

CORRECTED VERSION

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
6 May 2004 (06.05.2004)

PCT

(10) International Publication Number
WO 2004/037877 A2

- (51) International Patent Classification⁷: **C08G**
- (21) International Application Number:
PCT/US2003/017658
- (22) International Filing Date: 3 June 2003 (03.06.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
10/161,561 3 June 2002 (03.06.2002) US
- (71) Applicant (for all designated States except US): **HONEYWELL INTERNATIONAL INC.** [US/US]; PO Box 2245, 101 Columbia Road, Morristown, NJ 07962 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **BEDWELL, William** [US/US]; HONEYWELL INTERNATIONAL INC., PO Box 2245, 101 Columbia Road, Morristown, NJ 07962 (US). **HACKER, Nigel** [GB/US]; HONEYWELL INTERNATIONAL INC., PO Box 2245, 101 Columbia Road, Morristown, NJ 07962 (US). **LEUNG, Roger**

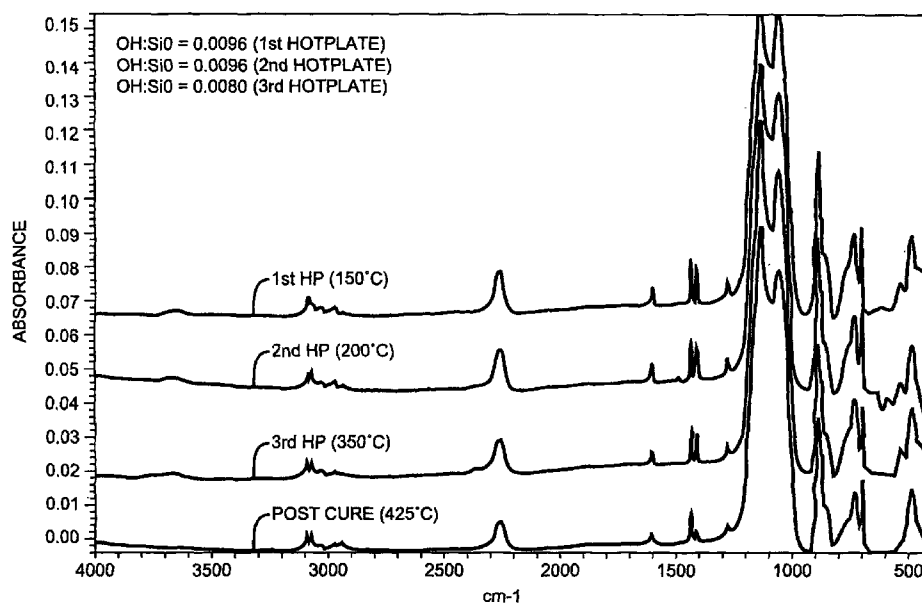
[US/US]; HONEYWELL INTERNATIONAL INC., PO Box 2245, 101 Columbia Road, Morristown, NJ 07962 (US). **IWAMOTO, Nancy** [US/US]; HONEYWELL INTERNATIONAL INC., PO Box 2245, 101 Columbia Road, Morristown, NJ 07962 (US). **NEDBAL, Jan** [CZ/US]; HONEYWELL INTERNATIONAL INC., PO Box 2245, 101 Columbia Road, Morristown, NJ 07962 (US). **XIE, Songyuan** [CN/US]; HONEYWELL INTERNATIONAL INC., PO Box 2245, 101 Columbia Road, Morristown, NJ 07962 (US). **MORO, Lorenza** [IT/US]; HONEYWELL INTERNATIONAL INC., PO Box 2245, 101 Columbia Road, Morristown, NJ 07962 (US). **MUKHERJEE, Shyama** [US/US]; HONEYWELL INTERNATIONAL INC., PO Box 2245, 101 Columbia Road, Morristown, NJ 07962 (US).

(74) Agent: **THOMPSON, Sandra**; RIORDAN & MCKINZIE, 600 Anton Blvd., 18th Floor, Costa Mesa, CA 92626 (US).

(81) Designated States (national): AE, AG, AL, AM, AT (utility model), AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA,

[Continued on next page]

(54) Title: ORGANOSILOXANES



(57) Abstract: The present invention provides an organosiloxane comprising at least 80 weight percent of Formula I: $[Y_{0.01-1.0}SiO_{1.5-2}]_a[Z_{0.01-1.0}SiO_{1.5-2}]_b[H_{0.01-1.0}SiO_{1.5-2}]_c$ where Y is aryl; Z is alkenyl; a is from 15 percent to 70 percent of Formula I; b is from 2 percent to 50 percent of Formula I; and c is from 20 percent to 80 percent of Formula I. The present organosiloxane may be used as ceramic binder, high temperature encapsulant, and fiber matrix binder. The present composition is also useful as an adhesion promoter in that it exhibits good adhesive properties when coupled with other materials in non-microelectronic or microelectronic applications. Preferably, the present compositions are used in microelectronic applications as etch stops, hardmasks, and dielectrics.

WO 2004/037877 A2



CH, CN, CO, CR, CU, CZ (utility model), CZ, DE (utility model), DE, DK (utility model), DK, DM, DZ, EC, EE (utility model), EE, ES, FI (utility model), 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, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK (utility model), SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

- (84) **Designated States (regional):** 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).

Published:

— *without international search report and to be republished upon receipt of that report*

(48) Date of publication of this corrected version:

11 November 2004

(15) Information about Correction:

see PCT Gazette No. 46/2004 of 11 November 2004, Section II

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.