

Title (en)

HIGH TEMPERATURE ALLOY PARTICULARLY SUITABLE FOR A LONG-LIFE TURBOCHARGER NOZZLE RING

Title (de)

HOCHTEMPERATURLEGIERUNG INSBESONDERE FÜR TURBOLADER MIT DÜSENRING UND LANGER LEBENSDAUER

Title (fr)

ALLIAGE HAUTES TEMPERATURES CONVENANT PARTICULIEREMENT POUR UN DISTRIBUTEUR DE TURBINE A GRANDE LONGEVITE DE TURBOCOMPRESSEUR

Publication

EP 1540024 A1 20050615 (EN)

Application

EP 02773389 A 20020916

Priority

US 0229284 W 20020916

Abstract (en)

[origin: WO2004024970A1] An iron-based alloy that contains the elements of cobalt, carbon, silicon, manganese, chromium, and optionally contains molybdenum, niobium, and tungsten, and optionally also minor amounts of one or more of aluminum, nickel, vanadium, nitrogen, sulfur and titanium. The combined amount of chrome and cobalt is at least 18 percent by weight of the total alloy, more preferably at least 34.5 percent by weight, and most preferably at least 36 percent by weight. The combined amount of chrome and cobalt is at most 41.5 percent by weight of the total alloy. The alloy is particularly suitable for use in mechanical parts which are thermally highly stressed and exposed to oxidizing and/or corroding effects, such as turbocharger nozzle rings.

IPC 1-7

C22C 38/30; **C22C 38/22**; **C22C 38/26**; **C22C 38/34**

IPC 8 full level

C22C 38/00 (2006.01); **C22C 38/22** (2006.01); **C22C 38/26** (2006.01); **C22C 38/30** (2006.01); **C22C 38/34** (2006.01); **C22C 38/58** (2006.01); **C23C 8/22** (2006.01); **C23C 8/26** (2006.01); **C23C 8/32** (2006.01); **C23C 30/00** (2006.01); **F01D 17/16** (2006.01); **F01D 25/00** (2006.01); **F02B 37/24** (2006.01); **F02B 39/00** (2006.01)

CPC (source: EP US)

C22C 38/22 (2013.01 - EP US); **C22C 38/26** (2013.01 - EP US); **C22C 38/30** (2013.01 - EP US); **C22C 38/34** (2013.01 - EP US); **C23C 8/22** (2013.01 - EP US); **C23C 8/26** (2013.01 - EP US); **C23C 8/32** (2013.01 - EP US); **C23C 30/00** (2013.01 - EP US)

Citation (search report)

See references of WO 2004024970A1

Designated contracting state (EPC)

DE FR GB IT NL

DOCDB simple family (publication)

WO 2004024970 A1 20040325; EP 1540024 A1 20050615; JP 2005539138 A 20051222; US 2005006006 A1 20050113

DOCDB simple family (application)

US 0229284 W 20020916; EP 02773389 A 20020916; JP 2004535371 A 20020916; US 49580704 A 20040517