

Title (en)

LOWER COST HIGH STRENGTH SINGLE CRYSTAL SUPERALLOYS WITH REDUCED RE AND RU CONTENT

Title (de)

KOSTENGÜNSTIGE HOCHFESTE EINZELKRISTALL-SUPERLEGIERUNGEN MIT VERRINGERTEM RE- UND RU-GEHALT

Title (fr)

SUPERALLIAGES MONOCRISTALLINS HAUTEMENT RÉSISTANTS ET À TENEUR RÉDUITE EN RE ET EN RU

Publication

EP 3141623 B1 20190529 (EN)

Application

EP 16181107 A 20091201

Priority

- US 11871408 P 20081201
- EP 09252708 A 20091201

Abstract (en)

[origin: US2010135846A1] A first embodiment of a nickel based alloy consists essentially of from 3.0 to 5.2 wt % chromium, from 1.5 to 3.0 wt % molybdenum, from 6.0 to 12.5 wt % tungsten, from 5.0 to 11 wt % tantalum, from 5.5 to 6.5 wt % aluminum, from 11 to 14 wt % cobalt, from 0.001 to 1.75 wt % rhenium, from 0.2 to 0.6 wt % hafnium, up to 0.05 wt % yttrium, up to 3.0 wt % ruthenium, and the balance nickel. Another embodiment of a nickel based alloy consists essentially of from 1.0 to 3.0 wt % chromium, up to 2.5 wt % molybdenum, from 11 to 16 wt % tungsten, from 4.0 to 8.0 tantalum, from 5.7 to 6.5 wt % aluminum, from 11 to 15 wt % cobalt, from 2.0 to 4.0 wt % rhenium, from 0.2 to 0.6 wt % hafnium, up to 0.05 wt % yttrium, up to 3.0 wt % ruthenium, and the balance nickel.

IPC 8 full level

C22C 19/05 (2006.01)

CPC (source: EP US)

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