

Title (en)

New superalloys and the methods for improving the properties of superalloys.

Title (de)

Superlegierungen und Verfahren zur Verbesserung der Eigenschaften von Superlegierungen.

Title (fr)

Superaliages et procédé pour l'amélioration des propriétés des superalliages.

Publication

EP 0387976 A2 19900919 (EN)

Application

EP 90250070 A 19900314

Priority

CN 89105034 A 19890315

Abstract (en)

This invention has provided a new technique of improving the properties of superalloys by reducing the segregation of the alloying elements. The characteristic specificity is to reduce the phosphorus content of the alloys to below 0.001 (in wt%) and, in case of Ni-base superalloys, to below 0.0005(wt%). It is needed to eliminate Zr from the superalloys. Meanwhile, it is also needed to control the proper content of B and to reduce the content of Si to below 0.005. The invention has also provided a series of low segregation superalloys.

IPC 1-7

C22C 19/05

IPC 8 full level

C22C 19/03 (2006.01); **C22C 19/05** (2006.01)

CPC (source: EP)

C22C 19/03 (2013.01); **C22C 19/055** (2013.01); **C22C 19/056** (2013.01); **C22C 19/057** (2013.01)

Cited by

EP0561179A3; EP2703507A1; CN114250375A; EP1961830A4; CN112779385A; US8083990B2; WO9967435A1; US9856553B2; US10221473B2; JP2014005528A; EP2703507B1

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 0387976 A2 19900919; EP 0387976 A3 19901107; CN 1045607 A 19900926

DOCDB simple family (application)

EP 90250070 A 19900314; CN 89105034 A 19890315