

Title (en)

METHOD OF PREPARING IRON-BASED COMPONENTS BY COMPACTION WITH ELEVATED PRESSURES

Title (de)

VERFAHREN ZUR HERSTELLUNG VON KOMPONENTEN AUF EISENBASIS DURCH VERDICHUNG MIT ERHÖHTEN DRÜCKEN

Title (fr)

PROCEDE DE PREPARATION DE COMPOSANTS A BASE DE FER PAR COMPACTAGE A DES PRESSIONS ELEVEES

Publication

EP 1554071 B1 20101208 (EN)

Application

EP 03751717 A 20031022

Priority

- SE 0301633 W 20031022
- SE 0203134 A 20021022

Abstract (en)

[origin: WO2004037468A1] The present invention concerns a process for the preparation of high density green compacts comprising the steps of providing an iron-based powder essentially free from fine particles; optionally mixing said powder with graphite and other additives; uniaxially compacting the powder in a die at a compaction pressure of at least about 800 MPa and ejecting the green body. The invention also concerns the powder used in the method.

IPC 8 full level

B22F 1/00 (2022.01); **B22F 1/052** (2022.01); **B22F 1/10** (2022.01); **B22F 3/12** (2006.01); **C22C 33/02** (2006.01)

CPC (source: EP KR US)

B22F 1/00 (2013.01 - EP KR US); **B22F 1/052** (2022.01 - EP KR US); **B22F 1/10** (2022.01 - EP KR US); **B22F 3/12** (2013.01 - KR); **C22C 33/02** (2013.01 - EP); **C22C 33/0264** (2013.01 - EP US); **B22F 2003/023** (2013.01 - EP); **B22F 2003/026** (2013.01 - EP); **B22F 2998/00** (2013.01 - EP); **B22F 2998/10** (2013.01 - EP)

Designated contracting state (EPC)

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

DOCDB simple family (publication)

WO 2004037468 A1 20040506; AT E490830 T1 20101215; AU 2003269786 A1 20040513; AU 2003269786 B2 20071213; BR 0314079 A 20050705; BR 0314079 B1 20111004; CA 2495697 A1 20040506; CA 2495697 C 20111213; CN 1705533 A 20051207; CN 1705533 B 20100811; DE 60335280 D1 20110120; EP 1554071 A1 20050720; EP 1554071 B1 20101208; ES 2357741 T3 20110429; JP 2006503983 A 20060202; JP 2010189769 A 20100902; JP 4909514 B2 20120404; KR 101179725 B1 20120904; KR 20050059285 A 20050617; KR 20110114689 A 20111019; MX PA05004256 A 20050705; PL 208668 B1 20110531; PL 375094 A1 20051114; RU 2005115474 A 20051027; RU 2333075 C2 20080910; SE 0203134 D0 20021022; TW 200417433 A 20040916; TW 201127521 A 20110816; TW I415698 B 20131121; ZA 200501296 B 20061025

DOCDB simple family (application)

SE 0301633 W 20031022; AT 03751717 T 20031022; AU 2003269786 A 20031022; BR 0314079 A 20031022; CA 2495697 A 20031022; CN 200380101698 A 20031022; DE 60335280 T 20031022; EP 03751717 A 20031022; ES 03751717 T 20031022; JP 2004546605 A 20031022; JP 2010125721 A 20100601; KR 20057006889 A 20050421; KR 20117020083 A 20031022; MX PA05004256 A 20031022; PL 37509403 A 20031022; RU 2005115474 A 20031022; SE 0203134 A 20021022; TW 100101842 A 20031022; TW 92129264 A 20031022; ZA 200501296 A 20031022