

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
16 July 2009 (16.07.2009)

PCT

(10) International Publication Number
WO 2009/088363 A1

(51) International Patent Classification:
H05K 3/04 (2006.01) **H05K 3/46** (2006.01)

(21) International Application Number:
PCT/SG2008/000470

(22) International Filing Date:
9 December 2008 (09.12.2008)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
200800182-8 8 January 2008 (08.01.2008) SG

(71) Applicant (for all designated States except US): **OPULENT ELECTRONICS INTERNATIONAL PTE LTD** [SG/SG]; 10 Ubi Crescent, #07-12, Lobby B, Ubi Tech Park, Singapore 408564 (SG).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **WEE, Kai Fook Francis** [SG/SG]; 31 Jalan Isnin Thomson Garden, Singapore, Singapore 577969 (SG).

(74) Agent: **YU SARN AUDREY & PARTNERS**; 17 Upper Circular Road, #03-00 Juta Building, Singapore 058415 (SG).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))

Published:

— with international search report

(54) Title: A METHOD OF DEPTH ROUTING AN ELECTRONIC LAYUP AND APPARATUS FOR EFFECTING SUCH A METHOD

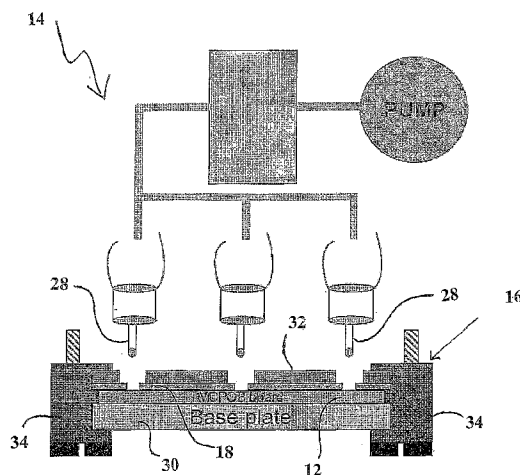


Figure 6

(57) Abstract: A method of depth routing an electronic layup comprised of a dielectric sandwiched between a metal layer and a metal substrate which is then laminated. The method involves first positioning a hardened mask so that the mask is interposed between the metal layer and at least one nozzle of a sandblasting machine, the mask having at least one aperture provided therein. Thereafter, the electronic layup is sandblasted through the at least one aperture by way of the sandblasting machine. The force, size and type of abrasive applied by the sandblasting machine are sufficient to erode the metal layer and the dielectric but not the substrate.

WO 2009/088363 A1