

Title (en)  
METHOD FOR PRODUCING GRAIN-ORIENTED SILICON STEEL SHEETS

Publication  
**EP 0162710 B1 19890809 (EN)**

Application  
**EP 85303595 A 19850522**

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Abstract (en)  
[origin: EP0162710A2] A grain-oriented silicon steel sheet having high magnetic induction and low iron loss can be obtained by adhering uniformly at least one member selected from the group consisting of elements of Ge, Sn, Pb, As, Bi and Zn and compounds containing these elements to the surfaces of a silicon steel sheet before or after the decarburization annealing in a method for producing grain-oriented silicon steel sheets, wherein a hot rolled steel sheet is subjected to at least one cold rolling, the finally cold rolled steel sheet is subjected to a decarburization annealing, and the decarburized steel sheet is applied with an annealing separator consisting mainly of MgO and then subjected to a final annealing, or by carrying out the adhesion treatment of element in combination with a preliminary annealing before the decarburization annealing in the above described method, or by using the annealing separator further containing Bi or a Bi-containing compound in the above described method.

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