Title (en)

MACHINE COMPONENT USING POWDER COMPACT AND METHOD FOR PRODUCING SAME

Title (de)

MASCHINENKOMPONENTE MIT PULVERPRESSKÖRPER UND VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)

COMPOSANT DE MACHINE UTILISANT UN COMPRIMÉ DE POUDRE ET SON PROCÉDÉ DE PRODUCTION

Publication

EP 3088106 A4 20170809 (EN)

Application

EP 14873470 A 20141126

Priority

- JP 2013269343 A 20131226
- JP 2014180181 A 20140904
- JP 2014229131 A 20141111
- JP 2014081250 W 20141126

Abstract (en)

[origin: EP3088106A1] A machine part having a radial crushing strength of more than 100 MPa is manufactured by: press forming raw material powder containing, as a main raw material, metal powder capable of forming an oxide film, to thereby provide a green compact; and forming the oxide film between particles of the metal powder forming the green compact through steam treatment.

IPC 8 full level

B22F 3/24 (2006.01); **B22F 5/00** (2006.01); B22F 1/102 (2022.01)

CPC (source: EP US)

B22F 3/02 (2013.01 - US); **B22F 3/24** (2013.01 - EP US); B22F 1/102 (2022.01 - EP US); B22F 2003/023 (2013.01 - US); B22F 2201/05 (2013.01 - EP US)

Citation (search report)

- [XD] JP S6372803 A 19880402 - FUJITSU LTD, et al
- [X] US 2009042051 A1 20090212 - SKARMAN BJORN [SE], et al
- [E] EP 3104029 A1 20161214 - NTN TOYO BEARING CO LTD [JP]
- [T] ASTM STANDARDS: "Standard Test Method for Radial Crushing Strength, K, of Powder Metallurgy (P/M) Bearings and Structural Materials", 30 November 2005 (2005-11-30), XP055383144, Retrieved from the Internet <URL:ftp://185.72.26.245/Astm/1/Section%2002/ASTM0205/PDF/B939.pdf> [retrieved on 20170620]
- See references of WO 2015098407A1

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 3088106 A1 20161102; **EP 3088106 A4 20170809**; CN 105828988 A 20160803; JP 2016053210 A 20160414; US 2016311026 A1 20161027

DOCDB simple family (application)

EP 14873470 A 20141126; CN 201480068394 A 20141126; JP 2014229131 A 20141111; US 201415101958 A 20141126