

Title (en)

COLD ROLLED STEEL SHEET HAVING HIGH YIELD RATIO AND LESS ANISOTROPY, PROCESS FOR PRODUCING THE SAME

Title (de)

KALTGEWALZTES STAHLBLECH MIT HOHEM STRECKGRENZENVERHÄLTNIS UND WENIGER ANISOTROPIE UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

FEUILLE D'ACIER LAMINÉE À FROID AYANT UN RAPPORT DE RENDEMENT ÉLEVÉ ET MOINS D'ANISOTROPIE ET SON PROCÉDÉ DE PRODUCTION

Publication

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Application

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Abstract (en)

[origin: WO2006118424A1] Disclosed herein is a Nb-Ti composite IF steel in which fine precipitates, such as CuS precipitates, having a size of 0.2  $\mu\text{m}$  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.

IPC 8 full level

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