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(54) Title: \$G(A)\$-ALUMINA FOR CORDIERITE CERAMICS, PRODUCTION METHOD OF THE \$G(A)\$-ALUMINA AND STRUCTURES OF CORDIERITE CERAMICS USING THE \$G(A)\$-ALUMINA

(57) Abstract: α -Alumina for cordierite ceramics having a secondary particle size of 40-70 μm , a primary particle size of 1.5-3 μm , and a BET specific surface area of 0.5-1.5 m^2/g as measured in its powder form is prepared. The prepared α -alumina is pulverized by means of a jet mill to obtain pulverized α -alumina that comprises alumina particles of 3 μm or less in an amount of 30 mass% or less and alumina particles of 15 μm or less in an amount of at least 75 mass% in relation to a particle size distribution profile of the pulverized alumina, and has a mean particle size of 4-10 μm and a +90- μm sieve residue of 50 ppm by mass or less. The thus obtained α -alumina is used to produce cordierite ceramics having a low coefficient of thermal expansion and high thermal shock resistance and exhibiting small variance in characteristics. Structures, such as catalyst carriers for use in a waste gas control apparatus and waste gas control filters, are produced from the cordierite ceramics.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

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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)

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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 0 201 319 A (NGK INSULATORS LTD) 12 November 1986 (1986-11-12) claims page 4, line 22 -page 6, line 4 table 4 ---	1,3,5, 7-13
X	US 6 203 773 B1 (MARHANKA JOHN E ET AL) 20 March 2001 (2001-03-20) claims column 1, line 14 - line 28 column 4, line 6 - line 12 ---	1,3,5, 7-13
P,X	EP 1 201 620 A (NGK INSULATORS LTD) 2 May 2002 (2002-05-02) claims -----	1,7-13



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

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Information on patent family members

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