

Title (en)

PROCESS FOR MANUFACTURING A THIN STRIP MADE OF SOFT MAGNETIC ALLOY

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES DÜNNEN BANDES AUS EINER WEICHMAGNETISCHEN LEGIERUNG

Title (fr)

PROCEDE DE FABRICATION D'UNE BANDE MINCE EN ALLIAGE MAGNETIQUE DOUX

Publication

EP 2791377 B1 20180711 (FR)

Application

EP 12801754 A 20121217

Priority

- FR 2011053037 W 20111216
- EP 2012075851 W 20121217

Abstract (en)

[origin: WO2013087939A1] Process for manufacturing a strip made of soft magnetic alloy capable of being cut mechanically, the chemical composition of which comprises, by weight: 18% <= Co <= 55%; 0% <= V + W <= 3%; 0% <= Cr <= 3%; 0% <= Si <= 3%; 0% <= Nb <= 0.5%; 0% <= B <= 0.05%; 0% <= C <= 0.1%; 0% <= Zr + Ta <= 0.5%; 0% <= Ni <= 5%; 0% <= Mn <= 2%, the remainder being iron and impurities resulting from this melting, according to which a strip obtained by hot rolling is cold rolled in order to obtain a cold-rolled strip having a thickness of less than 0.6 mm. After the cold rolling, a continuous annealing treatment is carried out by passing through a continuous furnace, at a temperature between the order/disorder transition temperature of the alloy and the ferritic/austenitic transformation start temperature of the alloy, followed by a rapid cooling to a temperature below 200°C. Strip obtained.

IPC 8 full level

C22C 19/07 (2006.01); **C21D 6/00** (2006.01); **C21D 8/12** (2006.01); **C22C 30/00** (2006.01); **C22C 38/10** (2006.01); **C22C 38/12** (2006.01); **C22F 1/10** (2006.01); **C22F 1/16** (2006.01); **H01F 1/147** (2006.01)

CPC (source: EP RU US)

A63B 21/4017 (2015.10 - EP US); **A63B 23/14** (2013.01 - EP US); **C21D 6/007** (2013.01 - EP RU US); **C21D 8/12** (2013.01 - EP RU US); **C21D 8/1233** (2013.01 - EP US); **C21D 8/1261** (2013.01 - EP RU US); **C22C 19/07** (2013.01 - EP RU US); **C22C 30/00** (2013.01 - EP RU US); **C22C 38/004** (2013.01 - EP US); **C22C 38/02** (2013.01 - EP US); **C22C 38/04** (2013.01 - EP US); **C22C 38/10** (2013.01 - EP US); **C22C 38/105** (2013.01 - EP US); **C22C 38/12** (2013.01 - EP RU US); **C22C 38/16** (2013.01 - EP US); **C22C 38/42** (2013.01 - EP US); **C22C 38/46** (2013.01 - EP US); **C22C 38/48** (2013.01 - EP US); **C22C 38/52** (2013.01 - EP US); **C22F 1/10** (2013.01 - EP US); **C22F 1/16** (2013.01 - EP RU US); **H01F 1/147** (2013.01 - RU US); **H01F 1/16** (2013.01 - EP US); **H01F 41/02** (2013.01 - RU US); **A63B 2208/12** (2013.01 - EP US); **Y10T 29/49009** (2015.01 - EP US); **Y10T 29/49826** (2015.01 - EP US)

Citation (opposition)

Opponent : Vacuumschmelze GmbH & Co KG.

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