Title (en)

HIGH STRENGTH STEEL SHEET HAVING EXCELLENT BRITTLE CRACK RESISTANCE AND METHOD FOR MANUFACTURING SAME

Title (de)

HOCHFESTES STAHLBLECH MIT HERVORRAGENDEM SPRÖDIGKEITSBRUCHWIDERSTAND UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

TÔLE D'ACIER À HAUTE RÉSISTANCE PRÉSENTANT UNE EXCELLENTE RÉSISTANCE AUX FISSURES FRAGILES ET PROCÉDÉ DE FABRICATION DE CELLE-CI

Publication

EP 2520683 B1 20161130 (EN)

Application

EP 10841181 A 20101222

Priority

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- KR 2010009222 W 20101222

Abstract (en)

[origin: EP2520683A2] Provided is a steel plate having excellent resistance to brittle crack initiation in a parent material zone and a weld heat affected zone. More particularly, the present invention relates to a high-strength steel sheet having excellent resistance to brittle crack initiation which includes 0.02 wt% to 0.06 wt% of carbon (C), 0.1 wt% or less of silicon (Si), 1.5 wt% to 2.0 wt% of manganese (Mn), 0.012 wt% or less of phosphorous (P), 0.003 wt% or less of sulfur (S), 0.5 wt% to 1.5 wt% of nickel (Ni), 0.003 wt% to 0.015 wt% of aluminum (Al), 0.005 wt% to 0.02 wt % of titanium (Ti), 0.005 wt% to 0.015 wt% of niobium (Nb), 0.002 wt% to 0.006 wt% of nitrogen (N), and iron (Fe) as well as unavoidable impurities as a remainder, and has a value of C+0.5Si-0.1Ni+6Al+3Nb of 0.1% or less, and a method of manufacturing the high-strength steel sheet.

IPC 8 full level

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CPC (source: EP KR)

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Cited by

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