

Title (en)

Treatment of fiberfill fibers with aqueous dispersions of organopolysiloxanes

Title (de)

Verfahren zur Behandlung von Füllfasern mit wässrigen Dispersionen von Organopolysiloxanen

Title (fr)

Ensemble de palonnier avec rails latéraux non parallèles

Publication

**EP 1921203 B1 20090617 (DE)**

Application

**EP 07120032 A 20071106**

Priority

DE 102006052730 A 20061108

Abstract (en)

[origin: EP1921203A1] Treatment of fiberfill fibers includes contacting fibers with aqueous dispersion of organopolysiloxane obtained by reacting organopolysiloxane comprising condensation-capable groups and specific siloxane units with silane or its hydrolysate in the presence of water and emulsifier. Treatment of fiberfill fibers includes contacting fibers with aqueous dispersion of organopolysiloxane obtained by reacting organopolysiloxane comprising condensation-capable groups and units of formula  $R_a(OR_{1>})_bSiO_{4-(a+b)/2}(I)$  with silane of formula  $(R_{3>O})_3SiCR_{2>2-Y}(II)$  or its hydrolysate in the presence of water, emulsifier, optionally further silane of formula  $(R_{3>O})_xR_{3-x}Si-R_{6>Z}(III)$  or its hydrolysate, and optionally further materials which do not take part in the reaction of organopolysiloxane with silane (II). Provided that no metal-containing catalysts are used and the organopolysiloxane and silane (II) are used in such amounts that the organopolysiloxane forms toluene-insoluble elastomeric film after removal of water. R : H or 1-18C monovalent hydrocarbyl optionally substituted with heteroatoms N and/or O; R<sub>1></sub>H or 1-8C alkyl, preferably H, Me, or Et; a : 0-3; b : 0-2; R<sub>2></sub>1-4C monovalent alkyl or preferably H; R<sub>3></sub>1-8C alkyl; Y : -NHR<sub>4></sub>, -NR<sub>4>2</sub>, or -NR<sub>5></sub>; R<sub>4></sub>1-18C monovalent hydrocarbyl optionally containing N and/or O; R<sub>5></sub>3-12C divalent hydrocarbyl optionally containing N and/or O; R<sub>6></sub>3-18C divalent hydrocarbyl; Z : amino, aminoalkylamino, epoxy, or (meth)acryloyloxy; and x : 1-3. Provided that a+b is = 3 and the organopolysiloxane contains an average OR<sub>1></sub>radical(s)/molecule.

IPC 8 full level

**D06M 15/643** (2006.01); **C08G 77/26** (2006.01)

CPC (source: EP KR US)

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Cited by

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**EP 1921203 A1 20080514**; **EP 1921203 B1 20090617**; CN 101200855 A 20080618; CN 101200855 B 20120530; DE 102006052730 A1 20080515; DE 502007000888 D1 20090730; JP 2008121182 A 20080529; JP 4546994 B2 20100922; KR 100956290 B1 20100510; KR 20080042024 A 20080514; US 2008107814 A1 20080508; US 8304023 B2 20121106

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