

Title (en)

PYROGENIC SILICA PRODUCED IN A PRODUCTION FACILITY WITH HIGH CAPACITY

Title (de)

PYROGENE KIESELSÄURE HERGESTELLT IN EINER PRODUKTIONS-ANLAGE MIT GROßER KAPAZITÄT

Title (fr)

ACIDE SILICIQUE PYROGÈNE PRODUIT DANS UNE INSTALLATION DE PRODUCTION DE GRANDE CAPACITÉ

Publication

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Application

EP 07822369 A 20071108

Priority

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Abstract (en)

[origin: WO2008058894A1] The invention relates to a method for the production of pyrogenic silica having a specific surface area of 30 to 500 m²/g and an average aggregate particle size of 100 to 500 nm and a relative thickening effect of greater than 2.0 relative to an amount of 2% by weight silica in a silicon oil with optimum dispersion, and a fraction of less than 0.03% by weight relative to the pyrogenic silica and less than 100,000 coarse particles per 1 millimeter relative to a 10% by weight aqueous dispersion of the silica. The pyrogenic silica is produced in a flame in a reactor, wherein the reaction gases in an amount of 100kg/h of at least one or more silicon compounds, fuel gas at 100Nm³/h, and air with more than 20% by volume oxygen at 300Nm³/h are brought to reaction in a flame, wherein the nozzle ejection velocity of the inlet gases from the reactor nozzle is between 10 and 200 m/s, and the gas velocity and the temperature at the nozzle and in the reactor is radially homogeneously distributed.

IPC 8 full level

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Citation (search report)

See references of WO 2008058894A1

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