

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
EP 2440507 A2 20120418 (FR)

Application
EP 10728331 A 20100604

Priority
• IB 2010052500 W 20100604
• FR 0953851 A 20090610

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.

IPC 8 full level
C04B 35/65 (2006.01); **C04B 35/567** (2006.01); **C04B 35/66** (2006.01)

CPC (source: EP)
C04B 35/565 (2013.01); **C04B 35/6263** (2013.01); **C04B 35/6265** (2013.01); **C04B 35/65** (2013.01); **C04B 35/66** (2013.01); **C04B 2235/3217** (2013.01); **C04B 2235/3272** (2013.01); **C04B 2235/3418** (2013.01); **C04B 2235/3454** (2013.01); **C04B 2235/349** (2013.01); **C04B 2235/3826** (2013.01); **C04B 2235/3865** (2013.01); **C04B 2235/3869** (2013.01); **C04B 2235/402** (2013.01); **C04B 2235/428** (2013.01); **C04B 2235/447** (2013.01); **C04B 2235/46** (2013.01); **C04B 2235/5427** (2013.01); **C04B 2235/5436** (2013.01); **C04B 2235/606** (2013.01); **C04B 2235/72** (2013.01); **C04B 2235/725** (2013.01); **C04B 2235/75** (2013.01); **C04B 2235/77** (2013.01); **C04B 2235/80** (2013.01); **C04B 2235/94** (2013.01); **C04B 2235/95** (2013.01); **C04B 2235/96** (2013.01); **C04B 2235/9676** (2013.01); **C04B 2235/9684** (2013.01); **C04B 2235/9692** (2013.01)

Citation (search report)
See references of WO 2010143110A2

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)
WO 2010143110 A2 20101216; WO 2010143110 A3 20110505; EP 2440507 A2 20120418; FR 2946642 A1 20101217; FR 2946642 B1 20130208

DOCDB simple family (application)
IB 2010052500 W 20100604; EP 10728331 A 20100604; FR 0953851 A 20090610