

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 A1 20150218 (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

B23K 9/23 (2006.01); **B23K 9/095** (2006.01); **G05B 17/00** (2006.01); **G05B 19/12** (2006.01)

CPC (source: EP)

B23K 9/23 (2013.01); **B23K 31/12** (2013.01); **G09B 19/24** (2013.01); **B23K 2101/001** (2018.07); **G06F 30/23** (2020.01)

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 2013154451 A1 20131017; EP 2836331 A1 20150218; EP 2836331 A4 20160406; RU 2014145348 A 20160610

DOCDB simple family (application)

RU 2012000281 W 20120412; EP 12874269 A 20120412; RU 2014145348 A 20120412