

Title (en)

Oxide dispersion strengthened, precipitation hardenable nickel-chromium alloy.

Title (de)

Oxiddispersionsgehärtete ausscheidungshärtbare Nickel-Chromlegierung.

Title (fr)

Alliage durcissable par précipitation à base de nickel-chrome durci par dispersion d'oxydes.

Publication

**EP 0507364 A1 19921007 (DE)**

Application

**EP 92200560 A 19920227**

Priority

DE 4110543 A 19910330

Abstract (en)

An oxide dispersion-hardened, precipitation-hardenable nickel-chromium alloy, which is prepared by mechanical alloying and is composed of 15 to 21% by weight of chromium 4 to 7% by weight of aluminium 1 to 8% by weight of molybdenum 0 to 5% by weight of tungsten 0.1 to 0.2% by weight of zirconium 0.005 to 0.015% by weight of boron 0 to 0.075% by weight of carbon >0.2 to 3.0% by weight of silicon and 0.5 to 1.25% by weight of yttrium oxide, the remainder being nickel, has improved oxidation resistance and resistance to corrosion by hot gas. <IMAGE>

Abstract (de)

Eine oxiddispersionsgehärtete ausscheidungshärtbare Nickel-Chromlegierung, die durch mechanisches Legieren hergestellt und zusammengesetzt ist aus 15 bis 21 Gew.% Chrom 4 bis 7 Gew.% Aluminium 1 bis 8 Gew.% Molybdän 0 bis 5 Gew.% Wolfram 0,1 bis 0,2 Gew.% Zirkonium 0,005 bis 0,015 Gew.% Bor 0, bis 0,075 Gew.% Kohlenstoff > 0,2 bis 3,0 Gew.% Silizium 0,5 bis 1,25 Gew.% Yttriumoxid Rest Nickel. besitzt eine verbesserte Oxidations- und Heißgaskorrosionsbeständigkeit. <IMAGE>

IPC 1-7

**C22C 1/10; C22C 32/00**

IPC 8 full level

**C22C 1/05** (2006.01); **C22C 1/10** (2006.01); **C22C 19/05** (2006.01); **C22C 32/00** (2006.01); **C22F 1/00** (2006.01); **C22F 1/10** (2006.01);  
**F01D 5/28** (2006.01)

CPC (source: EP)

**C22C 1/1084** (2013.01); **C22C 32/0026** (2013.01)

Citation (search report)

- [A] EP 0398121 A1 19901122 - ASEA BROWN BOVERI [CH]
- [AD] EP 0260465 A1 19880323 - BBC BROWN BOVERI & CIE [CH]
- [A] US 3809545 A 19740507 - BENJAMIN J
- [A] EP 0319786 A1 19890614 - KRUPP GMBH [DE]
- [A] ANNUAL REVIEW OF MATERIALS SCIENCE Bd. 13, 1983, ANNUAL REVIEWS INC. , PAOLO ALTO, US Seiten 279 - 300; P.S. GILMAN ET AL: 'MECHANICAL ALLOYING'

Cited by

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Designated contracting state (EPC)

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