

Title (en)

SILICON DIOXIDE POWDER HAVING LARGE PORE LENGTH

Title (de)

SILICIUMDIOXIDPULVER MIT GROSSER PORENLÄNGE

Title (fr)

POUDRE DE DIOXYDE DE SILICIUM AYANT UNE GRANDE LONGUEUR DE PORE

Publication

EP 2702107 A1 20140305 (DE)

Application

EP 12706802 A 20120221

Priority

- DE 102011017587 A 20110427
- EP 2012052941 W 20120221

Abstract (en)

[origin: WO2012146405A1] The invention relates to silicon dioxide powder in the form of aggregated primary particles, having a specific pore length L of 2.5×10^5 to 4×10^5 m/pg, wherein L is defined as the quotient from the square of the BET surface and the cumulative pore volume of 2 to 50 nm, which volume is determined by the BJH method, according to the formula $L = (\text{BET} \times \text{BET})/\text{BJH volume}$. The invention also relates to silanized silicon dioxide powder in the form of aggregated primary particles, having a specific pore length L of 2×10^5 to 3.5×10^5 m/pg, wherein the surface of the aggregates or parts thereof is/are coated with chemically bound silyl groups. The invention further relates to a thermal insulation material comprising the silicon dioxide powder and/or the silanized silicon dioxide powder.

IPC 8 full level

C09C 1/28 (2006.01); **C01B 33/03** (2006.01); **C01B 33/18** (2006.01)

CPC (source: EP US)

C01B 33/03 (2013.01 - US); **C01B 33/18** (2013.01 - EP US); **C01B 33/183** (2013.01 - EP US); **C09C 1/28** (2013.01 - EP US); **C01P 2006/12** (2013.01 - EP US); **C01P 2006/14** (2013.01 - EP US); **Y10T 428/2982** (2015.01 - EP US)

Citation (search report)

See references of WO 2012146405A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

DE 102011017587 A1 20121031; CN 103476876 A 20131225; CN 103476876 B 20150513; CN 104961136 A 20151007; CN 104961136 B 20171128; EP 2702107 A1 20140305; EP 3156459 A1 20170419; EP 3156459 B1 20180815; ES 2693907 T3 20181214; JP 2014518833 A 20140807; JP 5823026 B2 20151125; KR 101544299 B1 20150812; KR 20140006975 A 20140116; PL 3156459 T3 20190131; UA 112439 C2 20160912; US 2014030525 A1 20140130; WO 2012146405 A1 20121101

DOCDB simple family (application)

DE 102011017587 A 20110427; CN 201280018461 A 20120221; CN 201510244488 A 20120221; EP 12706802 A 20120221; EP 16191644 A 20120221; EP 2012052941 W 20120221; ES 16191644 T 20120221; JP 2014506796 A 20120221; KR 20137027940 A 20120221; PL 16191644 T 20120221; UA A201313506 A 20120221; US 201214110561 A 20120221