

Title (en)

NOVEL COBALT-BASE SUPERALLOY AND CAST AND WELDED INDUSTRIAL GAS TURBINE COMPONENTS THEREOF

Publication

**EP 0186797 B1 19890621 (EN)**

Application

**EP 85115301 A 19851203**

Priority

US 67811884 A 19841204

Abstract (en)

[origin: EP0186797A1] Cobalt-base superalloys having special utility in the production of industrial gas turbine hot gas path components because of their unique combination of properties including excellent hot corrosion resistance, creep rupture strength at high temperature, metallurgical stability, tensile ductility and weldability, consist essentially of 0.3 to 0.6% carbon, 27-35% chromium, 9-16% nickel, 6-9% tungsten, 0.45 to 2.0% tantalum, up to 3.0% hafnium, up to 0.1% columbium, up to 0.7% zirconium, not more than 2.0% iron, 1.5% manganese and silicon and 0.05% boron, balance cobalt, the carbide formers being selected to satisfy the following equation: <MATH>

IPC 1-7

**C22C 19/07**

IPC 8 full level

**C22C 19/07** (2006.01); **F01D 9/02** (2006.01)

CPC (source: EP)

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