

Title (en)

METHOD AND DEVICE FOR PRODUCING A TUBULAR SOLID BODY FROM A REFRACTORY TUNGSTEN-HEAVY METAL ALLOY, PARTICULARLY AS A SEMI-FINISHED PRODUCT FOR THE PRODUCTION OF A PENETRATOR FOR A KINETIC ENERGY PROJECTILE WITH FRAGMENTATION EFFECT

Title (de)

VERFAHREN UND VORRICHTUNG ZUR HERSTELLUNG EINES ROHRFÖRMIGEN FESTKÖRPERS AUS EINER HOCHSCHMELZENDEN WOLFRAM- SCHWERMETALLLEGIERUNG, INSBESONDERE ALS HALBZEUG FÜR DIE FERTIGUNG EINES PENETRATORS FÜR EIN WUCHTGESCHOSS MIT SPLITTERWIRKUNG

Title (fr)

PROCÉDÉ ET DISPOSITIF DE FABRICATION D'UN CORPS SOLIDE DE FORME TUBULAIRE À PARTIR D'UN ALLIAGE DE TUNGSTÈNE ET DE MÉTAUX LOURDS À HAUT POINT DE FUSION, EN PARTICULIER COMME ÉBAUCHE POUR LA FABRICATION D'UN PÉNÉTRATEUR POUR MUNITIONS À HAUTE PÉNÉTRATION ET EFFET DE FRAGMENTATION

Publication

**EP 2173507 A1 20100414 (DE)**

Application

**EP 08784808 A 20080716**

Priority

- EP 2008005800 W 20080716
- DE 102007037702 A 20070809

Abstract (en)

[origin: WO2009018902A1] The invention relates to a filler device (1) comprising an exterior tube (2) having an extrusion die (3) located therein and a filler piece (4) that is filled with a metal powder mixture in the intermediate space (8) formed between the filler piece (4) and the extrusion die (3), whereupon said intermediate space is closed. In order to compact the metal powder, the filler device (1) is placed in a hydrostatic pressing system and the metal powder mixture is pressed into a green preform. The pressed tubes are subsequently sintered in one or more passes through a furnace, for which purpose the pressed tubes are subjected to a preselected time/temperature progression so as to ensure that a melt of tungsten (W) forms and contracts evenly in all directions such that a geometrically desired solid body results after sintering.

IPC 8 full level

**B22F 3/03** (2006.01); **B30B 15/02** (2006.01); **F42B 12/00** (2006.01)

CPC (source: EP US)

**B22F 3/1035** (2013.01 - EP US); **B22F 3/24** (2013.01 - EP US); **B22F 5/106** (2013.01 - EP US); **C22C 1/045** (2013.01 - EP US); **F42B 12/22** (2013.01 - EP US); **F42B 33/0242** (2013.01 - EP US); **B22F 2998/00** (2013.01 - EP US); **B22F 2999/00** (2013.01 - EP US)

Citation (search report)

See references of WO 2009018902A1

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 MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

**DE 102007037702 A1 20090212**; EP 2173507 A1 20100414; EP 2173507 B1 20140226; US 2011176951 A1 20110721; WO 2009018902 A1 20090212

DOCDB simple family (application)

**DE 102007037702 A 20070809**; EP 08784808 A 20080716; EP 2008005800 W 20080716; US 67342408 A 20080716