

Title (en)

COOLING OF A ROLLED STOCK UPSTREAM OF A FINISHING TRAIN OF A HOT ROLLING PLANT

Title (de)

KÜHLEN EINES WALZGUTS VOR EINER FERTIGSTRASSE EINER WARMWALZANLAGE

Title (fr)

REFROIDISSEMENT D'UN PRODUIT LAMINÉ EN AMONT D'UN TRAIN FINISSEUR D'UN LAMINOIR À CHAUD

Publication

EP 4101553 B1 20240131 (DE)

Application

EP 21178033 A 20210607

Priority

EP 21178033 A 20210607

Abstract (en)

[origin: WO2022258350A1] The invention relates to a method for cooling a rolled product (15) in a cooling section (19) which is located upstream of a finishing train (9) of a hot rolling mill (1) and which comprises at least one cooling device (21, 22, 23) by means of which a coolant flow of a coolant (35) can be delivered onto a rolled product surface (29) of the rolled product (15). In the method, a coolant flow is delivered, by means of each cooling device (21, 22, 23) and in each cooling section pass, onto the rolled product surface (29), which flow is set to a set value that is assigned to the relevant cooling device (21, 22, 23) for the cooling section pass. The set values for a cooling section pass are determined in a simulation of the cooling section pass in such a manner that surface temperatures, determined in the simulation, of the rolled product surface (29) upon leaving active regions (31, 32, 33) of the cooling device (21, 22, 23) do not exceed a minimum value for a surface temperature of the rolled product surface (29).

IPC 8 full level

B21B 37/76 (2006.01)

CPC (source: EP)

B21B 37/76 (2013.01); **C21D 1/60** (2013.01); **C21D 1/667** (2013.01); **C21D 9/46** (2013.01); **C21D 11/005** (2013.01); **B21B 45/0218** (2013.01); **B21B 45/0233** (2013.01); **B21B 2201/06** (2013.01); **B21B 2261/20** (2013.01)

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

DOCDB simple family (publication)

EP 4101553 A1 20221214; EP 4101553 B1 20240131; EP 4101553 C0 20240131; CN 117460587 A 20240126; WO 2022258350 A1 20221215

DOCDB simple family (application)

EP 21178033 A 20210607; CN 202280041056 A 20220520; EP 2022063733 W 20220520