

Title (en)
REFRACTORY PRODUCT HAVING A HIGH CONTENT OF ZIRCONIA

Title (de)
FEUERFESTES PRODUKT MIT HOHEM ZIRKONOXIDGEHALT

Title (fr)
PRODUIT REFRACTAIRE A HAUTE TENEUR EN ZIRCON

Publication
EP 2651835 A1 20131023 (FR)

Application
EP 11807785 A 20111215

Priority
• FR 1060659 A 20101216
• IB 2011055715 W 20111215

Abstract (en)
[origin: WO2012080981A1] The invention relates to a process for manufacturing a refractory product, comprising the following successive steps: a) mixing of raw materials so as to form a suitable feedstock so that the block obtained in step d) comprises more than 85% of ZrO₂, b) melting of said feedstock until a molten material is obtained, c) optionally, casting said molten material, d) cooling of the molten material to solidification in the form of a block; e) optionally, heat treatment, process comprising a compression operation in which a compression pressure of greater than 0.2 MPa is applied to at least one portion of the outer surface of the block obtained in step d), the compression operation beginning at a temperature above the temperature at which, in said block, tetragonal zirconia is converted to monoclinic zirconia or "phase transformation temperature", and ending at a temperature below said phase transformation temperature.

IPC 8 full level
C03B 5/43 (2006.01); **C04B 35/48** (2006.01); **C04B 35/484** (2006.01); **C04B 35/653** (2006.01); **C04B 35/657** (2006.01)

CPC (source: EP US)
C03B 5/43 (2013.01 - EP US); **C04B 35/481** (2013.01 - EP US); **C04B 35/484** (2013.01 - EP US); **C04B 35/645** (2013.01 - EP US); **C04B 2235/3201** (2013.01 - EP US); **C04B 2235/3217** (2013.01 - EP US); **C04B 2235/3248** (2013.01 - EP US); **C04B 2235/3409** (2013.01 - EP US); **C04B 2235/3418** (2013.01 - EP US); **C04B 2235/442** (2013.01 - EP US); **C04B 2235/656** (2013.01 - EP US); **C04B 2235/6567** (2013.01 - EP US); **C04B 2235/72** (2013.01 - EP US); **C04B 2235/727** (2013.01 - EP US); **C04B 2235/765** (2013.01 - EP US)

Citation (search report)
See references of WO 2012080981A1

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 RS SE SI SK SM TR

DOCDB simple family (publication)
WO 2012080981 A1 20120621; BR 112013013881 A2 20160913; CN 103261105 A 20130821; CN 103261105 B 20160803; EP 2651835 A1 20131023; FR 2969145 A1 20120622; FR 2969145 B1 20130111; JP 2014505005 A 20140227; JP 5919298 B2 20160518; US 2013255316 A1 20131003; US 9481594 B2 20161101

DOCDB simple family (application)
IB 2011055715 W 20111215; BR 112013013881 A 20111215; CN 201180060799 A 20111215; EP 11807785 A 20111215; FR 1060659 A 20101216; JP 2013543955 A 20111215; US 201113993553 A 20111215