

Title (en)

METHOD AND DEVICE FOR CLEANING TUBE BUNDLES

Title (de)

VERFAHREN UND VORRICHTUNG ZUM REINIGEN VON ROHRBÜNDELN

Title (fr)

PROCÉDÉ ET DISPOSITIF DE NETTOYAGE DE FAISCEAUX DE TUBES

Publication

**EP 3123096 A1 20170201 (DE)**

Application

**EP 15713189 A 20150327**

Priority

- DE 102014104356 A 20140328
- EP 2015056734 W 20150327

Abstract (en)

[origin: CA2941210A1] The invention relates to a method for cleaning tube bundles (1) with open end faces, in particular tube bundles (1) of heat exchangers, air coolers, or condensers. A cleaning device (5) which has at least one cleaning unit (20) is positioned adjacently to the open ends of the tube bundle (1), and the at least one cleaning unit (20) which has a high-pressure hose (11) is then arranged in a successive manner by a controller (50) so as to be flush with the respective tube (4) of the tube bundle (1). The cleaning unit (20) is inserted into the respective tube (4) and supplied with a liquid under high-pressure. The aim of the invention is to improve such a method and device such that a reliable cleaning process is carried out without operating errors. This is achieved in that the insert depth is measured when inserting the at least one cleaning unit (20) into the respective tube (4) and monitored by the controller (50).

IPC 8 full level

**B08B 9/032** (2006.01); **F28G 1/16** (2006.01); **F28G 15/00** (2006.01); **F28G 15/08** (2006.01)

CPC (source: EP US)

**B08B 9/0321** (2013.01 - US); **B08B 9/0323** (2013.01 - EP US); **B08B 9/0325** (2013.01 - EP US); **B08B 9/0433** (2013.01 - EP US); **F28D 7/103** (2013.01 - US); **F28G 1/163** (2013.01 - EP US); **F28G 15/003** (2013.01 - EP US); **F28G 15/04** (2013.01 - US); **F28G 15/06** (2013.01 - US); **F28G 15/08** (2013.01 - EP US)

Citation (search report)

See references of WO 2015144889A1

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 102014104356 A1 20151001**; CA 2941210 A1 20151001; CA 2941210 C 20230103; EP 3123096 A1 20170201; EP 3123096 B1 20190828; ES 2755362 T3 20200422; PL 3123096 T3 20200331; PT 3123096 T 20191121; US 10048027 B2 20180814; US 2017016687 A1 20170119; WO 2015144889 A1 20151001

DOCDB simple family (application)

**DE 102014104356 A 20140328**; CA 2941210 A 20150327; EP 15713189 A 20150327; EP 2015056734 W 20150327; ES 15713189 T 20150327; PL 15713189 T 20150327; PT 15713189 T 20150327; US 201515124461 A 20150327