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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
30 March 2006 (30.03.2006)

PCT

(10) International Publication Number
WO 2006/033836 A3

(51) International Patent Classification:
H01L 21/3105 (2006.01) *H01L 21/316* (2006.01)

(21) International Application Number:
PCT/US2005/031936

(22) International Filing Date:
7 September 2005 (07.09.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10/940,686 15 September 2004 (15.09.2004) US
11/203,558 12 August 2005 (12.08.2005) US

(71) Applicant *(for all designated States except US)*: **HONEYWELL INTERNATIONAL INC.** [US/US]; 101 Columbia Road, Morristown, NJ 07960 (US).

(72) Inventors: **BHANAP, Anil, S.**; 433 Glenmoor Circle, Milpitas, CA 95035 (US). **KOROLEV, Boris, A.**; 998 Meridian Avenue # 36, San Jose, CA 95126 (US). **LEUNG, Roger, Y.**; 1351 Rimrock Drive, San Jose, CA 95120 (US). **MUNOZ, Beth, C.**; 6229 Paso Los Cerritos, San Jose, CA 95120 (US). **RAMOS, Teresa, A.**; 400 N. First Street #309, San Jose, CA 95112 (US). **ROTH, Robert, R.**; 450 N. Mathilda Avenue, Bldg., O, Apt. #301, Sunnyvale, CA 94085 (US). **APEN, Paul, G.**; 94123 Steiner Street, San Francisco, CA 94123 (US). **ENDISCH, Denis, H.**; 10100 Firwood Drive, Cupertino, CA 95014 (US). **DANIELS, Brian, J.**; Rt. 1, Box 17, La Honda, CA 94020 (US). **NAMAN, Ananth**; 5259 Woodstock Way, San Jose, CA 95118 (US). **IWAMOTO, Nancy**; P.O. Box 547, Ramona, CA 92065 (US).

(74) Agents: **ROBERTS, Richard, S.** et al.; Roberts & Roberts, LLP, Attorneys at Law, P.O. Box 484, Princeton, NJ 08542 (US).

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

(88) Date of publication of the international search report:
27 July 2006

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: TREATING AGENT MATERIALS

(57) Abstract: A treating agent composition for increasing the hydrophobicity of an organosilicate glass dielectric film when applied to said film. It includes a component capable of alkylating or arylating silanol moieties of the organosilicate glass dielectric film via silylation, and an activating agent which may be an acid, a base, an onium compound, a dehydrating agent, and combinations thereof, and an optional solvent or mixture of a main solvent and a co-solvent.

WO 2006/033836 A3