

Title (en)
QUENCH-HARDENING APPARATUS, QUENCH-HARDENING METHOD, AND METAL SHEET MANUFACTURING METHOD

Title (de)
ABSCHRECKHÄRTUNGSVORRICHTUNG, ABSCHRECKHÄRTUNGSVERFAHREN UND VERFAHREN ZUR HERSTELLUNG VON METALLBLECHEN

Title (fr)
APPAREIL DE DURCISSEMENT PAR TREMPE, PROCÉDÉ DE DURCISSEMENT PAR TREMPE ET PROCÉDÉ DE FABRICATION FEUILLE MÉTALLIQUE

Publication
EP 4372106 A1 20240522 (EN)

Application
EP 22861065 A 20220729

Priority
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• JP 2022029365 W 20220729

Abstract (en)
Variations in the shape of a metal sheet generated during quenching is suppressed. A metal-sheet quenching apparatus 1 cools a metal sheet S while conveying the metal sheet S and includes a cooling tank 11 in which a cooling fluid CF is to be stored and the metal sheet S is immersed in the cooling fluid CF to be cooled; restraining rolls 20 that are installed inside the cooling tank 11 and convey the metal sheet S that has been cooled in the cooling tank 11 while restraining the metal sheet S in the thickness direction; a water-level adjustor 30 that adjusts the height of a fluid surface of the cooling fluid CF inside the cooling tank 11; and a position control device 40 that adjusts the height of the fluid surface of the cooling fluid CF inside the cooling tank 11 by controlling the operation of the water-level adjustor 30.

IPC 8 full level
C21D 9/573 (2006.01); **B21B 45/02** (2006.01); **C21D 1/18** (2006.01); **C21D 1/63** (2006.01); **C21D 1/667** (2006.01); **C22C 38/00** (2006.01); **C22C 38/60** (2006.01)

CPC (source: EP KR)
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