Title (en)

COLD ROLLED STEEL PLATE OF EXCELLENT MOLDABILITY, PANEL SHAPE CHARACTERISTICS AND DENTING RESISTANCE, MOLTEN ZINC PLATED STEEL PLATE, AND METHOD OF MANUFACTURING THESE STEEL PLATES

Title (de)

KALTGEWALZTE STAHLPLATTE EXZELLENTER FORMBARKEIT, FLACHFÖRMIGEN EIGENSCHAFTEN UND EINDELLWIDERSTAND, FEUERVERZINKTE STAHLPLATTE UND VERFAHREN ZUR DEREN HERSTELLUNG

Title (fr)

PLAQUE D'ACIER LAMINEE A FROID POSSEDANT D'EXCELLENTES CARACTERISTIQUES D'APTITUDE AU MOULAGE ET DE FORMABILITE EN PANNEAUX, UNE BONNE RESISTANCE A LA CONSTRICTION, PLAQUE D'ACIER A PLACAGE EN ZINC MOULE ET PROCEDE DE FABRICATION DE CES PLAQUES

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EP 1002884 A1 20000524 (EN)

Application

EP 98944222 A 19980924

Priority

- JP 9804283 W 19980924
- JP 11678898 A 19980427

Abstract (en)

Disclosed is a cold-rolled steel sheet excellent in formability, panel shapeability and dent-resistance, comprising 0.005 to 0.015% by weight of C, 0.01 to 0.2% by weight of Si, 0.2 to 1.5% by weight of Mn, 0.01 to 0.07% by weight of P, 0.006 to 0.015% by weight of S, 0.01 to 0.08% by weight of sol. Al, not higher than 0.004% by weight of N (N </= 0.004%), not higher than 0.003% by weight of O (O </= 0.003%), 0.04 to 0.23% by weight of Nb, 1.0 </= (Nb% x 12)/(C% x 93) </= 3.0, and a balance of Fe and unavoidable impurities, said cold-rolled steel sheet meeting the relationship given below: <MATH> where 0.002 < epsilon </= 0.096, epsilon represents a true strain, sigma 0.2 represents a 0.2% proof stress, and sigma represents a true stress relative to epsilon .

IPC 1-7

C22C 38/00; C21D 9/46; C21D 9/48; C21D 8/02; C21D 8/04; C22C 38/04; C22C 38/12; C22C 38/14

IPC 8 full level

C21D 9/46 (2006.01); **C21D 8/04** (2006.01); **C21D 9/48** (2006.01); **C22C 38/00** (2006.01); **C22C 38/02** (2006.01); **C22C 38/04** (2006.01); **C22C 38/12** (2006.01); **C22C 38/14** (2006.01); **C23C 2/02** (2006.01)

CPC (source: EP KR US)

C21D 8/0426 (2013.01 - EP); **C21D 8/0436** (2013.01 - EP); **C22C 38/00** (2013.01 - KR); **C22C 38/002** (2013.01 - EP); **C22C 38/004** (2013.01 - EP); **C22C 38/02** (2013.01 - EP); **C22C 38/04** (2013.01 - EP); **C22C 38/12** (2013.01 - EP); **C23C 2/02** (2013.01 - EP KR US); **C23C 2/0224** (2022.08 - EP KR US); **C23C 2/024** (2022.08 - EP KR US)

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