

Title (en)

SCAFFOLD COOLER FOR COOLING A STEEL STRIP IN A ROLLING STAND

Title (de)

WALZGERÜST MIT EINEM GERÜSTKÜHLER ZUM ABKÜHLEN EINES STAHLBANDS

Title (fr)

DISPOSITIF DE REFROIDISSEMENT DE CAGE PERMETTANT LE REFROIDISSEMENT D'UN FEUILLARD EN ACIER DANS UNE CAGE DE LAMINOIR

Publication

EP 3658305 B1 20220629 (DE)

Application

EP 18743776 A 20180719

Priority

- EP 17182794 A 20170724
- EP 2018069668 W 20180719

Abstract (en)

[origin: WO2019020492A1] The invention relates to a framework cooler (20) for cooling a steel band (50), installed in a roller framework (11) in place of the work rolls (5) and the associated installation pieces (5a and 5b). For this purpose, the framework cooler (20) is sized such that it can be installed into the roller framework (11) through the operator-side roller stands (1) of the roller framework (11). The framework cooler (20) comprises a lower water tank (21b) and an upper water tank (21a), each having a connection (22) for a coolant and a plurality of cooling nozzles (23) or cooling tubes (23a) arranged in the depth direction (T) of the framework cooler (20) or at least one cooling slot (24) extending in the depth direction (T) of the framework cooler (20). The lower and the upper water tank (21b and 21a) can be thereby supplied with coolant by the respective connection (22) and the bottom side of the steel band (50) can be cooled by the cooling nozzles (23) or cooling tubes (23a) or the cooling slot (24) of the lower water tank (21b) and the top side of the steel band (50) can be cooled by the cooling nozzles (23) or cooling tubes (23a) or the cooling slot (24) of the upper water tank (21a).

IPC 8 full level

B21B 45/02 (2006.01)

CPC (source: EP RU US)

B21B 37/74 (2013.01 - RU); **B21B 45/02** (2013.01 - RU); **B21B 45/0218** (2013.01 - US); **B21B 45/0233** (2013.01 - US); **B21B 45/0251** (2013.01 - EP); **B21B 1/26** (2013.01 - US); **B21B 31/08** (2013.01 - EP); **B21B 37/74** (2013.01 - US); **B21B 45/0233** (2013.01 - EP); **B21B 45/0251** (2013.01 - US); **B21B 2001/225** (2013.01 - US); **B21B 2027/103** (2013.01 - US); **B21B 2203/06** (2013.01 - EP); **B21B 2203/28** (2013.01 - EP); **B21B 2261/20** (2013.01 - US)

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 3434383 A1 20190130; CN 110891702 A 20200317; CN 110891702 B 20211015; EP 3658305 A1 20200603; EP 3658305 B1 20220629; RU 2020105861 A 20210825; RU 2020105861 A3 20211109; RU 2766925 C2 20220316; US 11331704 B2 20220517; US 11712725 B2 20230801; US 2020156130 A1 20200521; US 2022241833 A1 20220804; WO 2019020492 A1 20190131

DOCDB simple family (application)

EP 17182794 A 20170724; CN 201880049721 A 20180719; EP 18743776 A 20180719; EP 2018069668 W 20180719; RU 2020105861 A 20180719; US 201816620896 A 20180719; US 202217722436 A 20220418