

Title (en)
HYDROPHOBIC, SALT-LIKE STRUCTURED SILICATE

Title (de)
HYDROPHOBIERTES SALZARTIGES STRUKTURSILIKAT

Title (fr)
SILICATE STRUCTURAL SALIN RENDU HYDROPHOBE

Publication
EP 1749064 A2 20070207 (DE)

Application
EP 05733904 A 20050428

Priority
• EP 2005004542 W 20050428
• DE 102004024001 A 20040514

Abstract (en)
[origin: WO2005111729A2] A salt-like, hydrophobic structured silicate is disclosed. The cation of the salt-like structured silicate is a low-molecular organic cation or a combination thereof with an NH_4^{+} , H_3O^{+} , alkali metal, alkaline earth metal, earth metal and/or transition metal ion. The anion of the salt-like structured silicate is an island, ring, group, chain, band, layer or tectosilicate, or a combination thereof. The structured silicate is produced by (a) reacting a structured silicate whose cation is an NH_4^{+} , H_3O^{+} , alkali metal, alkaline earth metal, earth metal and/or transition metal ion or a combination thereof, and whose ion is an island, ring, group, chain, band, layer or tectosilicate, or a combination thereof, in an aqueous dispersion with a low-molecular organic cation; by (b) adding to and intensively blending with the aqueous structured silicate dispersion a hydrophobic compound from the group of waxes and metal soaps, in a quantity ranging from 0.2 to 200 % by weight of the salt-like structured silicate in step (a), before, during and/or after step (a) is carried out; and by (c) optionally removing, drying and isolating in the form of a powder the salt-like, hydrophobic structured silicate produced during step (b).

IPC 8 full level
C09C 1/42 (2006.01); **C01B 33/44** (2006.01); **G03G 9/00** (2006.01); **G03G 9/097** (2006.01)

CPC (source: EP US)
C09C 1/42 (2013.01 - EP US); **G03G 9/09725** (2013.01 - EP US); **C01P 2002/88** (2013.01 - EP US); **C01P 2004/51** (2013.01 - EP US); **C01P 2004/61** (2013.01 - EP US); **C01P 2006/12** (2013.01 - EP US)

Citation (search report)
See references of WO 2005111729A2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2005111729 A2 20051124; **WO 2005111729 A3 20060608**; BR PI0511114 A 20071127; CA 2566386 A1 20051124; CN 101098940 A 20080102; DE 102004024001 A1 20051208; EP 1749064 A2 20070207; JP 2007537120 A 20071220; US 2008107986 A1 20080508

DOCDB simple family (application)
EP 2005004542 W 20050428; BR PI0511114 A 20050428; CA 2566386 A 20050428; CN 200580021849 A 20050428; DE 102004024001 A 20040514; EP 05733904 A 20050428; JP 2007511965 A 20050428; US 59663905 A 20050428