

Title (en)

FUSED GRAINS OF OXIDES COMPRISING AL, TI AND MG AND CERAMIC PRODUCTS COMPRISING SUCH GRAINS

Title (de)

VERSCHMOLZENE KÖRNER AUS OXIDEN MIT AL, TI UND MG SOWIE KERAMIKPRODUKTE MIT SOLCHEN KÖRNERN

Title (fr)

GRAINS FONDUS D'OXYDES COMPRENANT AL, TI et MG ET PRODUITS CERAMIQUES COMPORTANT DE TELS GRAINS

Publication

**EP 2310338 A2 20110420 (FR)**

Application

**EP 09772746 A 20090702**

Priority

- FR 2009051294 W 20090702
- FR 0854577 A 20080704

Abstract (en)

[origin: WO2010001064A2] The invention relates to a mixture of fused grains mainly comprising or composed of an oxide phase of pseudo-brookite type and comprising titanium, aluminium and magnesium, said fused grains having the following chemical composition, in weight percentages on the basis of the oxides: less than 55% of Al<sub>2</sub>O<sub>3</sub>, more than 30% and less than 70% of TiO<sub>2</sub>, more than 1% and less than 15% of MgO, said fused grains also corresponding to the following composition, in molar percentages and on the basis of the single oxides Al<sub>2</sub>O<sub>3</sub>, TiO<sub>2</sub>, MgO: 180 = 3t + a = 220, a = 50, m = 100-a-t, in which a is the molar percentage of Al<sub>2</sub>O<sub>3</sub>, t is the molar percentage of TiO<sub>2</sub>, m is the molar percentage of MgO. The invention also relates to a ceramic product obtained from such fused grains.

IPC 8 full level

**C04B 35/478** (2006.01); **C04B 35/653** (2006.01)

CPC (source: EP US)

**B01D 39/2075** (2013.01 - EP US); **C04B 35/46** (2013.01 - US); **C04B 35/462** (2013.01 - US); **C04B 35/478** (2013.01 - EP US); **C04B 35/622** (2013.01 - US); **C04B 35/653** (2013.01 - EP US); **B01J 21/10** (2013.01 - EP US); **B01J 35/56** (2024.01 - EP US); **C04B 2235/3201** (2013.01 - EP US); **C04B 2235/3206** (2013.01 - EP US); **C04B 2235/3208** (2013.01 - EP US); **C04B 2235/3217** (2013.01 - EP US); **C04B 2235/3232** (2013.01 - EP US); **C04B 2235/3418** (2013.01 - EP US); **C04B 2235/3427** (2013.01 - EP US); **C04B 2235/5427** (2013.01 - EP US); **C04B 2235/5436** (2013.01 - EP US); **C04B 2235/6565** (2013.01 - EP US); **C04B 2235/72** (2013.01 - EP US); **C04B 2235/77** (2013.01 - EP US); **C04B 2235/80** (2013.01 - EP US); **C04B 2235/96** (2013.01 - EP US); **C04B 2235/9607** (2013.01 - EP US); **C04B 2235/9669** (2013.01 - EP US); **F01N 3/0222** (2013.01 - EP US); **F01N 3/2828** (2013.01 - US); **Y10T 428/24149** (2015.01 - EP US)

Citation (search report)

See references of WO 2010001064A2

Citation (examination)

X CAO: "Development of New Thermal Barrier Coating Materials for Gas Turbines", BERICHTE DES FORSCHUNGSZENTRUMS JÜLICH, vol. 4127, 1 January 2004 (2004-01-01), XP055059131, ISSN: 0944-2952, DOI: hdl.handle.net/2128/299

Designated contracting state (EPC)

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

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

**WO 2010001064 A2 20100107**; **WO 2010001064 A3 20101125**; CN 102083767 A 20110601; EP 2310338 A2 20110420; FR 2933398 A1 20100108; FR 2933398 B1 20110218; JP 2011526574 A 20111013; JP 5632369 B2 20141126; US 2011171421 A1 20110714; US 8715807 B2 20140506

DOCDB simple family (application)

**FR 2009051294 W 20090702**; CN 200980125600 A 20090702; EP 09772746 A 20090702; FR 0854577 A 20080704; JP 2011515577 A 20090702; US 200913002522 A 20090702