

Publication

EP 0875586 A4 19981104

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)

[origin: WO9720956A1] A process for producing non-oriented electrical steel sheets, by hot rolling a slab comprising on the weight basis 1.00 % < Si <= 7.0 %, 0.10 % <= Mn <= 1.50 %, C <= 0.0050 %, N <= 0.0050 %, and S <= 0.0050 % with the balance consisting of Fe and unavoidable impurities to prepare a hot rolled sheet, optionally annealing the hot rolled sheet, either subjecting the sheet to cold rolling once or at least twice with intermediate annealing conducted between the cold rolling steps and then finish annealing, or subjecting the sheet to cold rolling once or at least twice with intermediate annealing conducted between the cold rolling steps and then finish annealing followed by skin pass rolling, characterized in that the finishing in the step of finish hot rolling is performed under either an average coefficient of friction between the hot rolling roll and the steel sheet of not more than 0.25, or an average coefficient of friction between the hot rolling roll and the steel sheet of not more than 0.25 and a maximum strain rate in at least one pass of not less than 150 s<-1>. At the time of rough rolling, a sheet bar may be joined to continuously conduct finish rolling.

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)

Citation (search report)

- No further relevant documents disclosed
- See references of WO 9720956A1

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