

(19) (KR)
(12) (B1)

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G02F 1/136

(45)
(11)
(24)

2004 05 12
10-0431242
2004 04 30

(21) 10-2001-0041130
(22) 2001 07 10

(65)
(43)

10-2003-0005715
2003 01 23

(73) .
20

(72) 2 1027-3

2 930-43

(74)

:

(54)

ΔV_P , ΔV_P , ΔV_P , Δ
 V_P .
(gray) , ΔV_P ,
가 ,
 ΔV_P (flicker) , ΔV_P 가 . ΔV
(residual image)
가 .

4

1
2
3

, ,
가 , ,

4
5a 5d 4 - ,
6 .
< >

101 : 102 :
104 : 108 :
112 : 114 :
116 : 120 :

(LCD) , (C_{gd})
 ΔV_p
1
(6) , (11) (7) , (18) (5) ,
(P) , (7) (6) (17) , (T) , (22)
(5) (22) (14) (T)가 (matrix type)
(22) , 가 (13) (15)
(P) (13) (15)
(17) (17) (indium-tin-oxide : ITO)
가
(1 14) 가 가
가
2 1
(14) (13) (15)
(13) (15)
(T) (17) (31)
(31) (T) (13) (33) (35)
(32) (a-Si:H)
(32) (33) (13) (15) (31)
35) (P) (17) (P) (13)
(C_{st})(C) (13) (T) (31)
() 가 ()
(1 14) ()
(off state)가 , 가
(discharge)
(resolution)

(storage capacitor)(C_{st})

(31) (T) (31) (33) (31) (35) (31)
 (2) C_{gd} (1 14) (35) (31)
 31) (17) (flicker) (21) (21a) (가)
)(23) (가)
 () (21) 가 () (23)

(voltage shift) (level shift voltage) (kickback voltage) (23`) ΔV_p (25)
 ΔV_p (25) 3 V_{p(t)} (23`) (voltage offset)(ΔV)
 (1)

$$\Delta V_P = \frac{C_{gd}}{C_{gd} + C_{lc} + C_{st}} \cdot \Delta(V_g) \quad \text{----- (1)}$$

ΔV_g C_{gd} C_{lc} C_{st}
 (kickback voltage) ΔV_P
 ΔV_P

(1) ΔV_P ΔV_P

ΔV_P 가
 ΔV_P (flicker pattern) 가 () ΔV_P (f)

() (+) 가 (on) (-) 가
 (off)가 (+) (-) 가
 가 가
 ΔV_P (gray)

ΔV_P

1
 ;
 ;
 1 2 3
 ;
 1 2 3
 ;
 3

1, 2, 3, 4, 5a, 5b, 5c, 5d, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.

(124)

6

(101)

(L)

(M)

(101)

TCP

(M)

(N)

(101)

(101)

(4 124)

ΔV_P

ΔV_P

(flicker)

(image steaking)

ΔV_P 가

ΔV_P 가

(57)

1.

1

1 2 3

3 2

3

2.

1

1 2

3

3.

1

(Au), (Pt), (Ag)

4.

1

1, 2, 3

가 2 3

3

3

5.

