

Title (en)

METALLURGICAL POWDER COMPOSITION AND METHOD OF PRODUCTION

Title (de)

METALLURGISCHE PULVERZUSAMMENSETZUNG UND HERSTELLUNGSVERFAHREN

Title (fr)

COMPOSITION DE POUDRE MÉTALLURGIQUE ET PROCÉDÉ DE PRODUCTION

Publication

EP 2207907 A1 20100721 (EN)

Application

EP 08804654 A 20080924

Priority

- EP 2008062745 W 20080924
- DK PA200701397 A 20070928
- US 96052507 P 20071002

Abstract (en)

[origin: WO2009040369A1] The present invention relates to an annealed pre-alloyed water atomised iron-based powder suitable for the production of pressed and sintered components having high wear resistance. The iron-based powder comprises 10- below 18% by weight of Cr, 0.5-5% by weight of each of at least one of Mo, W, V and Nb and 0.5-2%, preferably 0.7-2% and most preferably 1 -2% by weight of C. The powder has a matrix comprising less than 10% by weight of Cr, and comprises large M₂₃C₆-type carbides in combination with M₇C₃-type carbides. The invention also relates to a method for production of the iron-based powder as well as a method for producing a pressed and sintered component having high wear resistance and the component having high wear resistance.

IPC 8 full level

C22C 33/02 (2006.01)

CPC (source: EP US)

C22C 33/0207 (2013.01 - EP US); **C22C 33/0285** (2013.01 - EP); **C22C 38/02** (2013.01 - EP); **C22C 38/22** (2013.01 - EP); **C22C 38/24** (2013.01 - EP); **F01L 3/02** (2013.01 - EP); **B22F 2998/10** (2013.01 - EP); **F01L 2301/00** (2020.05 - EP); **F01L 2301/02** (2020.05 - EP); **F01L 2303/00** (2020.05 - EP); **F01L 2820/01** (2013.01 - EP)

Citation (search report)

See references of WO 2009040369A1

Cited by

US11085102B2; US11253957B2; US11939646B2

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)

WO 2009040369 A1 20090402; BR PI0817619 A2 20150331; BR PI0817619 B1 20180424; CA 2700056 A1 20090402; CA 2700056 C 20160816; CN 101809180 A 20100818; CN 101809180 B 20130403; EP 2207907 A1 20100721; EP 2207907 B1 20171206; ES 2659979 T3 20180320; JP 2010540772 A 20101224; JP 5481380 B2 20140423; KR 101551453 B1 20150908; KR 20100075571 A 20100702; PL 2207907 T3 20180430; RU 2010116699 A 20111110; RU 2462524 C2 20120927; TW 200925295 A 20090616; TW I400341 B 20130701

DOCDB simple family (application)

EP 2008062745 W 20080924; BR PI0817619 A 20080924; CA 2700056 A 20080924; CN 200880108977 A 20080924; EP 08804654 A 20080924; ES 08804654 T 20080924; JP 2010526277 A 20080924; KR 20107009359 A 20080924; PL 08804654 T 20080924; RU 2010116699 A 20080924; TW 97137390 A 20080926