)
(233B) .

[0044] ,
, 5 (110Gm, 120Gm, 130Gm, 140Gm)
(100Gm) . 110Gm 120Gm
, 3 4 1 (110) (110G) (233G) 2
(120) (120G) (233G) . 5
(100Gm) (110G, 120G)
(233G) . (233R)
5 (100Gm) .
(233B) 4 (200) ( ) ,

(230B) . ,
(233B) . 4
(233G) (233R) (200)
(233B) .

[0045]
5 , (100Gm)
(*l*1) .

[0046] , 1
2 (10Gm) , 2
(10Gm) (11Gm, 12Gm) (*l*0)
.

[0047] 3 4
5 (100Gm) , 5
, (100Gm) (120Gm, 130Gm) (*l*1) (10Gm)
(11Gm, 12Gm) (*l*0) 2 , (100Gm) (120Gm, 130Gm)
(10Gm) (11Gm, 12Gm) 2 . 140ppi
QCIF , 5 (120Gm, 130Gm)
(*l*1) 0.1368 2 (10Gm) (11Gm, 12Gm)
(*l*0) . ,
.

[0048] 4 (110G, 120G)
(233G) . 5 110Gm
120Gm 110Gm 120Gm
.
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[0049] , 3 (x) 90° (y)
. 6 (y)
. (y) .

[0050] 3 4 ,
(110G) (233G) (233B) .
(110R) (233R)
(233B) . (110G)
(233G) , (110R)
(233R) . (233G),
(233R) (233B) .

[0051] 4 1 (231) 2 (235)
, 1 (231) 2 (235) . ,
(120R, 130R) (233R) (120R, 130R)
(233B) 1 (231,) . (120R,
130R) (233R) , 1 (231)
(233B) .
(120R, 130R) (233R) (233B)
. (233R) (Methoxy)
(Side Group) , (233B)

(-NR2) (Side Group) .
(120R, 130R) (233R)
, 2 (235) (233B)
(233R) . (233B)
(233R) . (233B)
(-CN) (Side Group) ,
(233R) (-F) (Side Group) .

[0052] (130R, 130R) ,
(110G, 120G) . , 4 1
(231) 2 (235) , (110G, 120G)
(233G) (110G, 120G) (233G) 1 (231,
) , 1 (231) (233B)
2 (235) (233B)
(233G) . (110G,
120G) (233G) (233B)
. (233G) (Methoxy) (Side
Group) , (233B) (-NR2)
(Side Group) . , (233B)
(233G) .
(233B) (-CN) (Side Group) ,
(233G) (-F) (Side Group)
.

[0053] 7
. 7 4
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[0054] , 4 (233G)
(233R) 5 6
(233B) (200) . 7
(233B) (200)
(233G) (233R) 5
6 .

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[0055] , 7 ,
(110G) (233G) (233B) .
(110R) (233R) (233B)
. (110G) (233G)
, (110R) (233R)
. (233G), (233R)
(233B) .

[0056] 7 1 (231) 2 (235)
, 1 (231) 2 (235) . ,
(120R, 130R) (233B) (120R, 130R)
(233R) 1 (231,) . (120R,
130R) (233R) , 1 (231)
(233B) (233R)
. (120R, 130R) (233B)
(233R) .
(233B) (-NR2) (Side Group)

, (233R) (Methoxy) (Side Group)
. (120R, 130R)
(233R) , 2 (235)
(233R) . (233R)
(233B) .
(233R) (-F) (Side Group) ,
(233B) (-CN) (Side Group)
.

[0057] (130R, 130R) ,
(110G, 120G) . , 4 1
(231) 2 (235) , (110G, 120G)
(233B) (110G, 120G) (233G) 1 (231,
) , 1 (231) (233B)
(233G) 2 (235)
(233G) .
(110G, 120G) (233B) (233G)
. (233B) (-NR2)
(Side Group) , (233G)
(Methoxy) (Side Group) .

[0058] , (233G) (233B)
. (233G) (-F) (Side
Group) , (233B) (-CN)
(Side Group) .

[0059] 1 (231) 2 (235)
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. ( )
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[0060] 1 .

[0061] 2 1
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[0062] 3
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[0063] 4 3 .

[0064] 5 3
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[0065] 6 5 .

