

Title (en)

PROCESS FOR ENHANCING THE OXIDATION AND CORROSION RESISTANCE OF A COMPONENT MADE FROM A DISPERSION-HARDENED SUPERALLOY BY MEANS OF A SURFACE TREATMENT

Publication

EP 0196447 B1 19890809 (DE)

Application

EP 86102345 A 19860224

Priority

CH 116685 A 19850315

Abstract (en)

1. A process for increasing the oxidation resistance and corrosion resistance of a component made of a dispersion strengthened superalloy by a surface treatment, characterised in that, regardless of the structural state of the starting material, the component is subjected to a surface treatment by coldworking, the degree of cold deformation in the surface zone (3, 5) being chosen so that, in the subsequent heat treatment, the available motive force leads to a fine-grained structure while the core zone (4) is forced to form coarse grains, and in that the component is subjected to recrystallization annealing in a temperature range above the recrystallization and below the solidus temperature.

IPC 1-7

C22F 1/00; **C22F 1/10**; **C22F 3/00**

IPC 8 full level

C22F 1/00 (2006.01); **C22F 1/10** (2006.01); **C22F 3/00** (2006.01)

CPC (source: EP US)

C22F 1/00 (2013.01 - EP US); **C22F 1/10** (2013.01 - EP US); **C22F 3/00** (2013.01 - EP US); **Y10S 148/903** (2013.01 - EP US)

Cited by

US4874644A; DE19756354B4; US4830683A; WO8807588A1; WO8807587A1

Designated contracting state (EPC)

CH DE FR GB LI

DOCDB simple family (publication)

EP 0196447 A1 19861008; **EP 0196447 B1 19890809**; DE 3664930 D1 19890914; JP S61213360 A 19860922; US 4909859 A 19900320

DOCDB simple family (application)

EP 86102345 A 19860224; DE 3664930 T 19860224; JP 5604286 A 19860313; US 83289986 A 19860226