

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
1 March 2001 (01.03.2001)

PCT

(10) International Publication Number
WO 01/14612 A1

(51) International Patent Classification⁷: C23C 22/00, 22/48, 8/06, B32B 15/04

(21) International Application Number: PCT/US00/20787

(22) International Filing Date: 21 August 2000 (21.08.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
09/383,718 26 August 1999 (26.08.1999) US

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(81) Designated States (national): AE, AL, AM, AT, AU, AZ,
BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK,
DM, 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, NO, NZ, PL, PT,
RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA,
UG, US, 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), OAPI patent (BF, BJ, CF, CG,
CI, CM, GA, GN, 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.

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: PROCESS FOR SELECTIVE DEPOSITION OF COPPER SUBSTRATES

(57) Abstract: A method is provided for the selective deposition of an organic solderability preservative (OSP) coating on copper surfaces of articles such as electronic components, e.g., printed wiring boards, to serve as a protective coating and preserve the solderability of the copper surface while substantially excluding gold surfaces from attracting the same OSP coating which coating causes cosmetic defects in the form of staining and may reduce the conductivity of the gold contact surface. The method improves the conventional OSP process and utilizes a pre-treatment of the copper surface before applying the OSP coating comprising treating the cleaned and preferably micro-etched copper with an aqueous solution of benzimidazole or derivative thereof to form a precoat on the copper surface. After the pre-treatment step, the precoated copper surface is conventionally treated with a suitable OSP solution such as an aqueous solution of a substituted benzimidazole compound, preferably at the 2-position.

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