Title (en)

Method of producing low iron loss grain-oriented silicon steel sheet having low-noise and superior shape characteristics.

Title (de)

Verfahren zum Herstellen von rauscharmen kornorientierten Siliziumstahlblechern mit niedrigen Wattverlusten und mit hervorragenden Formeigenschaften.

Title (fr)

Procédé de fabrication de tÔles d'acier au silicium à faible perte dans le fer, à grains orientés et ayant des caractéristiques de bruit faible et de forme supérieure.

Publication

EP 0611829 A1 19940824 (EN)

Application

EP 93102347 A 19930215

Priority

EP 93102347 A 19930215

Abstract (en)

A method of producing a low iron loss grain oriented silicon steel sheet which generates improved magnetostrictive characteristics when used as a stacked iron core and low noise when used in a stacked transformer, as well as superior shape characteristics. A grain oriented finish-annealed silicon steel sheet is coated with an insulating film. The surface of the grain oriented silicon steel sheet is irradiated with an electron beam along a multiplicity of spaced paths so as to refine the magnetic domains. The irradiation with the electron beam is conducted continuously or intermittently along a wave-form path on the surface of the grain oriented silicon steel, and the wave-form, such as a zigzag form, has a period length much smaller than the width of the grain oriented silicon steel sheet, and line interconnecting the centers of successive waves extends substantially perpendicularly to the direction of rolling of the grain oriented silicon steel sheet. <IMAGE>

IPC 1-7

C21D 8/12

IPC 8 full level

C21D 8/12 (2006.01)

CPC (source: EP)

C21D 8/1294 (2013.01); C21D 2221/00 (2013.01)

Citation (search report)

- [DY] EP 0367467 A1 19900509 - KAWASAKI STEEL CO [JP]
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