4

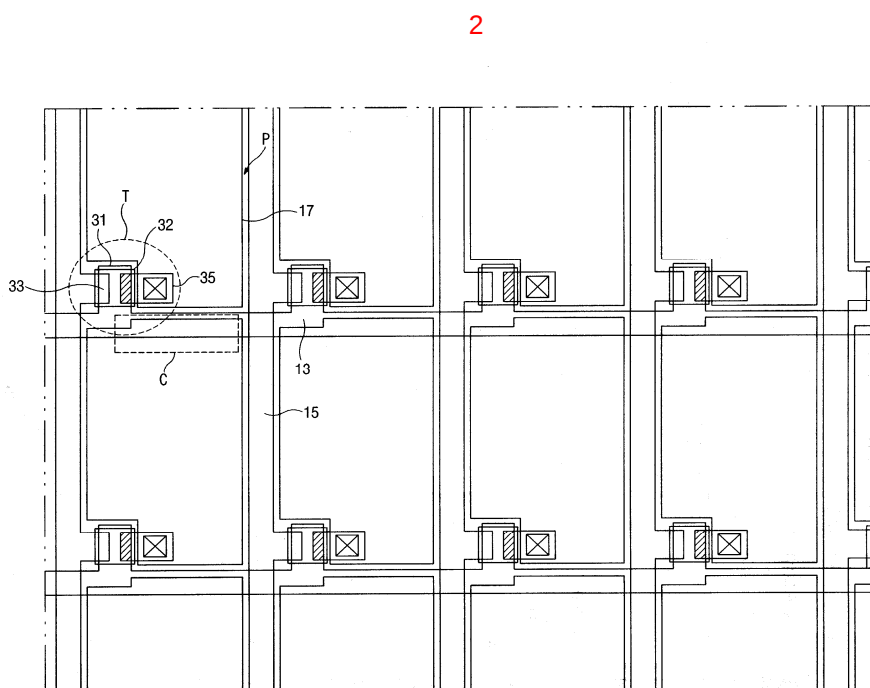
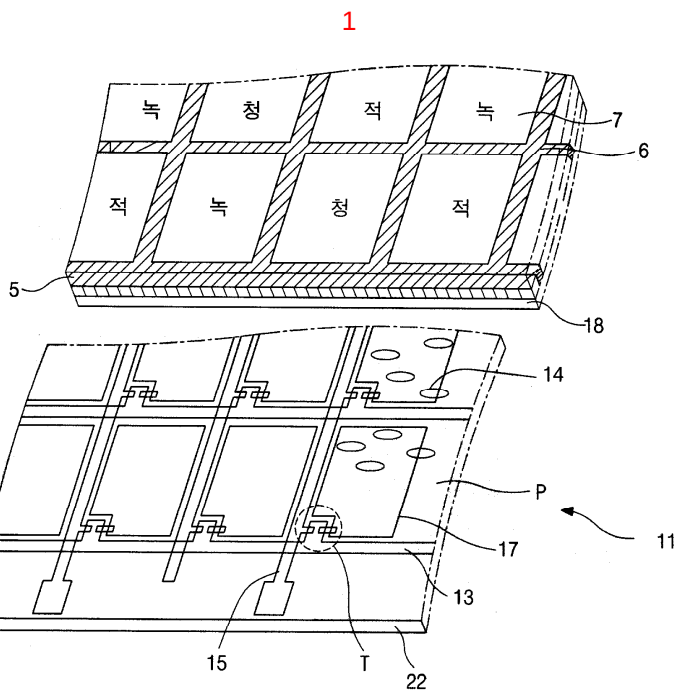
1 2

3

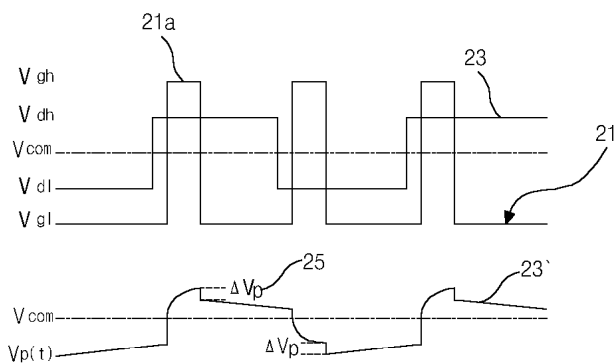
6.

