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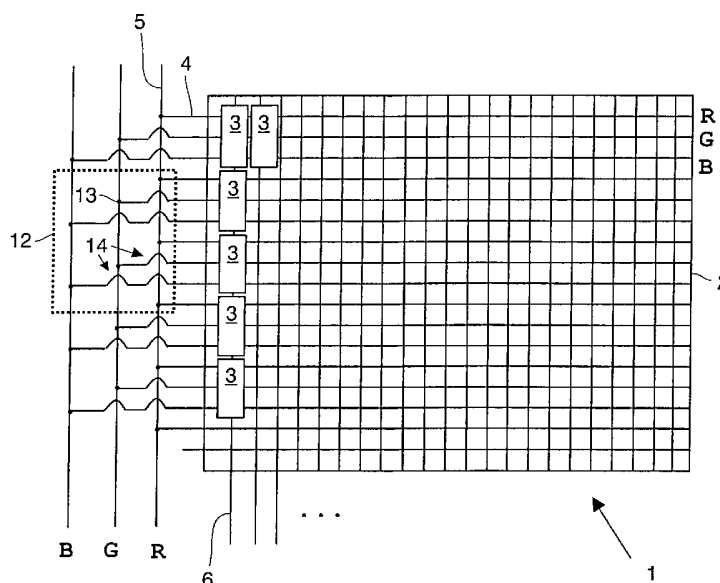
## PCT

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| <p>(15) <b>International Patent Classification<sup>7</sup>:</b> <b>H01L 27/00</b>,<br/>G01R 31/28</p> <p>(21) <b>International Application Number:</b><br/>PCT/IB2003/003629</p> <p>(22) <b>International Filing Date:</b> 8 August 2003 (08.08.2003)</p> <p>(25) <b>Filing Language:</b> English</p> <p>(26) <b>Publication Language:</b> English</p> <p>(30) <b>Priority Data:</b><br/>02078908.7 20 September 2002 (20.09.2002) EP</p> <p>(71) <b>Applicant (for all designated States except US):</b> <b>KONINKLIJKE PHILIPS ELECTRONICS N.V.</b> [NL/NL];<br/>Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).</p> <p>(72) <b>Inventors; and</b></p> <p>(75) <b>Inventors/Applicants (for US only):</b> <b>LIFKA, Herbert</b> [AT/NL]; c/o Prof . Holstlaan 6, NL-5656 AA Eindhoven (NL). <b>STROEX, Erik, A., H., M.</b> [NL/NL]; c/o Prof . Holstlaan 6, NL-5656 AA Eindhoven (NL). <b>BAKKER, Mark</b></p> | <p>[NL/NL]; c/o Prof . Holstlaan 6, NL-5656 AA Eindhoven (NL). <b>JONGMAN, Sietze</b> [NL/NL]; c/o Prof . Holstlaan 6, NL-5656 AA Eindhoven (NL). <b>KLEIN, Markus, H.</b> [DE/DE]; c/o Prof . Holstlaan 6, NL-5656 AA Eindhoven (NL).</p> <p>(74) <b>Agent:</b> <b>DEGUELLE, Wilhelmus, H., G.</b>; Philips Intellectual Property &amp; Standards, Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).</p> <p>(81) <b>Designated States (national):</b> 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, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.</p> <p>(84) <b>Designated States (regional):</b> 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, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).</p> |
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[Continued on next page]

- (54) Title:** ELECTRICAL DEVICE, A METHOD FOR MANUFACTURING AN ELECTRICAL DEVICE, TEST STRUCTURE, A METHOD FOR MANUFACTURING SUCH A TEST STRUCTURE AND A METHOD FOR TESTING A DISPLAY PANEL



- (57) Abstract:** The invention relates to an electrical device comprising a substrate carrying at least one component comprising at least one electrode, a first connecting line electrically connected to said electrode, wherein the first connecting line bridges a second connecting line by means of a crossover. The crossover is, at least at one side, bounded by an electrically insulating structure. The invention allows new testing methods and efficient lead-outs for an electrical device, such as electroluminescent display devices.

**Declaration under Rule 4.17:**

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations* 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, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, 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, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

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# INTERNATIONAL SEARCH REPORT

International Application No

PCT/IB 03/03629

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H01L27/00 G01R31/28

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01L H05B G01R

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data, INSPEC

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6 414 249 B1 (VICKERS KENNETH G) 2 July 2002 (2002-07-02)	16-18,21
A	figures column 5, line 5 - line 62 column 6, line 60 - column 9, line 3	1,4,9
Y	PATENT ABSTRACTS OF JAPAN vol. 2000, no. 10, 17 November 2000 (2000-11-17) -& JP 2000 200053 A (FUTABA CORP), 18 July 2000 (2000-07-18) abstract	16-18,21
A	EP 1 075 166 A (HARNESS SYST TECH RES LTD ; SUMITOMO WIRING SYSTEMS (JP); SUMITOMO ELE) 7 February 2001 (2001-02-07) abstract; figures 3,4	1,4-6,9, 12
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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PCT/IB 03/03629

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A	US 5 701 055 A (MIYAGUCHI SATOSHI ET AL) 23 December 1997 (1997-12-23) cited in the application abstract; figures 14-18 -----	1,2,5,9, 10,12,13
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