

Title (en)

COOLING DEVICE AND COOLING SYSTEM FOR COOLING A REFRIGERATED PRODUCT

Title (de)

KÜHLVORRICHTUNG UND KÜHLSYSTEM ZUM KÜHLEN EINES KÜHLGUTS

Title (fr)

DISPOSITIF DE REFROIDISSEMENT ET SYSTÈME DE REFROIDISSEMENT SERVANT À REFROIDIR UN PRODUIT À REFROIDIR

Publication

**EP 3887071 A1 20211006 (DE)**

Application

**EP 19808732 A 20191119**

Priority

- DE 102018220319 A 20181127
- EP 2019081773 W 20191119

Abstract (en)

[origin: WO2020109073A1] The invention relates to a cooling device (3) for cooling a refrigerated product (2) moved in a conveyor direction (B), the cooling device comprising: an upper cooling bar (4) arranged above the refrigerated product (2) and having at least one slotted nozzle (5) extending in a width direction of the refrigerated product (2), via which slotted nozzle a cooling fluid can be applied to an upper side (6) of the refrigerated product (2); an upper squeezing roller (7), which is arranged at a distance from and downstream of the upper cooling bar (4) in the conveyor direction (B), runs off the upper side (6) of the refrigerated product (2) and which extends at least over a width of the refrigerated product (2); an upper fluid-conducting element (8), which is arranged between the upper cooling bar (4) and the upper squeezing roller (7) in the conveyor direction (B) and at a distance above the refrigerated product (2), and which extends at least over the width of the refrigerated product (2) and is arranged at a distance from the upper squeezing roller (7); and an upper slide unit (9), having at least one upper slide element (10), which is arranged displaceably in the conveyor direction (B) and counter to the conveyor direction (B) and which is arranged in such a way that a gap (14) running in the width direction of the refrigerated product (2) can be selectively closed or at least partially opened between the upper cooling bar (4) and the upper fluid-conducting element (8).

IPC 8 full level

**B21B 45/02** (2006.01)

CPC (source: EP)

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

Citation (search report)

See references of WO 2020109073A1

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**DE 102018220319 A1 20200528**; EP 3887071 A1 20211006; EP 3887071 B1 20220720; WO 2020109073 A1 20200604

DOCDB simple family (application)

**DE 102018220319 A 20181127**; EP 19808732 A 20191119; EP 2019081773 W 20191119