

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_{1>H} or 1-8C alkyl, preferably H, Me, or Et; a : 0-3; b : 0-2; R_{2>1-4C} monovalent alkyl or preferably H; R_{3>1-8C} alkyl; Y : -NHR_{4>}, -NR_{4>2}, or -NR_{5>}; R_{4>1-18C} monovalent hydrocarbyl optionally containing N and/or O; R_{5>3-12C} divalent hydrocarbyl optionally containing N and/or O; R_{6>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_{1>radical(s)/molecule}.

IPC 8 full level

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CPC (source: EP KR US)

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Cited by

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