

Title (en)
METHOD FOR PRODUCING A GRAIN-ORIENTED FLAT STEEL PRODUCT

Title (de)
VERFAHREN ZUM ERZEUGEN EINES KORNIORIENTIERTEN STAHLFLACHPRODUKTS

Title (fr)
PROCÉDÉ DE PRODUCTION D'UN PRODUIT PLAT EN ACIER À GRAINS ORIENTÉS

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Application
EP 11761066 A 20110922

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Abstract (en)
[origin: WO2012110111A1] The invention relates to a method for producing a grain-oriented flat steel product that is intended for the manufacture of parts for electrotechnical applications and has minimized magnetic loss values and optimized magneto-restrictive properties, said method comprising the work steps of a) providing a flat steel product, and b) laser-treating the flat steel product, wherein, in the course of the laser treatment, linear deformations, which are arranged with a spacing a, are molded into the surface of the flat steel product by means of a laser beam emitted by a laser radiation source with a power P. The method according to the invention for producing flat steel products is optimally suitable for the manufacture of parts for transformers. This is achieved in that the apparent power S_{1.7/50} of the flat steel product before and after the laser treatment (operation b)), determined at a frequency of 50 Hertz and a polarization of 1.7 Tesla, is measured, and in that the parameters of the laser treatment are varied in such a way that the difference between the apparent power S_{1.7/50} measured before and after the laser treatment is less than 40%.

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