

Title (en)

PRODUCTION PROCESS OF A SILVER ALLOYWORKPIECE AND ALLOY USED FOR THIS PROCESS

Title (de)

HERSTELLUNGSPROZESS EINES WERKSTÜCKES AUS SILBERLEGIERUNG UND LEGIERUNG FÜR DIESEN PROZESS

Title (fr)

PROCEDE DE REALISATION D'UNE PIECE EN ALLIAGE D'ARGENT ET ALLIAGE UTILISE POUR CE PROCEDE

Publication

EP 1613786 A1 20060111 (FR)

Application

EP 04725262 A 20040402

Priority

- CH 2004000208 W 20040402
- EP 03405231 A 20030404
- EP 04725262 A 20040402

Abstract (en)

[origin: WO2004087972A1] The invention relates to a method of producing a silver-based alloy part. The inventive method consists in using an initial alloy containing silver and at least one silver-soluble metal, at concentrations of between 0.04 and 4 atomic percent, which can form a stable oxide at high temperature. Subsequently, the invention consists in performing the following successive operations comprising: oxygenation of the initial alloy such as to dissolve the oxygen in the silver containing same; partial oxidation of the soluble metal in order to form precipitate particles which prevent the alloy grains from swelling; and total oxidation, on at least one outer layer, of the soluble metal into a stable oxide at high temperature. The invention also relates to a silver-based alloy containing at least one silver-soluble metal which can form a stable oxide at high temperature and which, by means of internal oxidation, hardens same, producing a final grain size of less than 20µm.

IPC 1-7

C22C 1/10; **C22C 5/06**

IPC 8 full level

C22C 32/00 (2006.01)

CPC (source: EP US)

C22C 32/0021 (2013.01 - EP US)

Citation (search report)

See references of WO 2004087972A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2004087972 A1 20041014; EP 1613786 A1 20060111; US 2006272753 A1 20061207

DOCDB simple family (application)

CH 2004000208 W 20040402; EP 04725262 A 20040402; US 55199505 A 20051004