

Title (en)

ALLOYS RESISTANT TO STRESS CORROSION CRACKING

Publication

**EP 0246092 A3 19890503 (EN)**

Application

**EP 87304275 A 19870514**

Priority

US 86350886 A 19860515

Abstract (en)

[origin: EP0246092A2] Disclosed are iron, nickel, and cobalt based austenitic alloys containing 12 - 50 wt.% Cr, from 0.001 - 0.2 wt.% C, 0 - 3 wt.% Mo, 0 - 3 wt.% Mn, 0 - 0.5 wt.% Si, 0 - 0.2 wt.% Al, 0 - 0.75 wt.% Zr, and at least one carbide-forming element whose carbide is more stable than chromium carbide, and which alloy, at equilibrium, generates a carbon concentration in solution which is insufficient to form chromium carbides at a temperature from about 425 DEG C - 750 DEG C. The preferred carbide-forming element is Hf and/or Ta.

IPC 1-7

**C22C 38/26**; **C22C 19/05**; **C22C 19/07**

IPC 8 full level

**C22C 19/05** (2006.01); **C22C 19/07** (2006.01); **C22C 38/00** (2006.01); **C22C 38/26** (2006.01); **C22C 38/28** (2006.01)

CPC (source: EP)

**C22C 19/05** (2013.01); **C22C 19/07** (2013.01); **C22C 38/26** (2013.01)

Citation (search report)

- FR 2463192 A1 19810220 - HOWMET TURBINE COMPONENTS [US]
- GB 2083499 A 19820324 - FIRTH BROWN LTD
- GB 1087590 A 19671018 - MARTIN MARIETTA CORP
- EP 0183536 A2 19860604 - NIPPON STEEL CORP [JP]
- DE 3121782 A1 19830505 - MANNESMANN AG [DE]
- [A] E. HOUDREMONT: "Handbuch der Sonderstahlkunde", 3rd edition, 1956, pages 486-489, Verlag Stahleisen mbH, Düsseldorf, DE, "Karbidbildenden Elemente (Legierte St(h)hle)"

Cited by

GB2394959A; EP0332460A1; GB2394960A; GB2394960B; US6409847B2; US6173702B1; WO2015018017A1; WO9804757A1

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