

Title (en)

A method of manufacturing a component with a cellular structure by consolidating a coated metal powder

Title (de)

Verfahren zur Herstellung eines Körpers mit zellulärer Struktur durch Verdichtung von beschichtetem Metallpulver

Title (fr)

Procédé de fabrication d'un corps à structure cellulaire par densification d'une poudre métallique revêtue

Publication

**EP 1604760 B1 20070221 (EN)**

Application

**EP 05252858 A 20050510**

Priority

GB 0413135 A 20040612

Abstract (en)

[origin: EP1604760A1] A method of manufacturing a component (10,20) by consolidating a metal powder comprises preparing a metal powder, the metal powder comprising metal particles (30). Depositing a coating (32) containing at least one element on the surfaces (34) of the metal particles (30) of the metal powder. Applying heat and pressure to consolidate the metal particles (30) such that the at least one element of the coating (32) on the surfaces (34) of the metal particles (30) partially diffuses into the metal particles (30) and the coated metal particles (30) are diffusion bonded together to form a cellular structure (36).

IPC 8 full level

**B22F 1/00** (2006.01); **B22F 1/02** (2006.01); **B22F 1/145** (2022.01); **B22F 1/17** (2022.01)

CPC (source: EP US)

**B22F 1/145** (2022.01 - EP US); **B22F 1/17** (2022.01 - EP US)

Cited by

CN109759594A; US11040397B2

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

**EP 1604760 A1 20051214**; **EP 1604760 B1 20070221**; DE 602005000580 D1 20070405; DE 602005000580 T2 20070621; GB 0413135 D0 20040714; US 2005276715 A1 20051215

DOCDB simple family (application)

**EP 05252858 A 20050510**; DE 602005000580 T 20050510; GB 0413135 A 20040612; US 12623005 A 20050511