

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 FLUSSDICHE 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
EP 0875586 A1 19981104 (EN)

Application
EP 96941184 A 19961205

Priority

- JP 9603570 W 19961205
- JP 31687095 A 19951205
- JP 34504495 A 19951208
- JP 21809696 A 19960801
- JP 20606496 A 19960805
- JP 32188696 A 19961202

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 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>

IPC 1-7

C21D 8/12

IPC 8 full level

B21B 1/26 (2006.01); **C21D 8/12** (2006.01); **B21B 1/22** (2006.01); **B21B 3/02** (2006.01); **B21B 15/00** (2006.01); **B21B 27/10** (2006.01)

CPC (source: EP KR)

B21B 1/26 (2013.01 - EP); **C21D 6/008** (2013.01 - KR); **C21D 8/1222** (2013.01 - EP KR); **C21D 8/1233** (2013.01 - KR); **C21D 8/1261** (2013.01 - EP KR); **C22C 38/02** (2013.01 - KR); **B21B 3/02** (2013.01 - EP); **B21B 15/0085** (2013.01 - EP); **B21B 27/10** (2013.01 - EP); **B21B 2001/228** (2013.01 - EP); **B21B 2265/20** (2013.01 - EP); **C21D 8/1233** (2013.01 - EP)

Cited by

EP3943203A4; US9666350B2; US7922834B2; US8157928B2

Designated contracting state (EPC)

DE FR GB IT SE

DOCDB simple family (publication)

WO 9720956 A1 19970612; AU 1436397 A 19970627; AU 700333 B2 19981224; CN 1203635 A 19981230; EP 0875586 A1 19981104; EP 0875586 A4 19981104; KR 19990071916 A 19990927

DOCDB simple family (application)

JP 9603570 W 19961205; AU 1436397 A 19961205; CN 96198854 A 19961205; EP 96941184 A 19961205; KR 19980704203 A 19980603