

Title (en)
STEEL SHEET OF HIGH STRESS-CORROSION-CRACKING RESISTANCE FOR CANS AND METHOD OF MANUFACTURING THE SAME

Title (de)
STAHLBLECH MIT HOHER SPANNUNGSRISSKORROSIONSBESTÄNDIGKEIT FÜR DIE HERSTELLUNG VON DOSEN

Title (fr)
TOLE D'ACIER POUR BOITES DE CONSERVE A RESISTANCE ELEVEE A LA FISSURATION PAR CORROSION SOUS CONTRAINTEES, ET SON PROCEDE DE FABRICATION

Publication
EP 0662523 B1 19990428 (EN)

Application
EP 94921814 A 19940726

Priority
• JP 9401226 W 19940726
• JP 18626793 A 19930728

Abstract (en)
[origin: EP0662523A1] A steel sheet of a high stress-corrosion-cracking resistance for cans, characterized in that the steel sheet contains not more than 0.0015 wt.% of C, 0.05-0.40 wt.% of Mn, not more than 0.06 wt.% of P, not more than 0.06 wt.% of S, not more than 0.10 wt.% of acid soluble Al and not more than 0.0100 wt.% of N, at least one of not less than $3.4 \times ((\text{weight percentage of N}) - 0.0010)$ wt.% and not more than 0.06 wt.% of Ti and not less than $6.6 \times ((\text{weight percentage of N}) - 0.0010)$ wt.% and not more than 0.06 wt.% of Nb being further contained as necessary, the rest consisting of iron and unavoidable impurities, the steel sheet having an aging index of not less than 15 MPa, the relative average visibility of an electron channeling pattern measured with respect to not less than 20 crystal grains, which are not less than 50 μm away from one another, in an intermediate portion of the steel sheet in the direction of the thickness thereof being not more than 0.85; and a method of manufacturing the steel sheet. The present invention provides a steel sheet for two-piece cans and three-piece cans which has a small thickness and a high stress-corrosion-cracking resistance.

IPC 1-7
C22C 38/06; C22C 38/14; C21D 8/04; C21D 9/48; C22C 38/12

IPC 8 full level
C21D 8/04 (2006.01); **C22C 38/12** (2006.01); **C22C 38/14** (2006.01)

CPC (source: EP KR)
C21D 8/0436 (2013.01 - EP); **C22C 38/06** (2013.01 - KR); **C22C 38/12** (2013.01 - EP); **C22C 38/14** (2013.01 - EP); **C21D 8/0426** (2013.01 - EP);
C21D 8/0468 (2013.01 - EP)

Cited by
EP1411140A1; EP0767241A1; FR2739581A1; US10144985B2; US10655199B2

Designated contracting state (EPC)
DE FR GB NL

DOCDB simple family (publication)
EP 0662523 A1 19950712; EP 0662523 A4 19951213; EP 0662523 B1 19990428; CN 1043904 C 19990630; CN 1114113 A 19951227;
DE 69418172 D1 19990602; DE 69418172 T2 19991202; KR 0179419 B1 19990218; KR 950703660 A 19950920; WO 9504166 A1 19950209

DOCDB simple family (application)
EP 94921814 A 19940726; CN 94190649 A 19940726; DE 69418172 T 19940726; JP 9401226 W 19940726; KR 19950700994 A 19950314