

Title (en)

METHOD FOR PREPARING A SILICA SUSPENSION IN A POTENTIALLY CROSSLINKABLE SILICONE MATERIAL

Title (de)

VERFAHREN ZUR HERSTELLUNG EINER SILIKA-SUSPENSION IN EINER GEGEBENENFALLS VERNETZBAREN SILIKONZUSAMMENSETZUNG

Title (fr)

PROCEDE DE PREPARATION D'UNE SUSPENSION DE SILICE DANS UNE MATIERE SILICONE EVENTUELLEMENT RETICULABLE

Publication

EP 1578860 A1 20050928 (FR)

Application

EP 03799648 A 20031219

Priority

- FR 0303817 W 20031219
- FR 0216868 A 20021230

Abstract (en)

[origin: WO2004063266A1] The invention concerns a method for preparing a precipitated silica suspension in a silicone oil, said suspension being useable for producing silicones crosslinkable by polyaddition, polycondensation or condensation by dehydrogenation (elastomers). The invention aims at solving the problem of finding a compromise between cost, rheology and mechanical properties of the final elastomers. Therefor, the invention provides a method for preparing a precipitated silica suspension treated with trimethylchlorosilane, in the presence of hexamethyldisiloxane, in a crosslinkable silicone oil. HCl can be used. Grafting of the hydrophobic units on the silica and incorporation of the polyorganosiloxane silicone material are carried out during one single processing sequence, without passing through the powder form of the silica. Sodium silicate promoting MQ resin can be incorporated in the reaction medium. The invention also concerns the preparation of a crosslinkable silicone elastomer composition from said suspension, and the resulting composition.

IPC 1-7

C08K 9/06; C08L 83/04; C08J 3/20

IPC 8 full level

C08J 3/20 (2006.01); **C08L 83/04** (2006.01)

CPC (source: EP KR US)

C08J 3/20 (2013.01 - EP KR US); **C08K 9/06** (2013.01 - KR); **C08L 83/04** (2013.01 - EP KR US); **C08G 77/045** (2013.01 - EP US); **C08G 77/06** (2013.01 - EP US); **C08G 77/12** (2013.01 - EP US); **C08G 77/16** (2013.01 - EP US); **C08G 77/18** (2013.01 - EP US); **C08G 77/20** (2013.01 - EP US); **C08G 77/24** (2013.01 - EP US); **C08G 77/50** (2013.01 - EP US); **C08G 77/70** (2013.01 - EP US); **C08G 77/80** (2013.01 - EP US); **C08J 2383/04** (2013.01 - EP US)

Citation (search report)

See references of WO 2004063266A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

FR 2849441 A1 20040702; FR 2849441 B1 20060728; AU 2003299365 A1 20040810; CN 1745132 A 20060308; EP 1578860 A1 20050928; KR 100689682 B1 20070312; KR 20050093814 A 20050923; TW 200420625 A 20041016; TW 200523212 A 20050716; TW I306465 B 20090221; US 2006241222 A1 20061026; WO 2004063266 A1 20040729

DOCDB simple family (application)

FR 0216868 A 20021230; AU 2003299365 A 20031219; CN 200380109465 A 20031219; EP 03799648 A 20031219; FR 0303817 W 20031219; KR 20057012467 A 20050630; TW 92137354 A 20031229; TW 93100350 A 20040106; US 54113903 A 20031219