

Title (en)

METHOD FOR A WELDING PROCESS CONTROL OF NICKEL BASED SUPERALLOY PRODUCTS

Title (de)

VERFAHREN ZUR STEUERUNG EINES PROZESSES ZUR SCHWEISSUNG VON SUPERLEGIERUNGSPRODUKTEN AUF NICKELBASIS

Title (fr)

PROCÉDÉ POUR UNE RÉGULATION DE PROCESSUS DE SOUDAGE DE PRODUITS EN SUPERALLIAGE À BASE DE NICKEL

Publication

EP 2836331 A4 20160406 (EN)

Application

EP 12874269 A 20120412

Priority

RU 2012000281 W 20120412

Abstract (en)

[origin: WO2013154451A1] A method for a welding process control of Nickel-based superalloy products, especially for gas turbine components, which method includes generating a welding pattern basing on data relating to the geometry of welded products, the material of welded products and the parameters of the selected welding technology and welding equipment, performing a virtual welding using said welding pattern and assessing the quality of welding joint. According to the invention one can make a conclusion whether the selected welding parameters are appropriate for the given alloy composition, welding technology and geometry of the products to be welded and geometry of welding joint, and subsequent realize the welding process in optimal conditions basing on the welding pattern. The invention will bring substantial economic benefit since the number of expensive trials and rejection of welded products will be significantly reduced or even eliminated.

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

- [I] WO 2009009204 A2 20090115 - EDISON WELDING INST INC [US], et al
- [A] US 2011172796 A1 20110714 - SOHMSHETTY RAJA SHEKAR [US], et al
- [A] WO 0187528 A2 20011122 - CHROMALLOY GAS TURBINE CORP [US]
- See references of WO 2013154451A1

Designated contracting state (EPC)

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