Title (en)

TUBE BOTTOM AND HEAT EXCHANGER

Title (de)

ROHRBODEN UND WÄRMEÜBERTRAGER

Title (fr)

PLATEAU À TUBES ET ÉCHANGEUR DE CHALEUR

Publication

EP 3169965 A1 20170524 (DE)

Application

EP 15738319 A 20150713

Priority

- DE 102014213758 A 20140715
- EP 2015065989 W 20150713

Abstract (en)

[origin: WO2016008855A1] The invention relates to a tube bottom (80) for a heat exchanger, with a bottom region (81) having slot-type openings (82), wherein the slot—type openings (82) are rimmed by eyelets (83) and the tube bottom (80) has an attached rim region (85), wherein there is formed between the eyelets (83) and the attached rim region (85) a U-shaped trough (84) as receiving region for the foot of a box-like cover, wherein the U-shaped trough (84) consists of an inner first wall (87), the attached rim region (85) and a second wall forming the trough bottom (94), wherein the inner first wall (87) has at least one hump-like raised portion (88) in the continuation of an eyelet (83) on the side (95) oriented toward the U-shaped trough (84), which bounds the breadth of the U-shaped trough (84) between the attached rim region (85) and the first wall (87) and extends from the trough bottom (94) to that end region of the eyelet (83) oriented toward the U-shaped trough (84), wherein a depression (90) is formed in the hump-like raised portion (88), wherein forming the depression (90) produces a displacement of material toward that side (96) of the first wall (87) that is oriented away from the U-shaped trough (84). The invention also relates to a heat exchanger.

IPC 8 full level

F28F 9/02 (2006.01)

CPC (source: CN EP US)

F28F 9/0224 (2013.01 - CN EP US); **F28F 9/0226** (2013.01 - CN EP US)

Citation (search report)

See references of WO 2016008855A1

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 102014213758 A1 20160121; BR 112017000736 A2 20171114; BR 112017000736 B1 20210126; CN 106662413 A 20170510; CN 106662413 B 20180831; EP 3169965 A1 20170524; EP 3169965 B1 20180411; JP 2017520744 A 20170727; US 2017122680 A1 20170504; WO 2016008855 A1 20160121

DOCDB simple family (application)

DE 102014213758 A 20140715; BR 112017000736 A 20150713; CN 201580036395 A 20150713; EP 15738319 A 20150713; EP 2015065989 W 20150713; JP 2017502116 A 20150713; US 201715407519 A 20170117