

Title (en)

Novel cobalt-base superalloy and cast and welded industrial gas turbine components thereof.

Title (de)

Superlegierung auf Kobaltbasis und daraus hergestellte gegossene und geschweisste Bauteile für Gasturbinen.

Title (fr)

Superaliage à base de cobalt et pièces moulées et soudées pour turbines à gaz industrielles fabriquées avec cet alliage.

Publication

**EP 0186797 A1 19860709 (EN)**

Application

**EP 85115301 A 19851203**

Priority

US 67811884 A 19841204

Abstract (en)

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)

**C22C 19/07** (2013.01)

Citation (search report)

- [A] US 3549356 A 19701222 - SIMS CHESTER T, et al
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- [A] FR 2074104 A5 19711001 - CABOT CORP
- [AD] US 3383205 A 19680514 - SIMS CHESTER T, et al
- [A] GB 891550 A 19620314 - SIERRA METALS CORP

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US2020139435A1; US8252376B2; FR2769024A1; CN1094522C; WO9916919A1

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DOCDB simple family (application)

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