

Title (en)

COOLING OF AN INCLINED FLAT PRODUCT WHICH IS TO BE ROLLED

Title (de)

KÜHLUNG EINES SCHRÄG GESTELLTEN FLACHEN WALZGUTS

Title (fr)

REFROIDISSEMENT D'UN PRODUIT LAMINÉ PLAT DISPOSÉ DE MANIERE INCLINÉE

Publication

**EP 3456426 B1 20200715 (DE)**

Application

**EP 17191730 A 20170919**

Priority

EP 17191730 A 20170919

Abstract (en)

[origin: WO2019057435A1] A flat rolled metal product (1) is first hot-rolled in at least one rolling stand (2), then fed to a cooling zone (5) arranged downstream of the rolling stand (2) and finally cooled in the cooling zone (5). During the rolling in the rolling stand (2), the flat rolled product (1) is oriented horizontally. Before running into the cooling zone (5) and/or when running into the cooling zone (5), the flat rolled product (1) is turned by a first acute angle (a) about an axis running in the transporting direction (x), so that after completion of the turning about the axis the flat rolled product (1) is oriented obliquely. The flat rolled product (1) is cooled in the cooling zone (5) while it is oriented obliquely.

IPC 8 full level

**B21B 1/22** (2006.01); **B21B 41/00** (2006.01); **B21B 43/00** (2006.01)

CPC (source: EP US)

**B21B 1/22** (2013.01 - EP); **B21B 39/02** (2013.01 - US); **B21B 41/00** (2013.01 - EP); **B21B 43/00** (2013.01 - EP); **B21B 45/0209** (2013.01 - US); **B21B 37/74** (2013.01 - EP)

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 3456426 A1 20190320**; **EP 3456426 B1 20200715**; CN 111093849 A 20200501; CN 111093849 B 20211126; US 10960447 B2 20210330; US 11660648 B2 20230530; US 2020384515 A1 20201210; US 2021178444 A1 20210617; WO 2019057435 A1 20190328

DOCDB simple family (application)

**EP 17191730 A 20170919**; CN 201880060919 A 20180823; EP 2018072745 W 20180823; US 201816644210 A 20180823; US 202117179686 A 20210219