

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
18 December 2008 (18.12.2008)

PCT

(10) International Publication Number
WO 2008/152193 A1

(51) International Patent Classification:

H05K 3/46 (2006.01) **H05K 3/10** (2006.01)
H05K 3/02 (2006.01)

(21) International Application Number:

PCT/FI2008/050312

(22) International Filing Date: 29 May 2008 (29.05.2008)

(25) Filing Language: Finnish

(26) Publication Language: English

(30) Priority Data:

20070453 7 June 2007 (07.06.2007) FI
20070904 26 November 2007 (26.11.2007) FI

(71) Applicant (for all designated States except US): **FOCOIL OY** [FI/FI]; Lentokatu 2, FI-90460 Oulunsalo (FI).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **SALMINEN, Antti** [FI/FI]; Multamäenkatu 3 A, FI-53850 Lappeenranta (FI). **HOLAPPA, Rauno** [FI/FI]; Minttukuja 4, FI-90460 Oulunsalo (FI).

(74) Agent: **Patentti-Laitinen Oy**; P.O.Box 29, Kaivomestarininkatu 6, FI-02771 Espoo (FI).

(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, 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).

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

(54) Title: METHOD IN MANUFACTURING OF CIRCUIT BOARDS

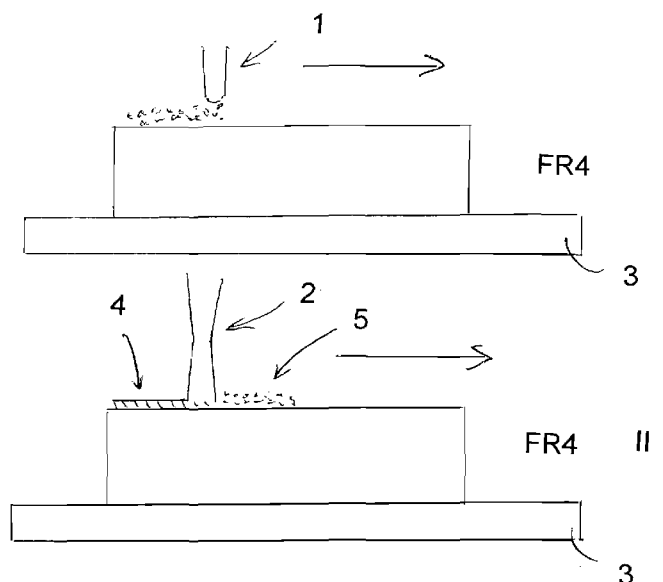


FIG. 2

(57) Abstract: Method for connecting the conductive surfaces of circuit boards, especially a circuit board equipped with at least two conductive surfaces separated by an insulator layer and with holes, or for creating conductors on a board in a manner that conducts electricity. In the method, a metal or metal alloy, in a powder form, is fed into and the powder is sintered using a laser in order to create a unified conductive structure.

WO 2008/152193 A1