

Title (en)

PROCESS FOR PRODUCTION OF COLD-ROLLED STEEL SHEET HAVING EXCELLENT PRESS MOLDABILITY

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES KALTGEWALZTEN STAHLBLECHS VON HERVORRAGENDER PRESSFORMBARKEIT

Title (fr)

PROCESSUS DE PRODUCTION D'UNE TÔLE D'ACIER LAMINÉE À FROID PRÉSENTANT UNE EXCELLENTE APTITUDE AU FORMAGE À LA PRESSE

Publication

**EP 2455499 B1 20171213 (EN)**

Application

**EP 10796868 A 20100617**

Priority

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- JP 2009162198 A 20090708

Abstract (en)

[origin: EP2455499A1] Provided are a cold-rolled steel sheet which undergoes a small load at the time of cold-rolling, has excellent press formability and high strength, and a method of manufacturing the cold-rolled steel sheet. A hot-rolled steel sheet which has the composition consisting of, by mass%, 0.10 to 0.30 C, 0.2 or more Mn, 0.01 or more Ni, 0.5 to 2.5 Mn+Ni, 1.2 to 9.0 Cr, and Fe and unavoidable impurities as a balance and has a tensile strength of 1000 MPa or less is subjected to pickling and, thereafter, is subjected to cold rolling at a total rolling reduction of 60 % or more thus forming a cold-rolled steel sheet, and final continuous annealing treatment is performed at a soaking temperature of 750 °C or above and at a cooling rate of 3 °C/s to 100 °C/s so that the cold-rolled steel sheet which has a tensile strength of 1280 MPa or more, breaking elongation of 3 % or more and a thickness of 0.05 to 0.60 mm is manufactured.

IPC 8 full level

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