

Title (en)

COMPACT INTENSE COOLING DEVICE FOR STRIP IN COLD ROLLING MILL

Title (de)

KOMPAKTE INTENSIVKÜHLUNGSVORRICHTUNG FÜR BAND IN KALTWALZWERK

Title (fr)

DISPOSITIF DE REFROIDISSEMENT INTENSE ET COMPACT POUR FEUILLARD DANS UN LAMINOIR À FROID

Publication

EP 3453465 A1 20190313 (EN)

Application

EP 17189898 A 20170907

Priority

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Abstract (en)

The present invention relates to a device for cooling a flat or long metallurgical product (1) of a given width in a cold rolling mill, comprising a header (8) provided with a means for supplying a liquid coolant, a header table (28) comprising a plurality of nozzles arranged according to a well-defined two-dimensional pattern (27) for creating low pressure coolant jets towards a bottom surface of the product (1), a means for locating said header table (28) at short distance of the product (1), so as to create a homogeneous highly turbulent liquid coolant cushion at low pressure on the surface of the product (1) in front of the header table (28), in the volume restricted by the product (1) and the header table (28), wherein the device further comprises means (15, 16, 17, 21, 30) for preventing coolant jets to be generated outside of the product (1) according to the width thereof and/or for preventing such coolant jets from splashing and from falling back onto a top surface of the product (1).

IPC 8 full level

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CPC (source: EP)

B21B 45/0233 (2013.01); **B21B 45/0218** (2013.01); **B21B 2001/221** (2013.01)

Citation (applicant)

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Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

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