

Title (en)

METHOD FOR PRODUCING A BODY CONSISTING OF METAL-CERAMIC-COMPOSITE MATERIALS

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES KÖRPERS AUS METALL-KERAMIK-VERBUNDWERKSTOFFEN

Title (fr)

PROCÉDÉ DE PRODUCTION D'UN CORPS EN MATÉRIAUX COMPOSITES MÉTAL-CÉRAMIQUE

Publication

EP 2086707 A1 20090812 (DE)

Application

EP 07820123 A 20070911

Priority

- EP 2007059516 W 20070911
- DE 102006051200 A 20061030

Abstract (en)

[origin: WO2008052834A1] The invention relates to a method for producing a body consisting of metal-ceramic-composite materials. Said method consists of the following steps: a) a ceramic first body is produced by sintering using an initial powder containing the ceramic particles having an aspect ratio of between 1 and 10 such that the obtained first body has a porous structure having pore diameters of between 0.5 - 10 µm and a total porosity of between 15 and 60 % (sintering step); and b) a metal melt, from pure metal or an alloy, is introduced into the thus produced ceramic first body having a porous structure (infiltration step).

IPC 8 full level

B22D 19/02 (2006.01); **B22D 19/14** (2006.01); **C22C 47/12** (2006.01); **C22C 47/14** (2006.01); **C22C 49/06** (2006.01)

CPC (source: EP US)

B22D 19/02 (2013.01 - EP US); **B22D 19/14** (2013.01 - EP US); **C04B 35/111** (2013.01 - EP US); **C04B 35/46** (2013.01 - EP US); **C04B 35/565** (2013.01 - EP US); **C04B 35/581** (2013.01 - EP US); **C04B 35/584** (2013.01 - EP US); **C04B 41/009** (2013.01 - EP US); **C04B 41/5155** (2013.01 - EP US); **C04B 41/88** (2013.01 - EP US); **C22C 29/005** (2013.01 - EP US); **C22C 32/00** (2013.01 - EP US); **F16D 69/02** (2013.01 - EP US); **C04B 2111/00362** (2013.01 - EP US); **C04B 2235/3217** (2013.01 - EP US); **C04B 2235/3232** (2013.01 - EP US); **C04B 2235/3826** (2013.01 - EP US); **C04B 2235/3865** (2013.01 - EP US); **C04B 2235/3873** (2013.01 - EP US); **C04B 2235/5296** (2013.01 - EP US); **Y10T 428/249994** (2015.04 - EP US)

Citation (search report)

See references of WO 2008052834A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

DE 102006051200 A1 20080508; EP 2086707 A1 20090812; JP 2010508153 A 20100318; RU 2009120387 A 20101210; US 2010009163 A1 20100114; WO 2008052834 A1 20080508

DOCDB simple family (application)

DE 102006051200 A 20061030; EP 07820123 A 20070911; EP 2007059516 W 20070911; JP 2009535042 A 20070911; RU 2009120387 A 20070911; US 30466207 A 20070911