

Title (en)
Steel strip cooling method.

Title (de)
Verfahren zum Kühlen von Bandstahl.

Title (fr)
Procédé pour le refroidissement d'une bande d'acier.

Publication
EP 0230780 A1 19870805 (EN)

Application
EP 86310098 A 19861223

Priority
JP 28932085 A 19851224

Abstract (en)
A method of rapidly cooling steel strips heated and soaked in a continuous heat-treatment furnace. The rapidly cooling is carried out by winding a steel strip (1) about a plurality of cooling rolls in succession (11-15) to bring the steel strips into contact therewith. The rapid cooling is started at a temperature of a range of 550-720 DEG C and simultaneously a tensile force α (kgf/mm²) of the steel strip is adjusted within a range determined by an inequality of $(1900-T_s)/1670 < \alpha < (1980-T_s)/720$ according to the starting temperature T_s (DEG C) of the rapid cooling. In another aspect, the rapid cooling is carried out by winding the steel strip about a plurality of cooling rolls in succession (11-15) to bring the steel strip into contact therewith and at the same time by jetting a gas against a back surface of the steel strip (8,9,16-20). The rapid cooling is started at a temperature of a range of 550-720 DEG C and simultaneously a tensile force α_{min} (kgf/mm²) of the steel strip is adjusted within a range determined by an inequality of $(1570-T_s)/1670 < \alpha_{min} < (2410-T_s)/630$.

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C21D 9/573

IPC 8 full level
C21D 9/573 (2006.01)

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Citation (search report)
• [X] EP 0155753 A1 19850925 - MITSUBISHI HEAVY IND LTD [JP], et al
• [Y] EP 0117083 A1 19840829 - NIPPON STEEL CORP [JP]
• [Y] DE 3324548 A1 19840112 - KAWASAKI STEEL CO [JP], et al
• [A] EP 0145485 A2 19850619 - MITSUBISHI HEAVY IND LTD [JP], et al
• [A] EP 0058607 A1 19820825 - STEIN HEURTEY [FR]
• [AD] PATENT ABSTRACTS OF JAPAN, vol. 8, no. 106 (C-223)[1543], 18th May 1984; & JP-A-59 20 428 (NIPPON KOKAN K.K.) 02-02-1984
• [AD] PATENT ABSTRACTS OF JAPAN, vol. 8, no. 251 (C-252)[1688], 16th November 1984; & JP-A-59 129 737 (KAWASAKI SEITETSU K.K.) 26-07-1984

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EP0614992A4; EP0495115A4

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