[0066] 7
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[0067] < >

[0068] 110, 120, 130: 110G, 120G:

[0069] 120B: 120R, 130R:

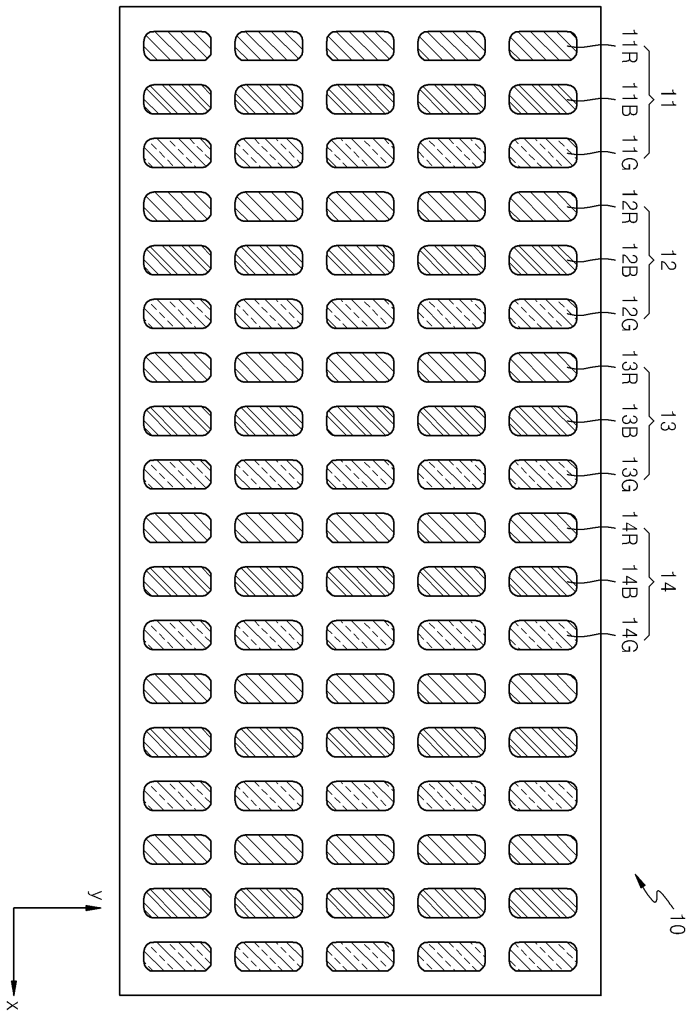
[0070] 231: 230G:

[0071] 230B: 230R:

[0072] 233G: 233B:

[0073] 233R:

1



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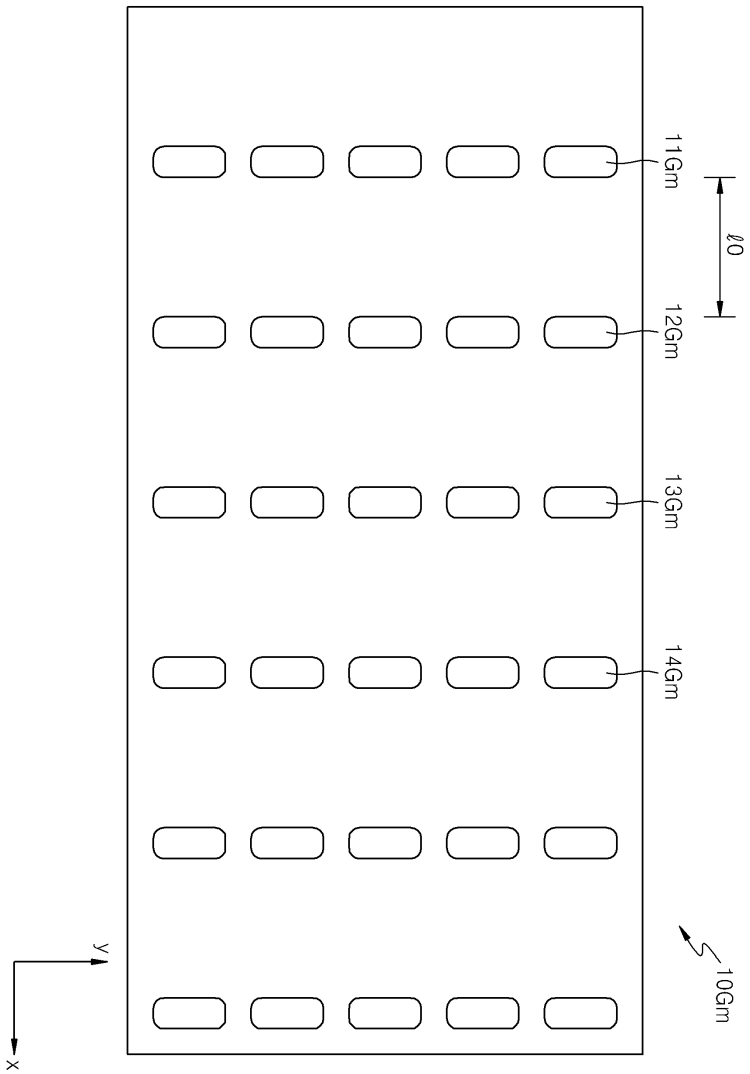

