

Title (en)

PROCESS FOR PRODUCING A TITANIUM ALLOY, AND USE OF A SPRAYING APPARATUS FOR CARRYING OUT THE PROCESS

Publication

EP 0307386 B1 19910306 (DE)

Application

EP 88890206 A 19880808

Priority

AT 218187 A 19870831

Abstract (en)

[origin: EP0307386A1] In the process for producing a Ti alloy, a molten and, if appropriate, preshaped preform is annealed to produce an initial microstructure and a microstructural transformation is effected by first cooling, after which a high dislocation density is produced in the course of a hot-forming step, which is followed by a recrystallisation by means of a heat treatment, a mainly martensitic decomposition taking place in the course of subsequent cooling, a microstructural transformation being carried out in the following annealing step and a fine-grained microstructure being produced in the course of final quenching. According to the invention at least the first cooling is carried out by spraying the preform with water and/or water air mixtures. The invention also relates to the use of a spray device for carrying out the said process. <IMAGE>

IPC 1-7

C21D 1/667; C22F 1/18

IPC 8 full level

C21D 1/667 (2006.01); **C22F 1/00** (2006.01); **C22F 1/18** (2006.01)

CPC (source: EP US)

C21D 1/667 (2013.01 - EP US); **C22F 1/002** (2013.01 - EP US); **C22F 1/183** (2013.01 - EP US)

Cited by

CN104139141A; EP0851036A1; CN1055323C; EP0716155A1; US5679183A; EP0514293A1; FR2676460A1; US5264055A

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 0307386 A1 19890315; EP 0307386 B1 19910306; AT 391882 B 19901210; AT A218187 A 19900615; DE 3861940 D1 19910411;
US 4902355 A 19900220

DOCDB simple family (application)

EP 88890206 A 19880808; AT 218187 A 19870831; DE 3861940 T 19880808; US 23805088 A 19880830