Title (en)

Ni-Cr-Co-Mo alloy for advanced gas turbine engines

Title (de)

Ni-Cr-Co-Mo Legierung für einen Gasturbinenantrieb

Title (fr)

Alliage de Ni-Cr-Co-Mo pour un moteur à turbine à gaz

Publication

EP 1640465 B1 20091028 (EN)

Application

EP 05018830 A 20050830

Priority

US 93492004 A 20040903

Abstract (en)

[origin: GB2417729A] A nickel-chromium-cobalt based alloy has a composition comprising (by weight): 17-22 % chromium, 8-15 % cobalt, 4.0-9.5 % molybdenum, 1.28-1.65 % aluminium, 1.50-2.30% titanium, 0.01-0.2 % carbon, up to 7.0 % tungsten, up to 0.80 % niobium, up to 0.015 % boron, up to 3 % iron, up to 1.5 tantalum, up to 1.5 % manganese, up to 0.5 % silicon, up to 0.5 % copper, up to 0.5 % each of magnesium, calcium, hafnium, zirconium, yttrium, cerium and lanthanum, with the balance being nickel and impurities. The sum of A1 + 0.56Ti + 0.29Nb lies between 2.2-2.9 and the sum of Mo + 0.52W lies between 6.5-9.5. The alloy may be used in wrought, cast, spray-formed of powder form and used to make components for gas turbine engines.

IPC 8 full level

C22C 19/05 (2006.01)

CPC (source: EP GB KR US)

C22C 19/05 (2013.01 - KR); **C22C 19/055** (2013.01 - EP GB US); **C22C 19/056** (2013.01 - EP US)

Cited by

EP3202931A4; CN111051548A; EP2246449A4; KR101293386B1; US9828657B2; WO2019233693A1; US9856553B2; US10221473B2; WO2014197088A1; US10358699B2; US10577680B2

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DOCDB simple family (publication)

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