

Title (en)
METHOD FOR PRODUCING CAN MANUFACTURING STEEL SHEET

Title (de)
VERFAHREN ZUR HERSTELLUNG EINES STAHLBLECHS ZUR HERSTELLUNG VON DOSEN

Title (fr)
PROCÉDÉ DE PRODUCTION DE TÔLE POUR LA FABRICATION DE BOÎTES

Publication
EP 2275581 A4 20150902 (EN)

Application
EP 09726961 A 20090327

Priority
• JP 2009056908 W 20090327
• JP 2008089924 A 20080331

Abstract (en)
[origin: EP2275581A1] Provided is a method of manufacturing a steel sheet for cans, where excessively high strengthening due to work hardening in cold-rolling is avoided, and thickness variation in the longitudinal direction of a steel sheet coil is inhibited, in a reduction in the steel sheet manufacturing cost by omitting the recrystallization annealing step. The steel compositions contain, in mass%, C: 0.005% or less, Mn: 0.05 to 0.5%, Al: 0.01 to 0.10%, N: 0.0010 to 0.0070%, and B: 0.15xN to 0.75xN (0.20xN to 0.97xN in atomic ratio) and further contain either or both Nb: 4xC to 20xC (0.52xC to 2.58xC in atomic ratio) and Ti: 2xC to 10xC (0.50xC to 2.51xC in atomic ratio), and the balance is Fe and inevitable impurity elements. The steel is continuously cast into a slab, the slab is hot-rolled at a finishing temperature of not higher than Ar 3 transformation point, and the hot-rolled steel sheet is subjected to coiling, pickling, and then cold-rolling at a reduction of 50 to 96%.

IPC 8 full level
C21D 9/46 (2006.01); **C21D 8/02** (2006.01); **C22C 38/00** (2006.01); **C22C 38/04** (2006.01); **C22C 38/06** (2006.01); **C22C 38/14** (2006.01)

CPC (source: EP)
C21D 8/02 (2013.01); **C21D 8/0226** (2013.01); **C21D 9/46** (2013.01); **C22C 38/001** (2013.01); **C22C 38/004** (2013.01); **C22C 38/04** (2013.01); **C22C 38/06** (2013.01)

Citation (search report)
• [X] JP H08176673 A 19960709 - KAWASAKI STEEL CO
• [X] JP 3596037 B2 20041202
• [A] EP 0936279 A1 19990818 - KAWASAKI STEEL CO [JP]
• [A] JP H08127816 A 19960521 - NIPPON STEEL CORP
• See references of WO 2009123294A1

Cited by
US10301702B2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 2275581 A1 20110119; EP 2275581 A4 20150902; CN 101983246 A 20110302; CN 101983246 B 20131127; JP 2009242857 A 20091022; JP 5262242 B2 20130814; KR 101235415 B1 20130220; KR 20100122941 A 20101123; TW 200948984 A 20091201; TW I440725 B 20140611; WO 2009123294 A1 20091008

DOCDB simple family (application)
EP 09726961 A 20090327; CN 200980112155 A 20090327; JP 2008089924 A 20080331; JP 2009056908 W 20090327; KR 20107021619 A 20090327; TW 98110593 A 20090331