

Title (en)

NICKEL-BASED SUPERALLOY, SINGLE-CRYSTAL GUIDE VANE AND TURBINE ENGINE

Title (de)

SUPERLEGIERUNG AUF NICKELBASIS, EINKRISTALLINE LEITSCHAUFEL UND TURBINENMOTOR

Title (fr)

SUPERALLIAGE À BASE DE NICKEL, AUBE MONOCRISTALLINE ET TURBOMACHINE

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Application

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Abstract (en)

[origin: WO2023281205A1] The invention relates to a nickel-based superalloy comprising in percentages by mass: 5.0 to 6.5% of aluminum, 0.50 to 2.5% of tantalum, 1.50 to 4.0% of titanium, 0 to 7.0% of cobalt, 12.0 to 16.0% of chromium, 0.50 to 2.5% of molybdenum, 0 to 2.0% of tungsten, 0.05 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 guide vane (20A, 20B) comprising such an alloy and to a turbine engine (10) comprising such a guide vane (20A, 20B).

IPC 8 full level

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