

Title (en)

COMPRESSIVE SINTERING APPARATUS COMPRISING PROTECTED OPPOSING RAMS

Title (de)

KOMPRESSIVE SINTERVORRICHTUNG MIT GESCHÜTZTEN GEGENÜBERLIEGENDEN STEMPELN

Title (fr)

APPAREIL DE FRITTAGE PAR COMPRESSION COMPRENANT DES MÂCHOIRES OPPOSÉES PROTÉGÉES

Publication

EP 3291935 A4 20181107 (EN)

Application

EP 16790063 A 20160505

Priority

- US 201562158326 P 20150507
- US 2016030896 W 20160505

Abstract (en)

[origin: WO2016179352A1] A compressive sintering system is described that comprises a die set and a vacuum chamber into which the die set is placed. The die set comprises a die casing and opposing rams forming a die cavity loaded with material to be sintered and is configured to compress the material during sintering. At least one of the opposing rams comprises a surface protection layer, such as a faceplate, in contact with the material to be sintered.

IPC 8 full level

B22F 3/00 (2006.01); **B22F 3/105** (2006.01); **B22F 3/12** (2006.01); **B22F 3/14** (2006.01); **B30B 1/00** (2006.01); **B30B 11/00** (2006.01); **B30B 11/02** (2006.01)

CPC (source: EP US)

B22F 3/003 (2013.01 - EP US); **B22F 3/105** (2013.01 - EP US); **B22F 3/14** (2013.01 - EP US); **B30B 1/00** (2013.01 - EP US); **B30B 11/007** (2013.01 - EP US); **B30B 11/02** (2013.01 - EP US); **B22F 2201/20** (2013.01 - US); **B22F 2202/06** (2013.01 - US); **B22F 2202/13** (2013.01 - US)

Citation (search report)

- [XI] CN 101505557 A 20090812 - UNIV SHENZHEN [CN]
- [XI] WO 2008085947 A1 20080717 - UNIV HOUSTON SYSTEM [US], et al
- [XI] WO 2014028731 A1 20140220 - UNIV FLORIDA [US]
- [XI] US 2013280520 A1 20131024 - PAN GUANG [US], et al
- [XI] MAJKIC G ET AL: "SYNTHESIS OF NITI BY LOW ELECTROTHERMAL LOSS SPARK PLASMA SINTERING", METALLURGICAL AND MATERIALS TRANSACTIONS A: PHYSICAL METALLURGY & MATERIALS SCIENCE, ASM INTERNATIONAL, MATERIALS PARK, OH, US, vol. 38A, no. 10, 1 October 2007 (2007-10-01), pages 2523 - 2530, XP001508185, ISSN: 1073-5623, DOI: 10.1007/S11661-007-9307-2
- See references of WO 2016179352A1

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)

WO 2016179352 A1 20161110; EP 3291935 A1 20180314; EP 3291935 A4 20181107; HK 1252361 A1 20190524; MA 42058 A 20180314; US 2016325354 A1 20161110

DOCDB simple family (application)

US 2016030896 W 20160505; EP 16790063 A 20160505; HK 18111647 A 20180911; MA 42058 A 20160505; US 201615147077 A 20160505