

Title (en)

COLD ROLLING METHOD, COLD ROLLING EQUIPMENT, AND COLD-ROLLED STEEL SHEET MANUFACTURING METHOD

Title (de)

KALTWALZVERFAHREN, KALTWALZAUSRÜSTUNG UND VERFAHREN ZUR HERSTELLUNG EINES KALTGEWALZTEN STAHLBLECHS

Title (fr)

PROCÉDÉ DE LAMINAGE À FROID, ÉQUIPEMENT DE LAMINAGE À FROID ET PROCÉDÉ DE FABRICATION DE TÔLE D'ACIER LAMINÉE À FROID

Publication

EP 4212260 A4 20240124 (EN)

Application

EP 21866765 A 20210907

Priority

- JP 2020152348 A 20200910
- JP 2021032889 W 20210907

Abstract (en)

[origin: EP4212260A1] A cold rolling method, cold rolling equipment, and a cold-rolled steel sheet manufacturing method capable of preventing sheet breakage by sufficiently suppressing occurrence of an edge crack of a material to be rolled during cold rolling are provided. In the cold rolling method, a rolling mill (2) including a plurality of stands (3₁) to (3₄) cold-rolls a material to be rolled (S). An N-th stand (3_N) (N is a natural number equal to or greater than 2) arranged in an N-th position from an upstream side of the material to be rolled (S) in a transfer direction among the plurality of stands (3₁) to (3₄), includes a tapered work roll (4a1) having a taper (4ab) formed on an end portion of a roll (4aa) having a uniform diameter. The N-th stand (3_N) rolls the material to be rolled (S) with a linear load of 0.8 t/mm or more.

IPC 8 full level

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Citation (search report)

- [XAI] JP H0691309 A 19940405 - NIPPON STEEL CORP
- [A] JP 2004058089 A 20040226 - HITACHI LTD
- [A] JP H0788503 A 19950404 - NIPPON STEEL CORP
- See also references of WO 2022054806A1

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