

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
26 June 2003 (26.06.2003)

PCT

(10) International Publication Number
WO 03/052725 A3

(51) International Patent Classification⁷: **G02F 1/1345**,
G09G 3/36, G02F 1/1343, 1/1335

(21) International Application Number: PCT/US02/39859

(22) International Filing Date:
13 December 2002 (13.12.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10/024,326 14 December 2001 (14.12.2001) US
10/150,394 17 May 2002 (17.05.2002) US
10/278,393 22 October 2002 (22.10.2002) US

(71) Applicant (for all designated States except US): **CLAIR-VOYANTE LABORATORIES, INC.** [US/US]; 874 Gravenstein Highway South., Suite 14., Sebastopol, CA 95472 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **BROWN ELLIOTT, Candice, Hellen** [US/US]; 531 York Street,

Vallejo, CA 95490 (US). **CREDELLE, Thomas, Lloyd** [US/US]; 407 Scotts Bluff Place, Morgan Hill, CA 95037 (US). **IM, Moon, Hwan** [KR/US]; 190 Calistoga Road, Santa Rosa, CA 95409 (US).

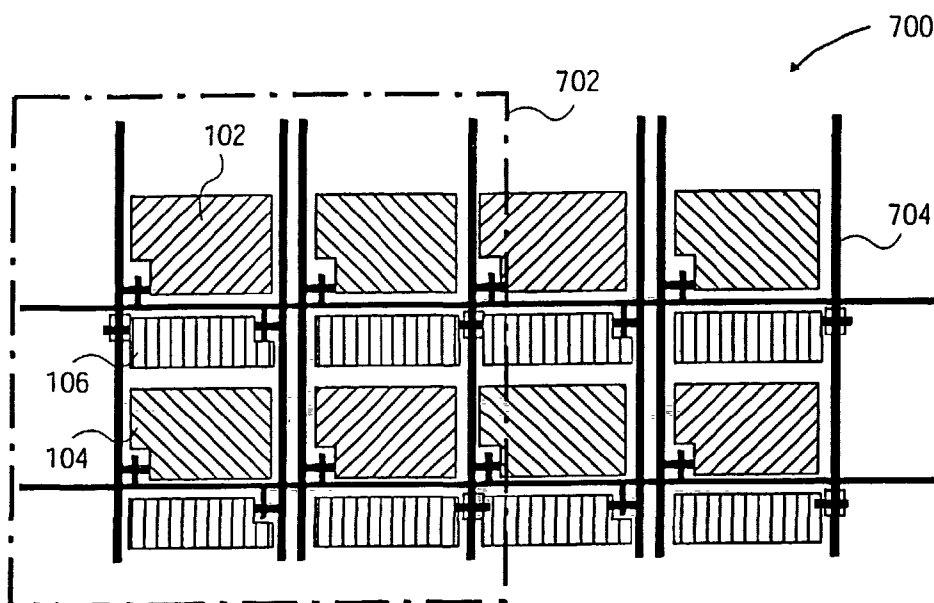
(74) Agent: **GARRETT, Arthur, S.**; Finnegan, Henderson, Farabow Garrett & Dunner, L. L.P., 1300 I Street, N.W., Washington, DC 20005-3315 (US).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK,

[Continued on next page]

(54) Title: COLOR DISPLAY HAVING VARIOUS SUB-PIXEL ARRANGEMENTS AND LAYOUTS



(57) Abstract: A color display having horizontal sub-pixel arrangements and layouts is disclosed. The display includes a plurality of a sub-pixel groups. Each sub-pixel group can have a plurality of sub-pixels wherein each sub-pixel has a height along a vertical axis and a width along a horizontal axis, width of each sub-pixel being greater in length than its height in the sub-pixel group. The display also includes a column driver coupled to each sub-pixel in a column and a row driver coupled to each sub-pixel in a row of the sub-pixel group. Each sub-pixel in the sub-pixel group is coupled to the row driver along the width of the sub-pixel.



WO 03/052725 A3



TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(88) Date of publication of the international search report:
28 August 2003

Published:

- *with international search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.