

Title (en)  
MIXED POWDER FOR IRON-BASED POWDER METALLURGY AND SINTERED BODY PRODUCED USING SAME

Title (de)  
PULVERGEMISCH FÜR EISENBASIERTE PULVERMETALLURGIE UND UNTER VERWENDUNG DAVON HERGESTELLTER SINTERKÖRPER

Title (fr)  
MÉLANGE DE POUDRES POUR MÉTALLURGIE DES POUDRES À BASE DE FER, CORPS FRITTÉ FABRIQUÉ À L'AIDE DE CELUI-CI

Publication  
**EP 3305440 A4 20180516 (EN)**

Application  
**EP 16799747 A 20160427**

Priority  
• JP 2015107346 A 20150527  
• JP 2016063170 W 20160427

Abstract (en)  
[origin: EP3305440A1] The mixed powder for iron-based powder metallurgy of the present invention comprises: at least one ternary oxide selected from the group consisting of Ca-Al-Si oxides and Ca-Mg-Si oxides, and at least one binary oxide selected from the group consisting of Ca-Al oxides and Ca-Si oxides. The ternary oxide and the binary oxide are contained in a sum weight of 0.025 wt% or more to 0.3 wt% or less.

IPC 8 full level  
**C22C 33/02** (2006.01); **B22F 1/12** (2022.01); **C22C 1/05** (2006.01)

CPC (source: EP KR US)  
**B22F 1/12** (2022.01 - EP KR US); **B22F 3/10** (2013.01 - KR); **B22F 3/12** (2013.01 - US); **C22C 1/05** (2013.01 - EP US);  
**C22C 33/02** (2013.01 - KR); **C22C 33/0228** (2013.01 - EP US); **B22F 2302/25** (2013.01 - KR US); **B22F 2998/10** (2013.01 - EP US);  
**B22F 2999/00** (2013.01 - EP US); **C22C 1/055** (2013.01 - EP US)

Citation (search report)  
• [E] WO 2016190037 A1 20161201 - KOBE STEEL LTD [JP]  
• [E] WO 2016190038 A1 20161201 - KOBE STEEL LTD [JP]  
• [A] JP H07138693 A 19950530 - DAIDO STEEL CO LTD  
• [A] NICLAS ÅNMARK ET AL: "The Effect of Different Non-Metallic Inclusions on the Machinability of Steels", MATERIALS, vol. 8, no. 2, 16 February 2015 (2015-02-16), pages 751 - 783, XP055465600, DOI: 10.3390/ma8020751  
• See references of WO 2016190039A1

Cited by  
KR20180008730A; EP3305439A4

Designated contracting state (EPC)  
AL 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 RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 3305440 A1 20180411; EP 3305440 A4 20180516; EP 3305440 B1 20200909**; CN 107614157 A 20180119; CN 107614157 B 20190705;  
JP 2016222942 A 20161228; JP 6480264 B2 20190306; KR 102060955 B1 20191231; KR 20180008733 A 20180124;  
KR 20190104455 A 20190909; US 2018126454 A1 20180510; WO 2016190039 A1 20161201

DOCDB simple family (application)  
**EP 16799747 A 20160427**; CN 201680029929 A 20160427; JP 2015107346 A 20150527; JP 2016063170 W 20160427;  
KR 20177036354 A 20160427; KR 20197025709 A 20160427; US 201615569008 A 20160427