

Title (en)

HEAT EXCHANGER FOR HEATING HIGHLY VISCOUS SLUDGE

Title (de)

WÄRMETAUSCHER ZUR ERHITZUNG VON HOCHVISOSEM SCHLAMM

Title (fr)

ÉCHANGEUR DE CHALEUR POUR CHAUFFER DES BOUES HAUTEMENT VISQUEUSES

Publication

EP 3265736 A4 20181107 (EN)

Application

EP 16758499 A 20160222

Priority

- DK PA201570123 A 20150305
- DK 2016050049 W 20160222

Abstract (en)

[origin: WO2016138905A1] There is provided a sludge/water heat exchanger for exchanging heat between countercurrent flowing water and sludge. The heat exchanger has at least two horizontally aligned tube pairs having an outer tube and at least three inner tubes, and return bends establishing a fluid flow connection between the inner tubes of one of said tube pairs with the inner tubes of an adjacent tube pair. In particular, the heat exchanger works well for those applications where sludge is contaminated with solids or substances which are prone to accumulate on heat transfer surfaces and/or render the sludge highly viscous.

IPC 8 full level

F28D 7/16 (2006.01); **F28D 7/10** (2006.01)

CPC (source: EP)

F28D 7/16 (2013.01); **F28F 9/26** (2013.01); **F28D 2021/0098** (2013.01)

Citation (search report)

- [X] US 1790151 A 19310127 - HOW HARLAN W
- [A] EP 0650025 A1 19950426 - TETRA LAVAL HOLDINGS & FINANCE [CH]
- [A] CN 103851936 A 20140611 - ZHANG WEI
- [A] CN 203687704 U 20140702 - SHANGHAI LEQUAN FOOD COMPANY
- [AD] GB 1436685 A 19760519 - DORR OLIVER INC
- See references of WO 2016138905A1

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)

WO 2016138905 A1 20160909; DK 178562 B1 20160627; DK 201570123 A1 20160627; EP 3265736 A1 20180110; EP 3265736 A4 20181107

DOCDB simple family (application)

DK 2016050049 W 20160222; DK PA201570123 A 20150305; EP 16758499 A 20160222