

Title (en)

METHOD FOR PRODUCING FE-BASED NANO-CRYSTAL ALLOY, AND METHOD FOR PRODUCING FE-BASED NANO-CRYSTAL ALLOY  
MAGNETIC CORE

Title (de)

VERFAHREN ZUR HERSTELLUNG EINER EISENBASIERTEN NANOKRISTALLINEN LEGIERUNG UND VERFAHREN ZUR HERSTELLUNG  
EINES MAGNETISCHEN KERNS FÜR DIE EISENBASIERTE NANOKRISTALLINE LEGIERUNG

Title (fr)

PROCÉDÉ DE PRODUCTION D'ALLIAGE NANOCRISTALLIN À BASE DE FE ET PROCÉDÉ DE PRODUCTION DE NOYAU MAGNÉTIQUE  
D'ALLIAGE NANOCRISTALLIN À BASE DE FER

Publication

**EP 3050977 B1 20181121 (EN)**

Application

**EP 14849656 A 20140922**

Priority

- JP 2013201030 A 20130927
- JP 2014075070 W 20140922

Abstract (en)

[origin: EP3050977A1] A method for producing an Fe-based nano-crystal alloy ribbon, includes a heat treatment step of heating a nano-crystallizable Fe-based amorphous alloy ribbon to a crystallization temperature region and cooling the nano-crystallizable Fe-based amorphous alloy ribbon. In the heat treatment step, a magnetic field is applied in a width direction of the alloy ribbon in a temperature range during a temperature-increasing period, the temperature range including at least a part of a temperature range from a temperature lower by 50 °C than a crystallization start temperature to a temperature higher by 20 °C than the crystallization start temperature and not exceeding a temperature higher by 50 °C than the crystallization start temperature, the crystallization start temperature being defined by a differential scanning calorimeter.

IPC 8 full level

**C21D 6/00** (2006.01); **C22C 38/00** (2006.01); **C22C 45/02** (2006.01); **H01F 1/153** (2006.01); **H01F 41/02** (2006.01)

CPC (source: EP)

**C21D 1/09** (2013.01); **C21D 6/00** (2013.01); **C22C 45/02** (2013.01); **H01F 1/15333** (2013.01); **C21D 1/34** (2013.01); **C21D 8/12** (2013.01); **C21D 2201/03** (2013.01)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**EP 3050977 A1 20160803**; **EP 3050977 A4 20170531**; **EP 3050977 B1 20181121**; CN 105593382 A 20160518; CN 105593382 B 20170818; JP 6024831 B2 20161116; JP WO2015046140 A1 20170309; WO 2015046140 A1 20150402

DOCDB simple family (application)

**EP 14849656 A 20140922**; CN 201480053096 A 20140922; JP 2014075070 W 20140922; JP 2015539203 A 20140922