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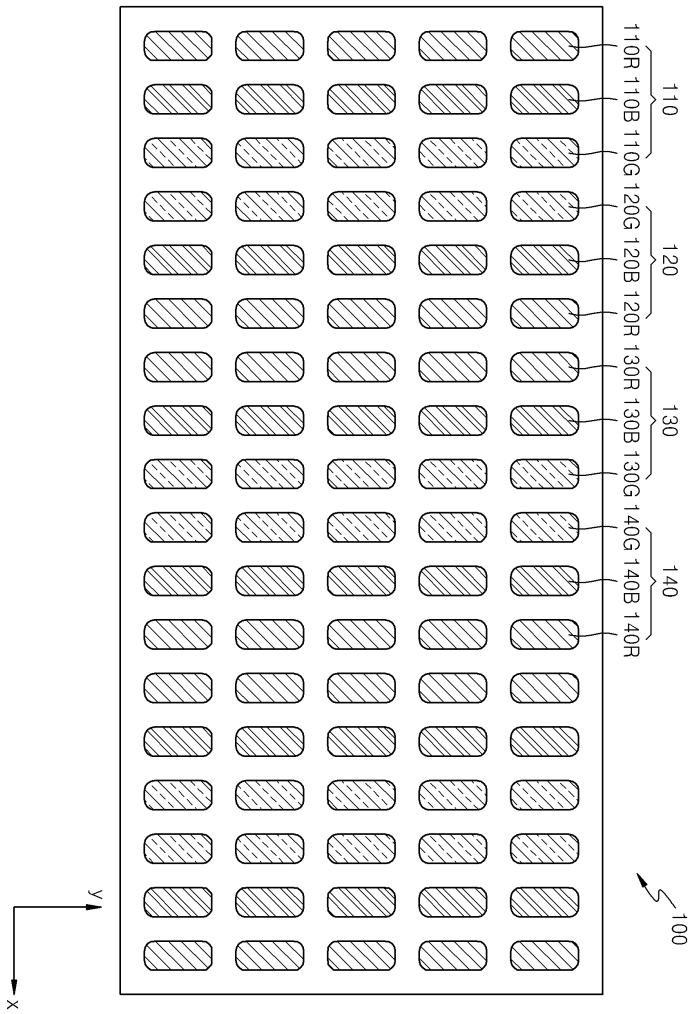
110R
110B
110G
120G
120B
120R
130R
130B
130G
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140R
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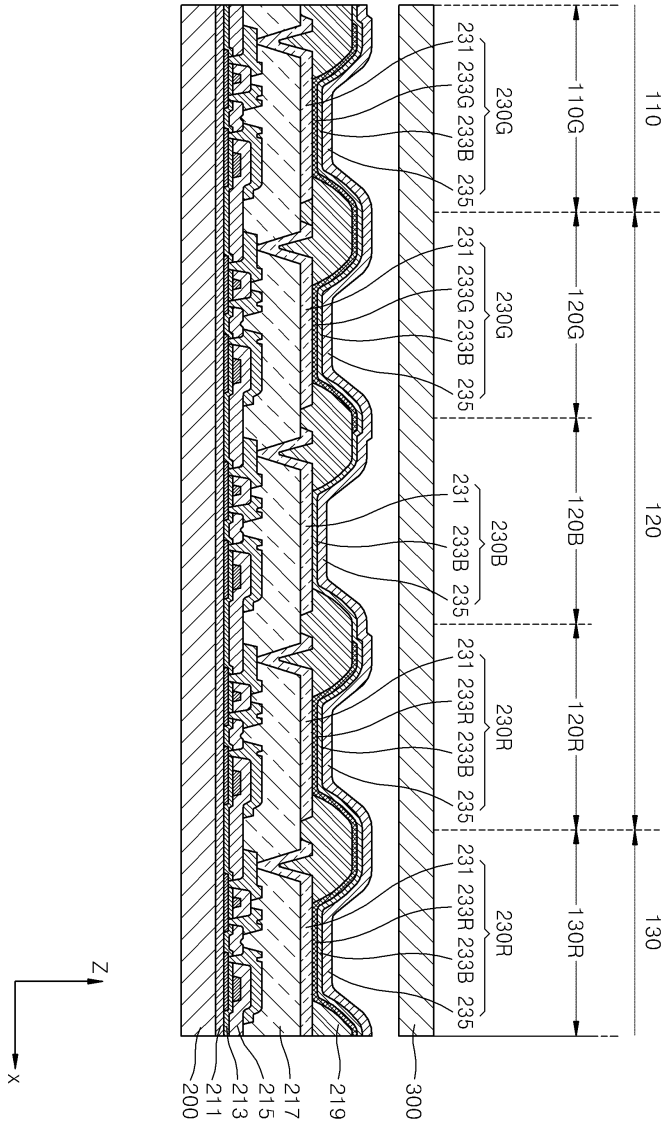
110
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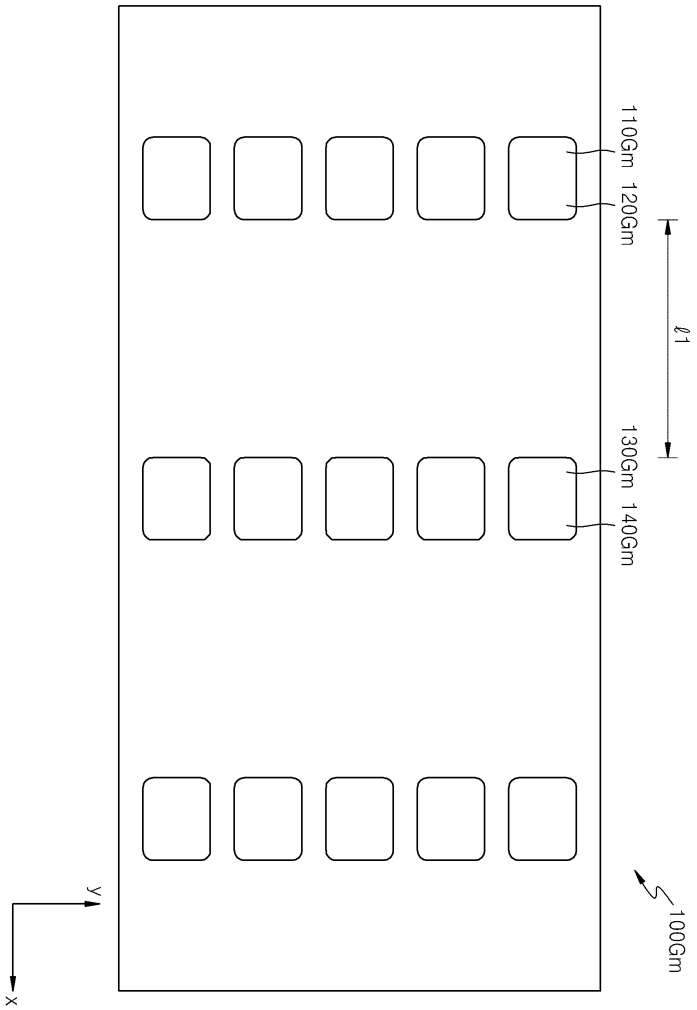
120B
120R
130R
230G
230B
230R
231
233G
233R
233B
235
300
219
217
215
213
211
200
Z
X

