

Title (en)

Improving the hot workability of an age hardenable nickel base alloy.

Title (de)

Warmbearbeitbarkeit einer Nickelbasislegierung mit struktureller Härtung.

Title (fr)

Usinabilité à chaud d'un alliage à base de nickel, à durcissement par vieillissement.

Publication

**EP 0117932 A1 19840912 (EN)**

Application

**EP 83301267 A 19830308**

Priority

EP 83301267 A 19830308

Abstract (en)

Very significant improvements in the hot workability of an age hardenable nickel base alloy containing 17 to 20 percent chromium, 2.9 to 5.3 percent titanium, 1.8 to 2.8 percent aluminum, 11 to 15.5 cobalt, 2.5 to 7 percent molybdenum, .8 to 1.5 percent tungsten, .004 to .040 percent boron, .02 to .06 percent carbon and about 52 to about 57 percent nickel are achieved by melting the raw materials under vacuum in the presence of lime, and forming a desulfurizing lime slag on the surface of the molten raw materials, and thereafter adding magnesium thereto just prior to casting the alloy, preferably while maintaining the molten raw material under an inert gas atmosphere.

IPC 1-7

**C22C 1/02**

IPC 8 full level

**C22C 1/02** (2006.01)

CPC (source: EP)

**C22C 1/023** (2013.01)

Citation (search report)

- [A] GB 1035250 A 19660706 - WESTINGHOUSE ELECTRIC CORP
- [A] GB 1180974 A 19700211 - INT NICKEL LTD [GB]
- [A] US 3575734 A 19710420 - MUZYKA DONALD R, et al
- [A] FR 2262120 A1 19750919 - SPECIAL METALS CORP [US]
- [A] US 3850624 A 19741126 - HULIT G, et al
- [A] US 3907552 A 19750923 - KENNEDY RICHARD L
- [E] US 4376650 A 19830315 - MCGINNESS ROBERT L
- [A] METALS ABSTRACTS, vol. 12, page 50, abstract no. 31-2524

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)

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