

Title (en)

Nickel-containing alloys, method of manufacture thereof and articles derived therefrom

Title (de)

Nickelhaltige Legierungen, Herstellungsverfahren dafür und daraus gewonnene Artikel

Title (fr)

Alliages contenant du nickel, procédé de fabrication associé et articles dérivés formés à partir de ceux-ci

Publication

EP 2319948 A1 20110511 (EN)

Application

EP 10188023 A 20101019

Priority

US 60315209 A 20091021

Abstract (en)

A nickel-containing alloy is disclosed. The alloy contains about 1.5 to about 4.5 weight percent aluminum; about 1.5 to about 4.5 weight percent titanium; about 0.8 to about 3 weight percent niobium; about 14 to about 28 weight percent chromium; up to about 0.2 weight percent zirconium; about 10 to about 23 weight percent cobalt; about 1 to about 3 weight percent tungsten; about 0.05 to about 0.2 weight percent carbon, about 0.002 to about 0.012 weight percent boron; and about 40 to about 70 weight percent nickel. The atomic ratio of aluminum to titanium is at least about 0.5. The alloy is also substantially free of tantalum. Related processes and articles are also disclosed.

IPC 8 full level

C22C 19/05 (2006.01)

CPC (source: EP US)

C22C 19/055 (2013.01 - EP US); **C22C 19/056** (2013.01 - EP US); **C22F 1/10** (2013.01 - EP US)

Citation (search report)

[X] WO 2005056852 A2 20050623 - GEN ELECTRIC [US], et al

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Designated extension state (EPC)

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DOCDB simple family (publication)

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