

Title (en)

A heat treatment method of a ni-based superalloy for wave-type grain boundary and a ni-based superalloy produced accordingly

Title (de)

Wärmebehandlungsverfahren einer Superlegierung auf Nickelbasis für Wellentyp-Korngrenze und entsprechend hergestellte Superlegierung auf Nickelbasis

Title (fr)

Procédé de traitement thermique d'un superalliage à base de nickel pour joint de grain en vague et superalliage à base de nickel obtenu par le procédé

Publication

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Application

EP 09007693 A 20090610

Priority

KR 20080056386 A 20080616

Abstract (en)

The present invention suggests a method of heat treatment of a Ni-based superalloy that improves resistance against creep, fatigue and stress corrosion cracking while being economical and easy, and a Ni-based superalloy produced by using the same. The method and the superalloy of the present invention include solution treatment at the high temperature region during a heat treatment process after manufacturing or final cold working fabrication. Immediately following the said solution treatment, the material is slowly cooled at 1#¼15°C/minute down to the intermediate temperature region for aging treatment. After the slow cooling stage, aging treatment is directly performed by holding it at the intermediate temperature region for the prescribed time. Lastly, the aging treatment is followed by air-cooling stage.

IPC 8 full level

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CPC (source: EP KR US)

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Citation (applicant)

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Citation (search report)

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