

Title (en)

PROCESS FOR MANUFACTURING POWDER COMPACTS WITH A HIGH RESISTANCE AND RELATIVELY LOW DENSITY FROM A HEAT-RESISTING ALUMINIUM ALLOY

Publication

EP 0256450 B1 19910130 (DE)

Application

EP 87111463 A 19870807

Priority

CH 323086 A 19860812

Abstract (en)

[origin: US4758405A] A green pressed article of high strength and of low relative density, formed from a heat-resistant aluminum alloy of the Al/Fe/X or Al/Cr/X type, where X is Ti, Ce, Zr, Hf, V, Nb, Cr, Mo or W, is produced by a powder-metallurgical process, wherein an alloy melt is atomized to form fine particles by means of an inert gas jet, with which 0.5 to 2% by volume of oxygen is admixed, and the powder produced in this manner is compactd. Nitrogen, argon or helium can be employed as inert gas. The green pressed article is preferably formed from a small proportion of coarser, non-spherical particles and a greater proportion of finer, spherical particles.

IPC 1-7

B22F 9/08; **C22C 1/04**

IPC 8 full level

B22F 9/08 (2006.01); **C22C 1/04** (2006.01); **C22C 1/05** (2006.01)

CPC (source: EP US)

B22F 9/082 (2013.01 - EP US); **C22C 1/0416** (2013.01 - EP US)

Cited by

EP0451093A1

Designated contracting state (EPC)

CH DE FR GB LI SE

DOCDB simple family (publication)

EP 0256450 A1 19880224; **EP 0256450 B1 19910130**; CH 673240 A5 19900228; DE 3767807 D1 19910307; DK 415687 A 19880213; DK 415687 D0 19870810; JP S6347304 A 19880229; NO 873364 D0 19870811; NO 873364 L 19880215; US 4758405 A 19880719; US 4832741 A 19890523

DOCDB simple family (application)

EP 87111463 A 19870807; CH 323086 A 19860812; DE 3767807 T 19870807; DK 415687 A 19870810; JP 20168587 A 19870812; NO 873364 A 19870811; US 19124288 A 19880506; US 8418487 A 19870812