5



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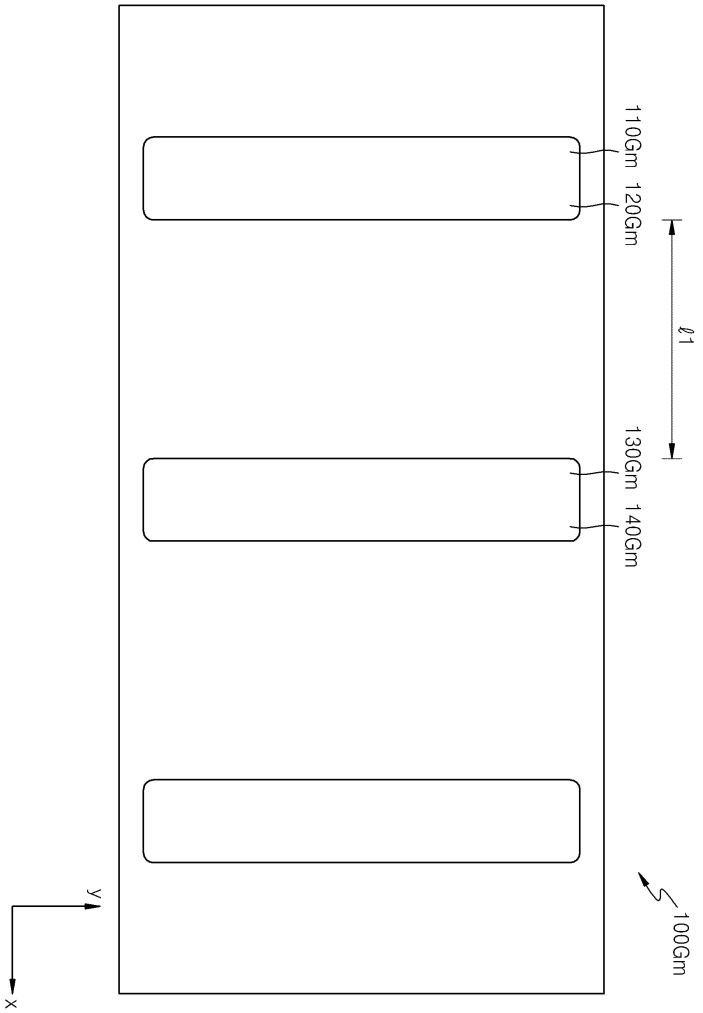

