

Title (en)

Supersolvus hot isostatic pressing and ring rolling of hollow powder forms

Title (de)

Isostatisches Supersolvus-Heisspressen und Ringwalzen von Hohlpulverformen

Title (fr)

Pressage isostatique à chaud supersolvus et laminage circulaire de formes creuses de poudres

Publication

EP 1779946 B1 20090513 (EN)

Application

EP 06255430 A 20061023

Priority

US 25866305 A 20051026

Abstract (en)

[origin: EP1779946A1] An annular metallic article (20) is fabricated by loading a metallic powder (74) into a fill volume (66) of a can (60), compacting the metallic powder (74) by hot isostatic pressing the metallic powder (74) within the can (60) at a temperature above the precipitate solvus temperature and below the solidus temperature of the metallic powder (74) to form a compacted powder mass (76), and ring rolling the compacted powder mass (76) to form the metallic article (20) having the annular circular shape.

IPC 8 full level

B22F 3/15 (2006.01); **B22F 3/14** (2006.01); **B22F 5/10** (2006.01); **C22C 1/04** (2006.01)

CPC (source: EP US)

B22F 3/15 (2013.01 - EP US); **B22F 5/009** (2013.01 - EP US); **B22F 5/106** (2013.01 - EP US); **C22C 1/0433** (2013.01 - EP US); **B22F 2003/248** (2013.01 - EP US); **B22F 2998/10** (2013.01 - EP US)

C-Set (source: EP US)

B22F 2998/10 + **B22F 3/004** + **B22F 3/15** + **B22F 3/18** + **B22F 3/24**

Cited by

RU2483835C1; EP3639953A1; FR2996476A1; RU2646656C2; US9737932B2; US8894913B2; WO2014053761A1; WO2010041957A1

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 1779946 A1 20070502; **EP 1779946 B1 20090513**; DE 602006006775 D1 20090625; US 2007092394 A1 20070426

DOCDB simple family (application)

EP 06255430 A 20061023; DE 602006006775 T 20061023; US 25866305 A 20051026