

(2006018097)

20.03.06

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

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
21 April 2005 (21.04.2005)

PCT

(10) International Publication Number
WO 2005/035616 A1

- (51) International Patent Classification⁷: **C08G 18/80**, C09D 175/04
- (21) International Application Number:
PCT/US2004/031108
- (22) International Filing Date:
23 September 2004 (23.09.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
10/677,789 2 October 2003 (02.10.2003) US
- (71) Applicant (for all designated States except US):
TREMCO INCORPORATED [US/US]; 3735 Green Road, Cleveland, OH 44122 (US).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): **FENG, Ta-Min** [US/US]; 6775 Saint Ives Blvd., Hudson, OH 44236 (US).
- (74) Agent: **DOCHERTY, Pamela, A.**; 800 Superior Avenue, Suite 1400, Cleveland, OH 44114-2688 (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, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, 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, IT, LU, 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
- 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.



162162



ACTION

(54) Title: PREPOLYMER COMPOSITIONS AND SEALANTS MADE THEREFROM

(57) Abstract: Prepolymer compositions for preparing a one-part, moisture-curable sealant, adhesive or coating, and a method of making such prepolymer compositions are provided. The prepolymer compositions comprise a polyurethane prepolymer that is end-capped with silane groups or a combination of silane groups and end capping groups that have been derived from an alcohol and an amount, referred to hereinafter as an "excess", of unreacted aromatic alcohol having a molecular weight of less than 2000. The excess of unreacted aromatic alcohol in the composition is from greater than 0% to 15% by mole of the level of original NCO groups in the prepolymer. From 50 to 100% of the original NCO groups are end-capped with silane groups, and from 0 to 50% of the original NCO groups are end-capped with a end-capping group that has been derived from an aromatic alcohol, an aliphatic alcohol or both. Sealant compositions and coating compositions comprising the present prepolymer composition are also provided.

WO 2005/035616 A1