

CORRECTED VERSION

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
16 May 2002 (16.05.2002)

PCT

(10) International Publication Number
WO 02/039753 A3

(51) International Patent Classification⁷: **G02F 1/13**,
G01M 11/02, H04N 17/00

(21) International Application Number: PCT/US01/51297

(22) International Filing Date: 26 October 2001 (26.10.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/244,125 27 October 2000 (27.10.2000) US
09/916,616 26 July 2001 (26.07.2001) US

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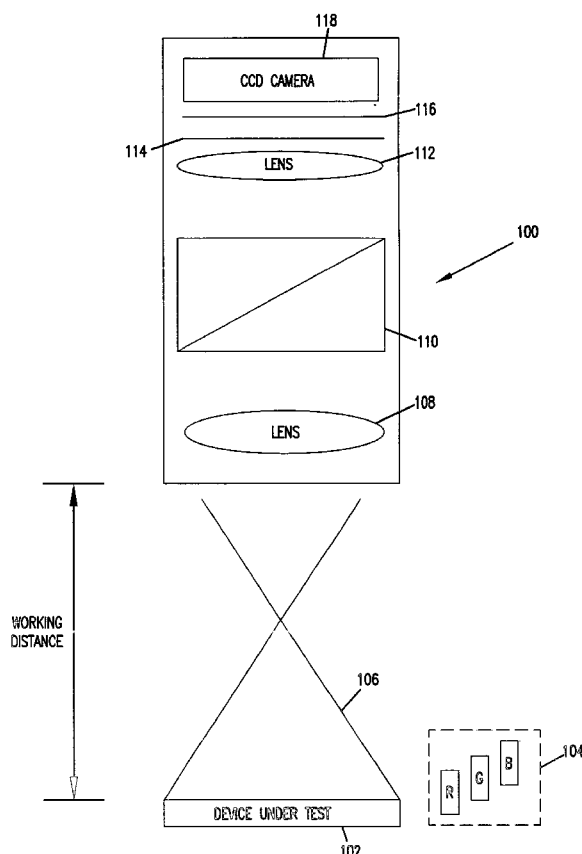
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(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,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

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(54) Title: METHOD AND APPARATUS FOR TESTING COLOR SEQUENTIAL, NEAR-TO-THE-EYE, AND SIMILAR DISPLAY DEVICES



(57) Abstract: A test method and apparatus for liquid crystal display (LCD) devices, and in particular LCoS (liquid crystal on silicon) display devices, to achieve a pass/fail determination based upon user-defined tolerances of the LDC devices. The test apparatus side-illuminates the LCD device to provide reliable pixel defect detection and uniformity measurement. The test method is adaptable for LCD devices that have light emitting devices (LEDs) integrated into the LCD or separated from the LCD. The side-illumination provides a gradient of brightness that is further discernable into red, green, and blue colors. A monochromatic image can be driven by the LEDs using one of two drive schemes. The first drive scheme illuminates a single color according to a monochrome test mode. The second drive scheme drive a white image with a single LED illuminated such that a monochromatic image results. A module can reorder the testing according to the rate of failures for each test.

WO 02/039753 A3



(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

(88) Date of publication of the international search report:
13 March 2003

(48) Date of publication of this corrected version:

20 November 2003

(15) Information about Correction:

see PCT Gazette No. 47/2003 of 20 November 2003, Section II

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.