

Title (en)
NONORIENTED ELECTROMAGNETIC STEEL SHEET

Title (de)
NICHT ORIENTIERTES ELEKTROMAGNETISCHES STAHLBLECH

Title (fr)
FEUILLE EN ACIER ELECTROMAGNETIQUE NON ORIENTEE

Publication
EP 1411138 A1 20040421 (EN)

Application
EP 02738812 A 20020627

Priority
• JP 0206458 W 20020627
• JP 2001195832 A 20010628

Abstract (en)
A non-oriented electromagnetic steel sheet comprises (by mass%) 0-0.010% C, 0.03-0.5 or > 0.5% but not > 2.5% Si and/or Al, 0.5% or less Mn, 0.10-0.26% P, 0.015% or less S, 0.010% or less N, balance Fe and removable impurities.

IPC 1-7
C22C 38/00; **C22C 38/06**; **C22C 38/60**; **C21D 9/46**; **B21B 3/02**; **H01F 1/16**

IPC 8 full level
C21D 8/12 (2006.01); **C21D 9/46** (2006.01); **C22C 38/00** (2006.01); **C22C 38/02** (2006.01); **C22C 38/04** (2006.01); **C22C 38/06** (2006.01); **C22C 38/60** (2006.01); **H01F 1/147** (2006.01); **H01F 1/16** (2006.01)

CPC (source: EP KR US)
C21D 8/12 (2013.01 - EP US); **C21D 9/46** (2013.01 - EP US); **C22C 38/00** (2013.01 - KR); **C22C 38/002** (2013.01 - EP US); **C22C 38/004** (2013.01 - EP US); **C22C 38/008** (2013.01 - EP US); **C22C 38/02** (2013.01 - EP US); **C22C 38/04** (2013.01 - EP US); **C22C 38/06** (2013.01 - EP US); **C22C 38/60** (2013.01 - EP US); **H01F 1/147** (2013.01 - EP US); **H01F 1/14716** (2013.01 - EP US); **H01F 1/14775** (2013.01 - EP US); **H01F 1/16** (2013.01 - EP US)

Cited by
EP1662010A1; EP2799573A4; EP2975152A4; US10102951B2; US11104973B2; US11299791B2; US10096414B2; EP2657355A4; EP3581665A4; EP3974547A1; US11111567B2; TWI697570B

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EP 1411138 A1 20040421; **EP 1411138 A4 20050112**; CN 1318627 C 20070530; CN 1520464 A 20040811; JP 4329538 B2 20090909; JP WO2003002777 A1 20041021; KR 100956530 B1 20100507; KR 20040014960 A 20040218; TW 555863 B 20031001; US 2004149355 A1 20040805; US 2008060728 A1 20080313; WO 03002777 A1 20030109

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