

Title (en)

STEEL SHEET FOR CANS, HOT-ROLLED STEEL SHEET TO BE USED AS THE BASE METAL AND PROCESSES FOR PRODUCTION OF BOTH

Title (de)

STAHLBLECH FÜR DOSEN, HEISSEGEWALZTES STAHLBLECH ZUR VERWENDUNG ALS BASISMETALL UND HERSTELLUNGSVERFAHREN FÜR BEIDE

Title (fr)

TÔLE D'ACIER POUR BOÎTES DE CONSERVE, TÔLE D'ACIER LAMINÉ À CHAUD À UTILISER COMME MÉTAL DE BASE ET PROCÉDÉS DE FABRICATION DES DEUX TYPES DE TÔLE

Publication

EP 2128289 A1 20091202 (EN)

Application

EP 08712121 A 20080222

Priority

- JP 2008053589 W 20080222
- JP 2007049652 A 20070228

Abstract (en)

In order to manufacture a tin mill black plate, 0.01 to 0.12% of C, 0.005 to 0.5% of Si, 0.3 to 1.5% of Mn, 0.005 to 0.2% of P, 0.10% or less of Al, 0.012% or less of N, and 0.005 to 0.10% of Nb are contained, and solution hardening, precipitation hardening, and grain refining hardening are combined to obtain a black plate having a substantially ferrite single-phase microstructure having an average grain size of 7 µm or less and properties after baking after lacquering, such as a yield point strength of 500 MPa or more, a yield ratio of 0.9 or more, a total elongation of 10% or more, and #r of -0.50 to 0. In particular, hot rolling conditions include FT of 870°C or higher, a cooling rate after hot rolling of 40 °C/s or less, and CT of 620°C or higher, and the average crystal grain size of a hot-rolled steel sheet used as a rolling raw material for the tin mill black plate is 6 µm or more.

IPC 8 full level

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Cited by

CZ306161B6; CZ306147B6; EP2671964A4; US10941456B2; US10400298B2; EP2138596B1

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