

Title (en)  
QUENCHING DEVICE, QUENCHING METHOD, COLD-ROLLED STEEL SHEET MANUFACTURING METHOD, AND PLATED STEEL SHEET MANUFACTURING METHOD

Title (de)  
ABSCHRECKVORRICHTUNG, ABSCHRECKVERFAHREN, VERFAHREN ZUR HERSTELLUNG EINES KALTGEWALZTEN STAHLBLECHS UND VERFAHREN ZUR HERSTELLUNG EINES PLATTIERTEN STAHLBLECHS

Title (fr)  
DISPOSITIF DE TREMPER, PROCÉDÉ DE TREMPER, PROCÉDÉ DE FABRICATION DE TÔLE D'ACIER LAMINÉE À FROID ET PROCÉDÉ DE FABRICATION DE TÔLE D'ACIER PLAQUÉE

Publication  
**EP 4345177 A1 20240403 (EN)**

Application  
**EP 22849011 A 20220526**

Priority  
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• JP 2022021485 W 20220526

Abstract (en)  
There is provided a quenching apparatus which produces a good cooling effect on a metal sheet, which facilitates switching between a condition of performing quenching and a condition of not performing the quenching, and which can suppress thermal deformation caused by thermal radiation from the metal sheet. A quenching apparatus 11 includes a bath 5 that contains a cooling medium 2 in which a metal sheet 1 is immersed and at least one pair of rolls 4 (a roll 4a and a roll 4b) which are disposed such that the metal sheet 1 running in the bath 5 is interposed between the at least one pair of rolls 4 (the roll 4a and the roll 4b) in the bath 5, distances of which from the metal sheet 1 are changeable, and which rotate at a peripheral speed higher than or equal to a running speed of the metal sheet 1.

IPC 8 full level  
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CPC (source: EP KR)  
**C21D 1/60** (2013.01 - EP); **C21D 1/63** (2013.01 - EP KR); **C21D 9/573** (2013.01 - KR); **C21D 9/5737** (2013.01 - EP); **C23C 2/06** (2013.01 - EP KR); **C25D 3/22** (2013.01 - KR)

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