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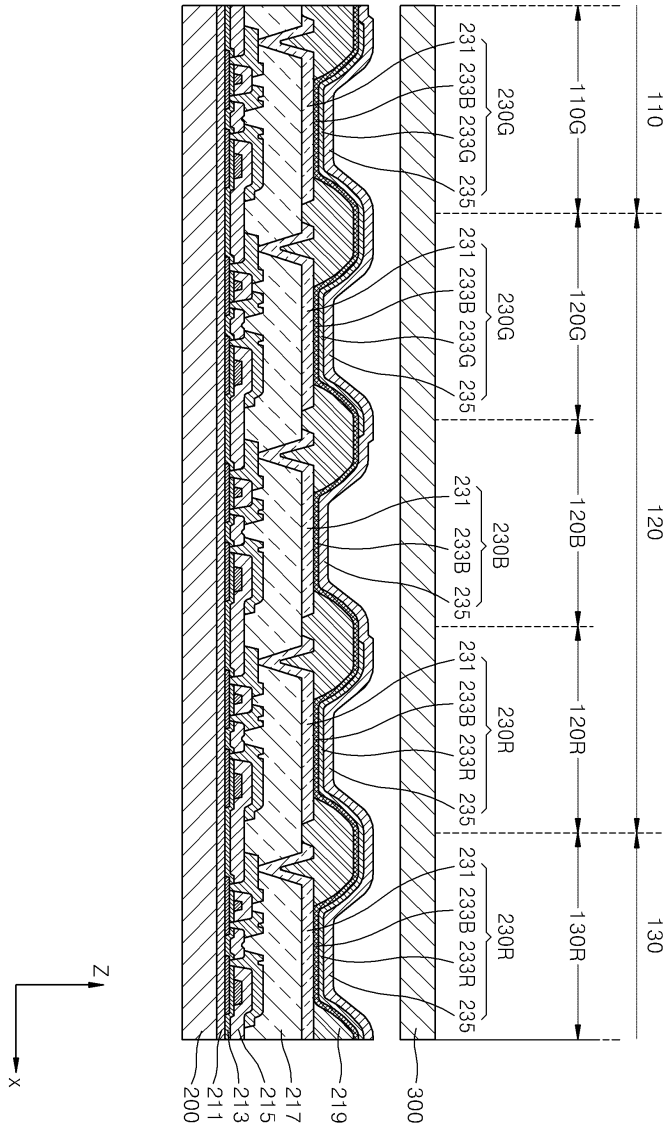
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专利名称(译)	有机发光显示装置		
公开(公告)号	KR1020090128883A	公开(公告)日	2009-12-16
申请号	KR1020080054857	申请日	2008-06-11
[标]申请(专利权)人(译)	三星显示有限公司		
申请(专利权)人(译)	三圣母工作显示有限公司		
当前申请(专利权)人(译)	三圣母工作显示有限公司		
[标]发明人	CHANG SEUNG WOOK 장승욱 KIM MU HYUN 김무현		
发明人	장승욱 김무현		
IPC分类号	H01L51/50 H05B33/26 H05B33/14		
CPC分类号	H01L27/3211 H01L27/3246 H01L51/5056 H01L51/5072 H01L2924/13069		
其他公开文献	KR100953539B1		
外部链接	Espacenet		

摘要(译)

本发明提供关于有机发光显示设备的每个像素，是相应的红光，以及包括子像素的发光层的有机发光显示设备，所述子像素的发光层包括用于蓝光发射的发光层释放蓝光的子像素的发光层包括用于蓝光发射的发光层并释放绿光。用于绿光发射的发光层和用于蓝光发射的发光层包括用于高分辨率有机发光显示装置的像素，具有改善的图案精度的发光层的沉积便于每个子像素。