

Title (en)

PROCESS FOR PRODUCING AN EASILY SHAPED COLD-ROLLED SHEET OR STRIP

Title (de)

VERFAHREN ZUR ERZEUGUNG EINES KALTGEWALZTEN STAHLBLECHES ODER -BANDES MIT GUTER UMFORMBARKEIT

Title (fr)

PROCEDE DE PRODUCTION D'UNE TOLE OU D'UN FEUILLARD D'ACIER LAMINE(E) A FROID, PRESENTANT UNE BONNE APTITUDE AU FORMAGE

Publication

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Application

**EP 97922915 A 19970426**

Priority

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Abstract (en)

[origin: US6162308A] PCT No. PCT/EP97/02169 Sec. 371 Date Oct. 27, 1998 Sec. 102(e) Date Oct. 27, 1998 PCT Filed Apr. 26, 1997 PCT Pub. No. WO97/46720 PCT Pub. Date Dec. 11, 1997A method for producing a cold-rolled steel sheet or strip with good formability, especially stretch formability, for making pressings with a high buckling resistance from a steel comprising (in % by mass): 0.01 to 0.08% C, 0.10 to 0.80% Mn, maximum 0.15% Si, 0.015 to 0.08% Al, a maximum 0.005% N, 0.01 to 0.04% Ti and/or Nb, whose contents exceeding the quantity necessary for stoichiometric binding of the nitrogen, ranges from 0.003 to 0.015% Ti or 0.0015 to 0.008% Nb, and a maximum 0.15% in total of one or several elements from the group copper, vanadium, nickel, the remainder being iron, including unavoidable impurities, including a maximum 0.08% P and a maximum 0.02% S, comprises preheating the cast slab to a temperature exceeding 1050 DEG C., hot-rolling at a final temperature ranging from over the Ar3 temperature to 950 DEG C., coiling the hot-rolled strip at a temperature ranging from 550 to 750 DEG C., cold-rolling at a total cold-rolling degree of deformation from 40 to 85%, recrystallization annealing of the cold strip in a continuous furnace at a temperature of at least 720 DEG C., subsequent cooling at 5 to 70 K/s; and skin passing.

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**C21D 8/04**

IPC 8 full level

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**US 6162308 A 20001219**; AT E278040 T1 20041015; BR 9709633 A 19990810; CA 2251354 A1 19971211; DE 19622164 C1 19970507; DE 59711972 D1 20041104; EP 0914480 A1 19990512; EP 0914480 B1 20040929; ES 2229352 T3 20050416; JP 2000514499 A 20001031; JP 3875725 B2 20070131; KR 20000016309 A 20000325; PL 183911 B1 20020830; PL 330318 A1 19990510; WO 9746720 A1 19971211

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