

Title (en)

Precipitation hardened Co-Ni based heat-resistant alloy and production method therefor

Title (de)

Ausscheidungsgehärtete Kobalt-Nickel-Legierung mit guter Wärmebeständigkeit sowie zugehörige Herstellungsmethode

Title (fr)

Alliage Co-Ni durci par precipitation par particules ayant une bonne résistance à chaleur

Publication

EP 1378579 B1 20051102 (EN)

Application

EP 03015101 A 20030703

Priority

JP 2002197142 A 20020705

Abstract (en)

[origin: EP1378579A1] A precipitation hardened Co-Ni based heat-resistant alloy is composed of, all by weight, not more than 0.05% of C; not more than 0.5% of Si; not more than 1.0% of Mn; 25 to 45% of Ni; 13 to 22% of Cr; 10 to 18% of Mo or 10 to 18% of Mo + 1/2W; 0.1 to 5.0% of Nb; 0.1 to 5.0% of Fe; and further at least one kind of 0.007 to 0.10% of REM; 0.001 to 0.010% of B; 0.0007 to 0.010% of Mg and 0.001 to 0.20% of Zr; the balance of substantially Co and inevitable impurities, and Co₃Mo or Co₇Mo₆ is precipitated in boundaries between a fine twin structure and a parent phase. <IMAGE>

IPC 1-7

C22C 19/05; **C22F 1/10**

IPC 8 full level

F01D 5/28 (2006.01); **C22C 19/00** (2006.01); **C22C 19/05** (2006.01); **C22C 19/07** (2006.01); **C22C 30/00** (2006.01); **C22F 1/00** (2006.01); **C22F 1/10** (2006.01); **F02C 7/00** (2006.01)

CPC (source: EP US)

C22C 19/055 (2013.01 - EP US); **C22C 19/056** (2013.01 - EP US); **C22C 19/07** (2013.01 - EP US); **C22C 30/00** (2013.01 - EP US); **C22F 1/10** (2013.01 - EP US)

Cited by

CN106756404A; CN113073234A; CN107208892A; CN107127343A; CN111187999A; EP2610360A4; US11427893B2; US11613795B2; US11306372B2; US11414728B2; US11499208B2; US11325189B2

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DOCDB simple family (application)

EP 03015101 A 20030703; DE 60302108 T 20030703; ES 03015101 T 20030703; JP 2002197142 A 20020705; US 61203903 A 20030703