

Title (en)

METHOD OF MANUFACTUR AN IRON-CHROME ALLOY.

Title (de)

VERFAHREN ZUR HERSTELLUNG EINER EISEN-CHROM-LEGIERUNG

Title (fr)

PROCÉDÉ DE FABRICATION UNE ALLIAGE DE FE-CR

Publication

**EP 2480695 A1 20120801 (DE)**

Application

**EP 10760237 A 20100818**

Priority

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Abstract (en)

[origin: WO2011026460A1] The invention relates to a method for producing a component, made of an iron-chromium alloy that precipitates Laves phases and/or particles containing Fe and/or particles containing Cr and/or particles containing Si and/or carbides, by subjecting a semi-finished product made of the alloy to a thermomechanical treatment, wherein in a first step, the alloy is solution heat treated at temperatures = the solution heat treatment temperature and it subsequently quenched in stationary protective gas or air, moving (blown) protective gas or air, or water. In a second step, a mechanical forming of the semi-finished product in a range from 0.05 to 99% is performed, and in a subsequent step, Laves phases Fe<sub>2</sub>(M, Si) or Fe<sub>7</sub>(M, Si)<sub>6</sub> and/or particles containing Fe and/or particles containing Cr and/or particles containing Si and/or carbides are precipitated in a specific and finely distributed manner in that the component produced from the formed semi-finished product is brought to an application temperature between 550 °C and 1000 °C by means of heating at 0.1 °C/min to 1000 °C/min.

IPC 8 full level

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Citation (search report)

See references of WO 2011026460A1

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