

Title (en)

BAKE-HARDENABLE COLD ROLLED STEEL SHEET WITH SUPERIOR STRENGTH AND AGING RESISTANCE, GAL- VANNEALED STEEL SHEET USING THE COLD ROLLED STEEL SHEET AND METHOD FOR MANUFACTURING THE COLD ROLLED STEEL SHEET

Title (de)

DURCH BAKE-HARDENING HÄRTBARES KALTGEWALZTES STAHLBLECH MIT ÜBERLEGENER FESTIGKEIT UND ALTERUNGSBESTÄNDIGKEIT, NACH DEM VERZINKEN WÄRMEBEHANDELTES STAHLBLECH UNTER VERWENDUNG DES KALTGEWALZTEN STAHLBLECHS UND VERFAHREN ZUR HERSTELLUNG DES KALTGEWALZTEN STAHLBLECHS

Title (fr)

FEUILLE D'ACIER LAMINEE A FROID, DURCISSABLE A LA CUISSON DOTEE D'UNE RESISTANCE SUPERIEURE ET D'UNE RESISTANCE AU VIEILLISSEMENT, FEUILLE D'ACIER RECUITE PAR GALVANISATION AU MOYEN DE LADITE FEUILLE D'ACIER LAMINEE A FROID, ET PROCEDE DE FABRICATION DE LA FEUILLE D'ACIER LAMINEE A FROID

Publication

**EP 1937853 A4 20111019 (EN)**

Application

**EP 06798860 A 20060922**

Priority

- KR 2006003777 W 20060922
- KR 20050088518 A 20050923

Abstract (en)

[origin: WO2007035059A1] A bake-hardenable cold rolled steel sheet with high strength and superior aging resistance used for outer panels of an automobile body, a galvanized steel sheet using the cold-rolled steel sheet, and a method for manufacturing the cold-rolled steel sheet are disclosed. The steel sheet comprises, by weight%, C: 0.0016 ~ 0.0025%, Si: 0.02% or less, Mn: 0.2 ~ 1.2%, P: 0.05 ~ 0.11%, S: 0.01% or less, Sol. Al: 0.08 ~ 0.12%, N: 0.0025% or less, Ti: 0 ~ 0.003%, Nb: 0.003 ~ 0.011%, Mo: 0.01 ~ 0.1%, B: 0.0005 ~ 0.0015%, the balance of Fe and other unavoidable impurities. The steel sheet has superior bake hardenability, aging resistance at room temperature, and secondary work embrittlement resistance.

IPC 8 full level

**C21D 8/02** (2006.01); **C21D 9/46** (2006.01); **C21D 9/56** (2006.01)

CPC (source: EP KR US)

**C21D 8/02** (2013.01 - KR); **C21D 8/0236** (2013.01 - EP US); **C21D 9/46** (2013.01 - EP US); **C21D 9/56** (2013.01 - EP US); **C22C 38/04** (2013.01 - EP KR US); **C22C 38/06** (2013.01 - EP US); **C22C 38/12** (2013.01 - EP US)

Citation (search report)

- [X] KR 20050070305 A 20050707 - POSCO [KR]
- [XP] WO 2006001583 A1 20060105 - POSCO [KR], et al
- [A] JP 2003253378 A 20030910 - NIPPON STEEL CORP
- [A] JP H11199991 A 19990727 - KAWASAKI STEEL CO
- [A] JP H10130733 A 19980519 - KAWASAKI STEEL CO
- See references of WO 2007035059A1

Designated contracting state (EPC)

DE FR SK

DOCDB simple family (publication)

**WO 2007035059 A1 20070329**; CN 101310031 A 20081119; CN 101310031 B 20101229; EP 1937853 A1 20080702; EP 1937853 A4 20111019; EP 1937853 B1 20131225; JP 2009509046 A 20090305; JP 4834733 B2 20111214; KR 100685037 B1 20070220; US 2008251168 A1 20081016

DOCDB simple family (application)

**KR 2006003777 W 20060922**; CN 200680042882 A 20060922; EP 06798860 A 20060922; JP 2008532164 A 20060922; KR 20050088518 A 20050923; US 6761706 A 20060922