

Title (en)

Method for producing homogeneous fine grain titanium alloys suitable for ultrasonic inspection

Title (de)

Verfahren zur Herstellung von Titan-Legierungen mit feiner Kornstruktur zur verbesserten Ultraschall-Prüfbarkeit

Title (fr)

Procédé de préparation d'alliages de titane ayant une structure granulaire fine pour améliorer l'abilité d'inspection par ultrasons

Publication

EP 1433863 B1 20070627 (EN)

Application

EP 03258060 A 20031219

Priority

RU 2002135197 A 20021226

Abstract (en)

[origin: EP1433863A1] A titanium material production method for producing homogeneous fine grain titanium material in which the titanium material has a grain size in a range from about 5 μ m to about 20 μ m. The method comprises providing a titanium material blank; conducting a first heat treatment on the titanium material blank to heat the titanium material blank to a beta -range; quenching the titanium material blank from the beta -region to the alpha + beta -region; forging the titanium material blank; and conducting a second heat treatment on the titanium material blank. The titanium material production method subjects the titanium material blank to superplasticity conditions during part of the titanium material production method.

IPC 8 full level

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CPC (source: EP)

C22F 1/183 (2013.01)

Cited by

CN108034911A; CN109518108A; KR101374233B1; CN109622838A; CN107604281A; KR100733285B1; EP3006583A4; CN109371267A; CN110129699A; CN114769478A; US10502252B2; US10144999B2; US10513755B2; US10337093B2; US11111552B2; US10370751B2; US10287655B2; US10570469B2; US10604823B2; US10619226B2; US10808298B2; US11319616B2

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