

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
26 July 2001 (26.07.2001)

PCT

(10) International Publication Number
WO 01/54068 A2

- (51) International Patent Classification⁷: **G06T 7/00**
- (21) International Application Number: PCT/CA01/00042
- (22) International Filing Date: 17 January 2001 (17.01.2001)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
2,296,143 18 January 2000 (18.01.2000) CA
- (71) Applicant: **SOLVISION INC.** [CA/CA]; 9-R Place du Commerce, Brossard, Quebec J4W 2V6 (CA).
- (72) Inventors: **COULOMBE, Alain**; 1085 Croissant Savard, Brossard, Quebec J4X 1X9 (CA). **CANTIN, Michel**; Apartment 1410, 7680 Boulevard Marie-Victorin, Brossard, Quebec J4W 3L2 (CA). **BERARD, Louis**; 3948 St-André, Montreal, Quebec H2L 3W1 (CA). **GAUTHIER, Jonathan**; 1737 B Des Vents, Ste-Julie, Quebec J3E 1L1 (CA).
- (74) Agents: **DUBUC, Jean, H.** et al.; Goudreau Gage Dubuc, The Stock Exchange Tower, Suite 3400, 800 Place Victoria, P.O. Box 242, Montreal, Quebec H4Z 1E9 (CA).
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, 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, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.
- (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, GW, ML, MR, NE, SN, TD, TG).
- Published:**
— without international search report and to be republished upon receipt of that report
- 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.*

(54) Title: METHOD AND SYSTEM FOR DETECTING DEFECTS ON A PRINTED CIRCUIT BOARD

(57) Abstract: A method and a system for detecting surface defects on electronic circuits, such as Printed Circuit Boards (PCB), are described herein. The method first comprises identifying contours on a digital image of the PCB. Then anomalies are detected on the PCB image by comparing the identified contours to contours on a vectorial model of the PCB. Each detected anomaly is compared to manufacturing data to verify it if corresponds to a defect.

WO 01/54068 A2