

Title (en)  
SIALON, ALUMINA, AND SILICON MATRIX REFRACTIVE MATERIAL

Title (de)  
REFRAKTÄRES MATERIAL MIT SIALON-, ALUMINIUM- UND SILIKONMATRIX

Title (fr)  
PRODUIT RÉFRACTAIRE À MATRICE DE SIALON, D'ALUMINE ET DE SILICIUM

Publication  
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Application  
**EP 10728331 A 20100604**

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Abstract (en)  
[origin: WO2010143110A2] The invention relates to a frit material comprising a refractive aggregate connected by a matrix, the matrix comprising, in wt % on the basis of the matrix for a total of 100%: more than 30% and less than 80% of alumina; more than 10% and less than 50% silicon metal; more than 5% and less than 60% of a phase or set of phases of SIALON having the formula  $\text{Si}^x\text{Al}_y\text{O}_u\text{N}_v$ , where the stoichiometric indices x, y, u, and v are such that: x is greater than or equal to 0 and less than or equal to 1; y is greater than or equal to 0 and less than or equal to 1; u is greater than or equal to 0 and less than or equal to 1; and v is greater than 0 and less than or equal to 1; less than 55% of one or more oxides and/or nitrides and/or carbides and/or intermetallic compounds of one or more elements selected from among Ti, Zr, Fe, Cr, W, Mo, Si, and B; and less than 20% other constituents. The invention can be used in particular for metallurgical furnace coatings.

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