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(54) Title: GRANULES BASED ON PYROGENICALLY PREPARED SILICON DIOXIDE, METHOD FOR THEIR PREPARATION AND USE THEREOF

(57) Abstract: Granules based on silicon dioxide and having the properties : Average grain size: 10 to 120 µm BET surface area: 40 to 400 m²/g Pore volume: 0.5 to 2.5 ml/g Pore size distribution: less than 5 % of the total pore volume exists of pores with a diameter < 5 nm, rest meso- and macropores pH value: 3.6 to 8.5 Tapped density: 220 to 700 g/l They are prepared by dispersing silicon dioxide in water, spray drying, optionally heating and/or silanising. Whereas a pyrogenic silicon dioxide powder with a BET surface area of 30 to 90 m²/g, a DBP index of 80 or less, a mean aggregate area of less than 25000 nm² and a mean aggregate circumference of less than 1000 nm, wherein at least 70% of the aggregates have a circumference of less than 1300 nm or a high-purity pyrogenically prepared silicon dioxide having metal contents of less than 0.2 µg/g is prepared by reacting a silicon tetrachloride having a metal content of less than 30 ppb by means of flame hydrolysis is used.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
INV. C01B33/18

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
C01B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 1 348 669 A (DEGUSSA AG) 1 October 2003 (2003-10-01) paragraphs [0030], [0031]; claims 1,3	1, 3, 5
A	the whole document -----	2, 4, 6-9
A	FR 1 382 482 A (DEUTSCHE GOLD- UND SILBER SCHEIDEANSTALT VORMALS ROESSLER) 18 December 1964 (1964-12-18) page 2, lines 5-8 page 2, lines 18-20 -----	1-9

Further documents are listed in the continuation of Box C.

See patent family annex.

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/EP2006/050946

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