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(54) Title: SPINEL FORMING REFRACTORY COMPOSITIONS, THEIR METHOD OF PRODUCTION AND USE THEREOF

(57) Abstract: The present invention relates to particulate compositions for use in alumina-magnesia spinel forming dry vibratable mixtures, the composition comprising, based on the total weight of the particulate composition, 95 to 99.9 wt.-% of a mixture of particulate Al_2O_3 and particulate MgO; and 0.1 to 5 wt.-% binding agent; wherein at least a portion of the particles of said mixture of particulate Al_2O_3 and particulate MgO is present in the particulate composition as a coating of particles on the surface of other particles. The invention further relates to methods of production of said compositions as well as their uses.

INTERNATIONAL SEARCH REPORT

International application No
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A. CLASSIFICATION OF SUBJECT MATTER
INV. C04B35/443 C04B35/634 C04B35/66 C04B35/628 C04B35/626
ADD.

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)
C04B C01F

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 practicable, search terms used)
EPO-Internal, COMPENDEX, INSPEC, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	Thomas A Bier ET AL: "Spinel forming castables: physical and chemical mechanisms during drying", , 1 November 2000 (2000-11-01), XP055083098, Retrieved from the Internet: URL:http://www.ranews.info/feat_art/2000/fano00a.pdf [retrieved on 2013-10-09]	1-6,9,12
Y	Title page 1; table 1 first sentence; page 1, column 1, paragraph "1. Introduction" first bullet; page 1, column 3	7,16
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[X] Further documents are listed in the continuation of Box C.

[X] See patent family annex.

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Date of the actual completion of the international search	Date of mailing of the international search report
1 December 2014	08/12/2014

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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Y	paragraphs [0001], [0002] example comp. ex. 16; table 4	7,16
Y	SOUDIER J: "Understanding and optimisation of MgO hydration resistance and spinel formation mechanisms for increasing performances of DVM used in crucible induction furnaces melting steel", UNITECR '05 ; PROCEEDINGS OF THE UNIFIED INTERNATIONAL TECHNICAL CONFERENCE ON REFRACTORIES: 9TH BIENNIAL WORLDWIDE CONGRESS ON REFRACTORIES, AMERICAN CERAMIC SOCIETY, US, 8 November 2005 (2005-11-08), - 11 November 2005 (2005-11-11), pages 679-683, XP008165263, ISBN: 978-1-57498-265-6	16
A	abstract page 681, column 1, lines 1-11 page 682, column 2, lines 17-20	10-15
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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/EP2014/059666

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