

Title (en)

METAL POWDER FOR POWDER METALLURGY, COMPOUND, GRANULATED POWDER, AND SINTERED BODY

Title (de)

METALLPULVER FÜR PULVERMETALLURGIE, VERBINDUNG, GRANULIERTES PULVER UND GESINTERTER KÖRPER

Title (fr)

POUDRE DE MÉTAL POUR MÉTALLURGIE DES POUDRES, COMPOSÉ, POUDRE GRANULÉE ET CORPS FRITTÉ

Publication

**EP 3054024 B1 20190731 (EN)**

Application

**EP 16154421 A 20160205**

Priority

JP 2015023385 A 20150209

Abstract (en)

[origin: EP3054024A1] A metal powder for powder metallurgy includes particles, which contain Fe as a principal component, Cr in a proportion of 0.2 mass% or more and 35 mass% or less, Si in a proportion of 0.2 mass% or more and 3 mass% or less, and C in a proportion of 0.005 mass% or more and 2 mass% or less, and in which when two elements selected from the group consisting of Ti, V, Y, Zr, Nb, Hf, and Ta are defined as a first element and a second element, the first element is contained in a proportion of 0.01 mass% or more and 0.5 mass% or less and the second element is contained in a proportion of 0.01 mass% or more and 0.5 mass% or less, wherein the content of Cr on the surface of each particle (Cr(0)) is 0.2 at % or more and 15 at% or less and is 70% or more and 170% or less the content of Cr at a depth of 60 nm from the surface of each particle (Cr(60)).

IPC 8 full level

**C22C 33/02** (2006.01); **B22F 1/00** (2022.01); **B22F 1/10** (2022.01); **C22C 38/00** (2006.01); **C22C 38/22** (2006.01); **C22C 38/24** (2006.01); **C22C 38/26** (2006.01); **C22C 38/28** (2006.01); **C22C 38/44** (2006.01); **C22C 38/46** (2006.01); **C22C 38/48** (2006.01); **C22C 38/50** (2006.01); **B22F 3/15** (2006.01)

CPC (source: CN EP US)

**B22F 1/00** (2013.01 - CN EP US); **B22F 1/10** (2022.01 - CN EP US); **B22F 3/10** (2013.01 - CN); **B22F 3/15** (2013.01 - EP US); **B22F 5/00** (2013.01 - US); **C22C 33/02** (2013.01 - CN); **C22C 33/0285** (2013.01 - EP US); **C22C 38/001** (2013.01 - CN); **C22C 38/002** (2013.01 - CN EP US); **C22C 38/005** (2013.01 - CN EP US); **C22C 38/02** (2013.01 - CN EP US); **C22C 38/04** (2013.01 - EP US); **C22C 38/12** (2013.01 - CN); **C22C 38/14** (2013.01 - CN); **C22C 38/18** (2013.01 - CN); **C22C 38/24** (2013.01 - CN); **C22C 38/26** (2013.01 - CN); **C22C 38/28** (2013.01 - CN); **C22C 38/34** (2013.01 - CN); **C22C 38/36** (2013.01 - CN); **C22C 38/44** (2013.01 - EP US); **C22C 38/46** (2013.01 - CN EP US); **C22C 38/48** (2013.01 - CN EP US); **C22C 38/50** (2013.01 - CN EP US); **C22C 38/56** (2013.01 - CN); **C22C 38/60** (2013.01 - CN); **B22F 2301/35** (2013.01 - US); **B22F 2302/45** (2013.01 - US); **B22F 2998/10** (2013.01 - CN EP US)

Cited by

EP4048462A4; SE2130240A1; SE545185C2; TWI761391B; TWI761392B; WO2023038562A1

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

DOCDB simple family (publication)

**EP 3054024 A1 20160810**; **EP 3054024 B1 20190731**; CN 105855534 A 20160817; CN 105855534 B 20191213; JP 2016145402 A 20160812; JP 6314866 B2 20180425; US 2016228948 A1 20160811

DOCDB simple family (application)

**EP 16154421 A 20160205**; CN 201610082827 A 20160205; JP 2015023385 A 20150209; US 201615002818 A 20160121