

Title (en)
CORROSION RESISTANT AGE HARDENABLE NICKEL-BASE ALLOY

Publication
EP 0247577 B1 19910925 (EN)

Application
EP 87107651 A 19870526

Priority
• US 86780386 A 19860527
• US 86913886 A 19860530

Abstract (en)
[origin: EP0247577A1] An age hardenable nickel base chromium, molybdenum, alloy as well as intermediate products and articles made therefrom are disclosed which, in the solution treated and age hardened condition, have a 0.2% yield strength greater than 100 ksi combined with resistance to pitting and crevice corrosion and to stress corrosion cracking in chloride and sulfide environments at elevated temperatures up to about 500 F without requiring working below the recrystallization temperature of the alloy. Broad and preferred ranges are disclosed as follows: <IMAGE> the balance being at least about 55% nickel, the sum of the percent chromium and molybdenum being not greater than 31, and the sum of the percent niobium, titanium and aluminum being such that the total atomic percent thereof is about 3.5 a/o to 5 a/o when calculated as 0.64(w/o Nb) + 1.24(w/o Ti) + 2.20(w/o Al).

IPC 1-7
C22C 19/05; **C22F 1/10**; **E21B 17/00**

IPC 8 full level
C22F 1/10 (2006.01); **C22C 19/05** (2006.01); **C22F 1/00** (2006.01); **E21B 17/00** (2006.01)

CPC (source: EP KR)
C22C 19/055 (2013.01 - EP); **C22C 38/54** (2013.01 - KR); **E21B 17/00** (2013.01 - EP)

Cited by
CN104674144A; EP1078190A4; CN115961178A; EP1852517A3; EP2222884A4; EP2845916A3; EP0424277A1; FR2653451A1; EP2730670A1; CN111094603A; EP3663422A4; EP1005946A1; FR2786419A1; EP3431222A1; US9464343B2; US8313593B2; US6447716B1; WO2023129703A1; WO2022053353A1; US7682474B2; US7740719B2; EP0262673B1

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