

Title (en)
NICKEL BASE SUPERALLOY

Title (de)
NICKEL-BASIS-SUPERLEGIERUNG

Title (fr)
SUPERALLIAGE A BASE DE NICKEL

Publication
EP 2451986 B2 20171018 (DE)

Application
EP 10726136 A 20100701

Priority
• EP 2010059368 W 20100701
• CH 10692009 A 20090709

Abstract (en)
[origin: WO2011003804A1] The invention relates to a nickel-based superalloy. The alloy according to the invention is characterized by the following chemical composition (listed in % by weight): 7.7-8.3 Cr, 5.0-5.25 Co, 2.0-2.1 Mo, 7.8-8.3 W, 5.8-6.1 Ta, 4.9-5.1 Al, 1.0-1.5 Ti, 1.0-2.0 Re, 0.11-0.15 Si, 0.1- 0.7 Hf, 0-0.5 Nb, 0.02-0.17 C, 50-400 ppm B, remainder Ni and production-related impurities. It is characterized by very high oxidation resistance, corrosion resistance, and good creep properties at high temperatures.

IPC 8 full level
C22C 19/05 (2006.01)

CPC (source: EP US)
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Citation (opposition)
Opponent :
• EP 1900839 A1 20080319 - ALSTOM TECHNOLOGY LTD [CH]
• JP 2001294959 A 20011026 - MITSUBISHI HEAVY IND LTD
• US 3526499 A 19700901 - QUIGG RICHARD J, et al
• EP 1319729 A1 20030618 - SIEMENS AG [DE]
• EP 1184473 B1 20050105 - TOSHIBA KK [JP], et al

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DOCDB simple family (publication)
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