

Title (en)
Ceracon forging of L1(sub 2) aluminum alloys

Title (de)
Ceracon-Schmieden von L1(sub 2)-Aluminiumlegierungen

Title (fr)
Forgeage de Ceracon d'alliages d'aluminium L1(sub 2)

Publication
EP 2239071 A2 20101013 (EN)

Application
EP 10250569 A 20100325

Priority
US 41967709 A 20090407

Abstract (en)
A method for producing high strength aluminum alloy consolidated billets containing L1 2 dispersoids by Ceracon forging is disclosed. The method comprises forming an aluminum alloy powder compact preform containing L1 2 dispersoid forming elements therein and encompassing the preform in a flowable pressure transmitting medium in a die in a hydraulic press. The die, pressure transmitting medium and preform are then heated and the preform is forged by applying pressure to the pressure transmitting medium by the ram of the hydraulic press. The unequal axial and radial strain resulting from this type of forging results in improved mechanical properties of L1 2 aluminum alloys.

IPC 8 full level
B22F 3/17 (2006.01); **C22C 1/04** (2006.01)

CPC (source: EP US)
B22F 3/17 (2013.01 - EP US); **C22C 1/0416** (2013.01 - EP US); **B22F 2998/10** (2013.01 - EP US); **B22F 2999/00** (2013.01 - EP US)

Citation (applicant)

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Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

Designated extension state (EPC)
AL BA ME RS

DOCDB simple family (publication)
EP 2239071 A2 20101013; EP 2239071 A3 20160810; US 2010254850 A1 20101007

DOCDB simple family (application)
EP 10250569 A 20100325; US 41967709 A 20090407