

Title (en)

NICKEL-BASED SUPERALLOY, SINGLE-CRYSTAL BLADE AND TURBOMACHINE

Title (de)

SUPERLEGIERUNG AUF NICKELBASIS, EINKRISTALLINE SCHAUFEL UND TURBOMASCHINE

Title (fr)

SUPERALLIAGE A BASE DE NICKEL, AUBE MONOCRISTALLINE ET TURBOMACHINE

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Application

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Abstract (en)

[origin: WO2022269158A1] A nickel-based superalloy comprises in weight percentages: 5.4 to 6.0% of aluminium, 7.5 to 9.0% of tantalum, 0.10 to 0.25% of titanium, 5.5 to 7.5% of cobalt, 4.0 to 5.5% of chromium, 0.10 to 0.70% of molybdenum, 4.0 to 5.0% of tungsten, 4.8 to 6.2% of rhenium, 0.04 to 0.15% of hafnium, 0 to 0.15% of silicon, the remainder consisting of nickel and unavoidable impurities. The invention also relates to a single-crystal blade (20A, 20B) comprising such an alloy and to a turbomachine (10) comprising such a blade (20A, 20B).

IPC 8 full level

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