Title (en)

HIGH-RIGIDITY HIGH-STRENGTH THIN STEEL SHEET AND METHOD FOR PRODUCING SAME

Title (de)

HOCHSTEIFES HOCHFESTES DÜNNES STAHLBLECH UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

FEUILLE D'ACIER MINCE AVEC RIGIDITE ET RESISTANCE MECHANIQUE ELEVEE ET PROCEDE POUR SA PRODUCTION

Publication

EP 1731627 B1 20130821 (EN)

Application

EP 05728004 A 20050331

Priority

- JP 2005006327 W 20050331
- JP 2004107040 A 20040331
- JP 2004346620 A 20041130

Abstract (en)

[origin: EP1731627A1] There is provided a high-stiffness high-strength thin steel sheet having a tensile strength of not less than 590 MPa and a Young's modulus of not less than 230 GPa, which comprises C: 0.02-0.15%, Si: not more than 1.5%, Mn: 1.0-3.5%, P: not more than 0.05%, S: not more than 0.01%, Al: not more than 1.5%, N: not more than 0.01% and Ti: 0.02-0.50% as mass%, provided that C, N, S and Ti contents satisfy Ti* = Ti-(47.9/14)×N-(47.9/32.1)×S #¥ 0.01 and 0.01 #¤ C-(12/47.9)×Ti* #¤ 0.05 and the remainder being substantially iron and inevitable impurities, and has a texture comprising a ferrite phase as a main phase and having a martensite phase at an area ratio of not less than 1%.

IPC 8 full level

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CPC (source: EP KR US)

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Cited by

WO2019174730A1; EP2778247A4; EP2169083A4; EP2138599A4; US2018057907A1; US10570476B2

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