

Title (en)  
Heat exchanger

Title (de)  
Wärmetauscher

Title (fr)  
Échangeur de chaleur

Publication  
**EP 2508834 A2 20121010 (EN)**

Application  
**EP 11460027 A 20110519**

Priority  
PL 39447811 A 20110407

Abstract (en)

A heat exchanger comprising an outer jacket, which encases a set of vertically running pipe elements anchored in sieve walls on both ends, a gas combustion chamber positioned over the upper sieve wall, and baffles mounted crosswise to the pipe elements, with openings through which the pipe elements run, plus water, gas, and fume inlet and outlet pipe stubs, wherein the outer jacket (9) is conical in shape gaining in diameter towards the top, and the top baffle (5) below the upper sieve wall (2) is conical in shape, its apex pointing down.

IPC 8 full level  
**F28F 9/00** (2006.01); **F28D 7/16** (2006.01); **F28F 9/22** (2006.01)

CPC (source: EP)  
**F28D 7/1607** (2013.01); **F28D 7/1692** (2013.01); **F28F 9/00** (2013.01); **F28F 9/22** (2013.01); **F28F 2009/226** (2013.01); **F28F 2009/228** (2013.01)

Citation (applicant)

- PL 186723 B1 20040227 - MARCZEWSKI BOGUSLAW [PL]
- WO 2008131616 A1 20081106 - DALIAN HAITE OIL REFINING TECH [CN], et al
- WO 2009078577 A1 20090625 - KYUNGDONG NAVIEN CO LTD [KR], et al

Cited by  
CN105805938A; KR20190074647A; WO2019132324A1; CN108885026A; JP2019510952A; EP3438562A4; RU2717176C1; US10935278B2; US11306943B2; WO2019132323A1; WO2017171276A1

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)

**EP 2508834 A2 20121010; EP 2508834 A3 20140409; PL 219104 B1 20150331; PL 394478 A1 20121008**

DOCDB simple family (application)

**EP 11460027 A 20110519; PL 39447811 A 20110407**