4

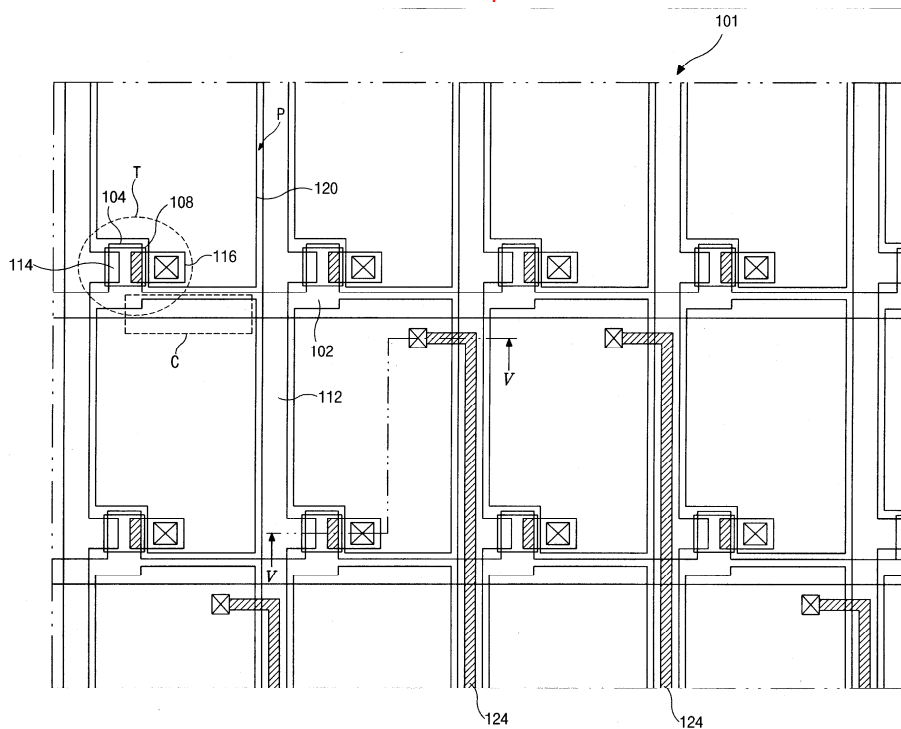
(Au), (Pt), (Ag)



