

Title (en)

Nickel-base alloy and its use in casting and welding operations

Title (de)

Nickelbasislegierung und ihre Anwendung beim Giessen und Schweißen

Title (fr)

Alliage à base de nickel et son utilisation pour des opérations de coulage et de soudage

Publication

EP 1420074 A2 20040519 (EN)

Application

EP 03256701 A 20031023

Priority

US 28039102 A 20021025

Abstract (en)

An alloy has a composition of, in weight percent, from about 16 percent to about 21 percent chromium, from about 6 percent to about 12 percent iron, from about 6 percent to about 12 percent cobalt, from about 2.8 percent to about 3.3 percent molybdenum, from about 5 percent to about 5.4 percent niobium, from 0 to about 2 percent tantalum, from about 0.65 percent to about 1.15 percent titanium, from about 0.2 percent to about 0.8 percent aluminum, from about 0.01 percent to about 0.05 percent carbon, from about 0.005 percent to about 0.01 percent boron, less than about 0.1 percent zirconium, balance nickel and impurities. A molten mass of this composition may be cast into a mold for solidification. The solid material may be welded either in a rework/repair process or to join it to a second article.

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C22C 19/00

IPC 8 full level

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