

Title (en)
COLD ROLLED STEEL SHEET HAVING SUPERIOR FORMABILITY AND HIGH YIELD RATIO, PROCESS FOR PRODUCING THE SAME

Title (de)
KALTGEWALZTES STAHLBLECH MIT HERVORRAGENDER VERFORMBARKEIT UND HERVORRAGENDEM STRECKGRENZENVERHÄLTNIS UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)
FEUILLE D'ACIER LAMINÉE A FROID AYANT UNE FORMABILITÉ SUPÉRIEURE ET UN RAPPORT DE RENDEMENT ELEVÉ ET SON PROCÉDÉ DE PRODUCTION

Publication
EP 1888800 A1 20080220 (EN)

Application
EP 06732897 A 20060503

Priority

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Abstract (en)
[origin: WO2006118425A1] Disclosed herein is a Nb-Ti composite IF steel in which fine precipitates, such as CuS precipitates, having a size of 0.2 µm or less are distributed. The distribution of fine precipitates in the Nb-Ti composite IF steel enhances the yield strength and lowers the in-plane anisotropy index. The nanometer-sized precipitates allow the formation of minute crystal grains. As a result, dissolved carbon is present in a larger amount in the crystal grain boundaries than within the crystal grains, which is advantageous in terms of room-temperature non-aging properties and bake hardenability.

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