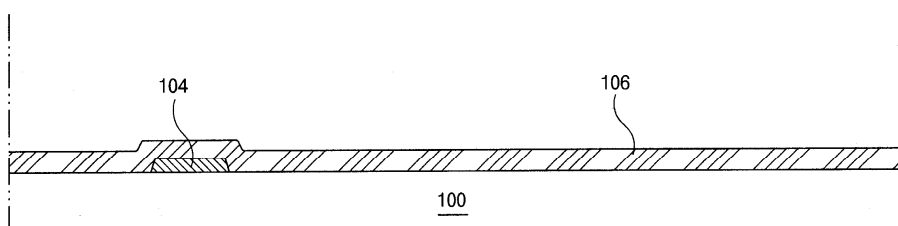
3



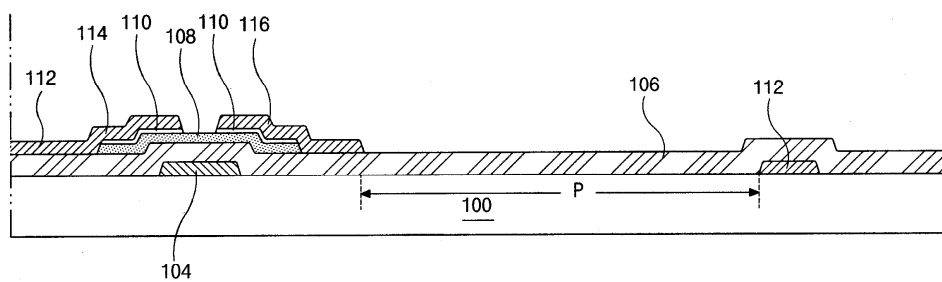
4



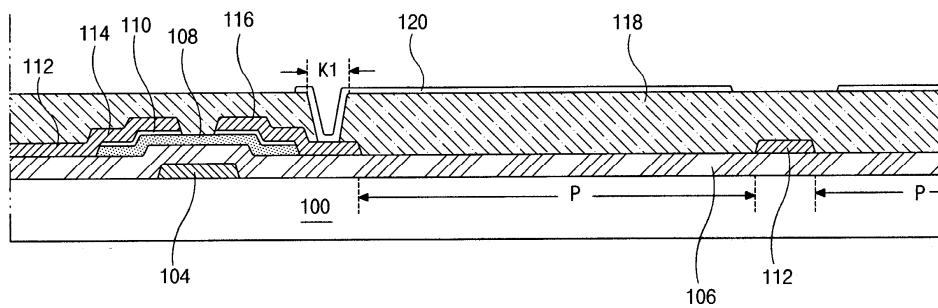
5a



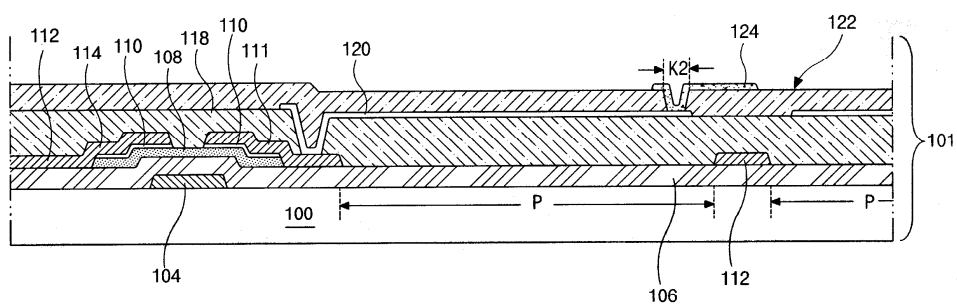
5b



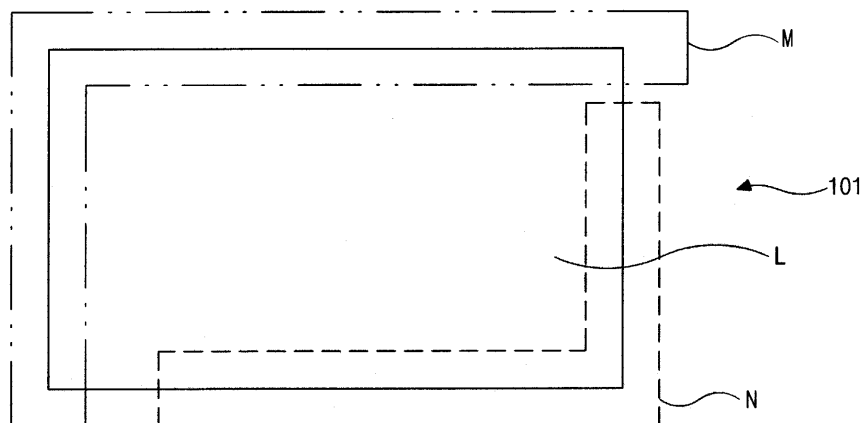
5c



5d



6



专利名称(译)	用于液晶显示装置的阵列基板及其制造方法		
公开(公告)号	KR100431242B1	公开(公告)日	2004-05-12
申请号	KR1020010041130	申请日	2001-07-10
[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	BAEK HEUMIL 백흠일 KIM GIHONG 김기홍		
发明人	백흠일 김기홍		
IPC分类号	G02F1/136		
代理人(译)	贞媛KI		
其他公开文献	KR1020030005715A		
外部链接	Espacenet		

摘要(译)

本发明涉及一种测量液晶显示器阵列基板的 ΔVP 的方法。传统上，由于不能精确测量构成阵列基板的每个像素中产生的 ΔVP 值，因此发出由 ΔVP 值产生的闪烁图案，然后手动调节公共电压以去除闪烁图案 ΔVP 的值被校正。如上所述的公共电压调节方法的缺点在于花费很长时间，因为不仅需要找到精确的 ΔVP 值而且还需要测量每个灰度，因为闪烁图案是由人眼确认的。为了解决这个问题，本发明的目的是在与所述阵列基板上的像素电极接触添加一个额外的布线，因此，在由布线预定的每个像素中流动的信号的准确波形可以被测量。在这种方法中，很容易校正 ΔVP 值，因为可以相对精确地测量 ΔVP 值。因此，可以防止由于 ΔVP 引起的诸如闪烁或残留图像的缺陷，因此可以制造具有更清晰图像质量的液晶面板。 4

