

Title (en)

Nickel based superalloy for single crystal turbine blades of industrial turbines having a high resistance to hot corrosion

Title (de)

Superlegierung auf Nickelbasis für Einkristallturbinenschaufeln von industriellen Turbinen mit hoher Beständigkeit gegen Heisskorrosion

Title (fr)

Superaliage à base de nickel pour aubes monocristallines de turbines industrielles ayant une résistance élevée à la corrosion à chaud

Publication

EP 1211336 B1 20070530 (FR)

Application

EP 00403362 A 20001130

Priority

EP 00403362 A 20001130

Abstract (en)

[origin: EP1211336A1] A nickel based superalloy, suitable for monocrystalline solidification, comprises (wt.%): (a) 4.75-5.25 cobalt; (b) 11.5-12.5 chromium; (c) 0.8-1.2 molybdenum; (d) 3.75-4.25 tungsten; (e) 3.75-4.25 aluminum; (f) 4-4.8 titanium; (g) 1.75-2.25 tantalum; (h) 0.006-0.04 carbon; (i) ≤ 0.01 boron; (j) ≤ 0.01 zirconium; (k) ≤ 1 hafnium; (l) ≤ 1 niobium; and (m) remainder nickel and inevitable impurities. An Independent claim is also included for an industrial turbine blade produced by the monocrystalline solidification of the above superalloy.

IPC 8 full level

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