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 creueses de poudres

Publication

EP 1779946 A1 20070502 (EN)

Application

EP 06255430 A 20061023

Priority

US 25866305 A 20051026

Abstract (en)

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)

Citation (search report)

- [A] RU 2069595 C1 19961127 - AKTSIONERNOE OBSHCHESTVO KULEB [SU]
- [A] JP 2004042235 A 20040212 - MITSUBISHI HEAVY IND LTD
- [A] GB 1557744 A 19791212 - SPECIAL METALS CORP
- [A] GB 2027060 A 19800213 - HOWMET TURBINE COMPONENTS

Cited by

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

Designated contracting state (EPC)

DE FR GB

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

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