

Title (en)

METHOD OF PREPARING A LITHIUM-ALUMINIUM COMPOUND BY POWDER METALLURGY, AND ITS USE

Publication

EP 0134403 B1 19871216 (DE)

Application

EP 84105154 A 19840507

Priority

DE 3330597 A 19830825

Abstract (en)

[origin: EP0134403A1] 1. A powder-metallurgical process for the production of an alloying addition, consisting of a pure beta-phase Al-Li compound, containing between 44 to 55 atom-%, or 17 or 25 weight-%, with the corresponding content of aluminium between 56 to 45 atom-% or 83 to 75 weight-%, using the following steps : a) Weighing and mixing of the elementary lithium and aluminium in powder form in a weight ratio of 1:5 to 1:3 under a protective atmosphere (argon or helium) ; b) charging the powder mixture into a heatable extruding die, degassing the mixture by applying a vacuum at temperature below the melting point of lithium ; c) extruding the mixture ; d) performing the reacting sintering of the extrudate in vacuum or under a protective atmosphere, characterized in that by heating the extrudate in the extrusion die without pressure at a heating rate of 5 to 50 degrees C/min to a temperature from approx. 450 degrees C to closely below the peritectic temperature of 520 degrees C at the maximum.

IPC 1-7

C22C 1/03; **C22C 1/04**

IPC 8 full level

C22C 1/03 (2006.01); **C22C 1/04** (2006.01)

CPC (source: EP)

C22C 1/03 (2013.01); **C22C 1/0416** (2013.01)

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)

EP 0134403 A1 19850320; **EP 0134403 B1 19871216**; AT E31429 T1 19880115; DE 3330597 A1 19850314; DE 3330597 C2 19860724; DE 3468128 D1 19880128

DOCDB simple family (application)

EP 84105154 A 19840507; AT 84105154 T 19840507; DE 3330597 A 19830825; DE 3468128 T 19840507