

Title (en)  
PROCESS FOR PRODUCING NON-ORIENTED ELECTRICAL STEEL SHEET HAVING HIGH MAGNETIC FLUX DENSITY AND LOW IRON LOSS

Title (de)  
VERFAHREN ZUR HERSTELLUNG VON ELEKTRISCH NICHT ORIENTIERTEN STAHLPLATTEN MIT HOHER MAGNETISCHER FLUSSDICHTHE UND GERINGEM EISENVERLUST

Title (fr)  
PROCEDE DE FABRICATION DE TOLES D'ACIER ELECTRIQUE A GRAIN NON ORIENTE AYANT UNE DENSITE DE FLUX MAGNETIQUE ELEVEE ET DE FAIBLES PERTES DANS LE FER

Publication  
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Application  
**EP 96941184 A 19961205**

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• JP 34504495 A 19951208  
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Abstract (en)  
A method for producing a non-oriented electrical steel sheet with a high magnetic flux density and a low iron loss comprising using a slab of steel containing  $1.00\% < \text{Si} \leq 7.00\%$ ,  $0.10\% \leq \text{Mn} \leq 1.50\%$ ,  $\text{C} \leq 0.0050\%$ ,  $\text{N} \leq 0.0050\%$ ,  $\text{S} \leq 0.0050\%$ , and a balance of Fe and unavoidable impurities, hot rolling it to produce a hot rolled sheet, applying or not applying a hot rolled strip annealing process, applying one or two or more cold rolling processes with annealing step, then applying finishing annealing or then applying a skin pass rolling process, the method for producing a non-oriented electrical sheet characterized in that the average coefficient of friction between the hot rolling roll and steel sheet at the finish hot rolling is not more than 0.25 or the average coefficient of friction is not more than 0.25 and finish hot rolling is performed at a maximum strain rate of at least one pass of not less than  $150 \text{ s}^{-1}$ . Further, a method for production characterized by joining sheet bars at the rough rolling and using them for continuous finish hot rolling. <IMAGE>

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IPC 8 full level  
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