

Title (en)

A METHOD AND DEVICE FOR GENERATING DEFORMATION TWINNING IN A METAL

Title (de)

VERFAHREN UND VORRICHTUNG ZUR ERZEUGUNG VON VERFORMUNGS-ZWILLINGSBILDUNG BEI EINEM METALL

Title (fr)

PROCÉDÉ ET DISPOSITIF DE GÉNÉRATION DE MACLAGE PAR DÉFORMATION DANS UN MÉTAL

Publication

EP 3289110 A1 20180307 (EN)

Application

EP 16722535 A 20160425

Priority

- EP 15165228 A 20150427
- EP 2016059112 W 20160425

Abstract (en)

[origin: WO2016173956A1] The present disclosure relates to: a method of generating twin lamellas in a metal body (1), comprising the steps of: - introducing said metal body (1) into a chamber (2); - filling said chamber (2) with a cooling medium having a temperature that will enable generation of twin lamellas in the metal body (1) upon deformation thereof; and - deforming said metal body (1) while the latter is surrounded by said cooling medium; wherein the cooling medium surrounding said metal body (1) upon deformation of the latter is in a gaseous state. The present disclosure also relates to: a device for generating twin lamellas in a metal body (1), said device comprising: - a chamber (2); - a chamber (2) inlet connected to a cooling medium source (4); and - a deformation device (5) for deforming said metal body (1); said deformation device (5) being positioned inside said chamber (2); wherein the deformation device (5) is positioned so that the metal body (1) will be surrounded by said cooling medium in a gaseous state while being deformed by said deformation device (5).

IPC 8 full level

C22F 1/00 (2006.01); **C21D 8/00** (2006.01); **C21D 8/06** (2006.01); **C21D 8/10** (2006.01); **C22F 1/02** (2006.01)

CPC (source: CN EP US)

C21D 1/667 (2013.01 - EP US); **C21D 8/00** (2013.01 - CN EP US); **C21D 8/06** (2013.01 - CN EP US); **C21D 8/10** (2013.01 - CN EP US); **C21D 9/08** (2013.01 - EP US); **C21D 9/525** (2013.01 - EP US); **C22F 1/002** (2013.01 - CN EP US); **C22F 1/02** (2013.01 - CN EP US); **C21D 1/62** (2013.01 - EP US); **C21D 2201/00** (2013.01 - EP US)

Citation (search report)

See references of WO 2016173956A1

Designated contracting state (EPC)

AL 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 RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2016173956 A1 20161103; CN 107466327 A 20171212; EP 3289110 A1 20180307; US 2018119246 A1 20180503

DOCDB simple family (application)

EP 2016059112 W 20160425; CN 201680021664 A 20160425; EP 16722535 A 20160425; US 201615569301 A 20160425