

Title (en)

A method of manufacturing a grain-oriented electrical steel strip

Title (de)

Verfahren zum Herstellen eines kornorientierten Elektrostahlbandes

Title (fr)

Procédé de fabrication d'une bande en acier électrique à grain orienté

Publication

**EP 0378131 B1 19970528 (EN)**

Application

**EP 90100231 A 19900105**

Priority

- JP 177889 A 19890107
- JP 8650289 A 19890405

Abstract (en)

[origin: EP0378131A2] Provided is a method of manufacturing a grain-oriented electrical steel strip having excellent magnetic properties, that is, high magnetic flux density in particular, which is characterized in that the average diameter  $d$  of grain (primary recrystallization grain) of a material before final annealing is set to a value greater than  $15\text{ }\mu\text{m}$  and the coefficient  $\sigma^*$  of deviation in grain diameter is set to a value less than 0.6. According to the present invention, the aggregation to the  $\{110\}<001>$  orientation of a product can be made to be remarkably high so as to obtain a product having a high magnetic flux density  $B_8$  which is equal to or greater than 1.88 tesla.

IPC 1-7

**C21D 8/12**

IPC 8 full level

**C21D 3/04** (2006.01); **C21D 8/12** (2006.01); **C21D 11/00** (2006.01)

CPC (source: EP)

**C21D 3/04** (2013.01); **C21D 8/12** (2013.01); **C21D 11/00** (2013.01); **C21D 8/1222** (2013.01); **C21D 8/1233** (2013.01); **C21D 8/1272** (2013.01)

Citation (examination)

- EP 0321695 A2 19890628 - NIPPON STEEL CORP [JP]
- EP 0326912 A2 19890809 - NIPPON STEEL CORP [JP]

Cited by

DE102011107304A1; WO2013004747A1; US5720196A; EP0585956A1; CN110457729A; EP0726328A1; US5665178A; EP0534432A3; KR100501003B1; EP0947597A3; KR100501002B1; EP0648847A1; US5472521A; EP0539858A1; US5261972A; CN103748240A; US6858095B2

Designated contracting state (EPC)

DE FR GB IT SE

DOCDB simple family (publication)

**EP 0378131 A2 19900718; EP 0378131 A3 19920930; EP 0378131 B1 19970528**; DE 69030771 D1 19970703; DE 69030771 T2 19970911

DOCDB simple family (application)

**EP 90100231 A 19900105**; DE 69030771 T 19900105