

Title (en)  
PHLEGMATIZED METAL POWDER OR ALLOY POWDER AND METHOD AND REACTION VESSEL FOR THE PRODUCTION THEREOF

Title (de)  
PHLEGMATISIERTE METALLPULVER ODER LEGIERUNGSPULVER UND VERFAHREN BZW. REAKTIONSGEFÄSS ZU DEREN HERSTELLUNG

Title (fr)  
POUDRE MÉTALLIQUE OU POUDRE D'ALLIAGE STABILISÉE ET PROCÉDÉ ET CUVE DE RÉACTION POUR LA PRODUIRE

Publication  
**EP 2247398 B1 20140820 (DE)**

Application  
**EP 09703271 A 20090108**

Priority  
• EP 2009050163 W 20090108  
• DE 102008005781 A 20080123

Abstract (en)  
[origin: CA2712929A1] A method and a device are described for the production of metal powder or alloy powder of a moderate grain sizes less than 10 µm, comprising or containing at least one of the reactive metals zirconium, titanium, or hafnium, by metallothermic reduction of oxides or halogenides of the cited reactive metals with the aid of a reducing metal, wherein said metal powder or alloy powder is phlegmatized by adding a passivating gas or gas mixture during and/or after the reduction of the oxides or halogenides and/or is phlegmatized by adding a passivating solid before the reduction of the oxides or halogenides, wherein both said reduction and also said phlegmatization are performed in a single gas-tight reaction vessel which can be evacuated.

IPC 8 full level  
**B22F 9/20** (2006.01); **B22F 1/00** (2006.01); **C22B 5/04** (2006.01); **C22B 34/10** (2006.01); **C22B 34/12** (2006.01); **C22B 34/14** (2006.01)

CPC (source: EP US)  
**B22F 9/18** (2013.01 - US); **B22F 9/20** (2013.01 - EP US); **B22F 9/22** (2013.01 - EP US); **C22B 5/04** (2013.01 - EP US); **C22B 34/10** (2013.01 - EP US); **C22B 34/1268** (2013.01 - EP US); **C22B 34/1277** (2013.01 - EP US); **C22B 34/14** (2013.01 - EP US); **F27B 19/02** (2013.01 - US); **B22F 2999/00** (2013.01 - EP US); **F27D 2005/0075** (2013.01 - EP US); **Y10T 428/2982** (2015.01 - EP US)

Citation (examination)  
GB 1526443 A 19780927 - PPG INDUSTRIES INC

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 TR

DOCDB simple family (publication)  
**DE 102008005781 A1 20090730**; AU 2009207739 A1 20090730; AU 2009207739 B2 20130307; BR PI0907383 A2 20150721; CA 2712929 A1 20090730; CA 2712929 C 20160308; CN 101925427 A 20101222; CN 101925427 B 20140618; DE 102008064648 A1 20100520; EP 2247398 A1 20101110; EP 2247398 B1 20140820; EP 2394762 A1 20111214; EP 2394762 B1 20131127; IL 206966 A0 20101230; IL 206966 A 20150630; IL 237346 A0 20150430; IL 237346 A 20161229; JP 2011514435 A 20110506; JP 2014129605 A 20140710; JP 5876651 B2 20160302; KR 101557174 B1 20151002; KR 20100113092 A 20101020; MX 2010007826 A 20100922; MY 152942 A 20141215; PL 2394762 T3 20140530; RU 2010134800 A 20120227; RU 2492966 C2 20130920; UA 102086 C2 20130610; US 2010272999 A1 20101028; US 2015130121 A1 20150514; US 8821610 B2 20140902; US 9279617 B2 20160308; WO 2009092631 A1 20090730

DOCDB simple family (application)  
**DE 102008005781 A 20080123**; AU 2009207739 A 20090108; BR PI0907383 A 20090108; CA 2712929 A 20090108; CN 200980103057 A 20090108; DE 102008064648 A 20080123; EP 09703271 A 20090108; EP 11180240 A 20090108; EP 2009050163 W 20090108; IL 20696610 A 20100713; IL 23734615 A 20150222; JP 2010543454 A 20090108; JP 2014020082 A 20140205; KR 20107016614 A 20090108; MX 2010007826 A 20090108; MY PI20103225 A 20090108; PL 11180240 T 20090108; RU 2010134800 A 20090108; UA A201009299 A 20090108; US 201314079768 A 20131114; US 74698509 A 20090108