

Title (en)

METHOD FOR PRODUCING AND USING A NICKEL-BASED SEMI-FINISHED PRODUCT HAVING A RECRYSTALLISATION CUBE STRUCTURE

Title (de)

VERFAHREN ZUR HERSTELLUNG UND VERWENDUNG VON HALBZEUG AUF NICKELBASIS MIT REKRISTALLISATIONSWÜRFELTEXTUR

Title (fr)

PROCEDE DE FABRICATION ET D'UTILISATION D'UN DEMI-PRODUIT A BASE DE NICKEL PRESENTANT UNE TEXTURE CUBIQUE DE RECRISTALLISATION

Publication

EP 1922426 A1 20080521 (DE)

Application

EP 06725088 A 20060315

Priority

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- DE 102005013368 A 20050316

Abstract (en)

[origin: DE102005013368B3] A blank starting product is made via a melt- or powder-metallurgical route, whilst taking mechanical alloying into account. The blank comprises technically-pure nickel or nickel alloy that contains a silver addition in the micro-alloy range of 10 atom ppm to 1000 atom ppm. The blank product is worked initially by hot deformation, then by cold deformation. Deformation exceeds 50% thickness reduction to strip or flat wire, with an intermediate dimension. This is stress-relieved by annealing at 500-850[deg]C, the higher temperatures being used for higher silver contents. The blank is quenched. It is subjected to substantial cold deformation exceeding 80%. Recrystallization annealing follows, resulting in the fully cubic structure.

IPC 8 full level

C22C 19/03 (2006.01); **C22F 1/10** (2006.01)

CPC (source: EP KR US)

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