Title (en)

Fired heat exchanger

Title (de)

Wärmetauscher mit Brennraum

Title (fr)

Echangeur de chaleur avec chambre de combustion

Publication

EP 2123991 B1 20120125 (EN)

Application

EP 08009326 A 20080520

Priority

EP 08009326 A 20080520

Abstract (en)

[origin: EP2123991A1] The fired heat exchanger is characterised by the fact that it contains a modular block constituting a set of inseparably interconnected panel plates (1) with a combustion chamber located in its upper internal part (2) ensuring full integration of the combustion chamber (2) with the working heat exchange surface located in the lower part of the panel plates (1). This surface is created by the lower lateral surfaces of the panel plates (1) together with chattered lamella bands mounted on them (3). They expand the working heat exchange surface and the gasses created in the combustion chamber (2) flow around this surface. The circulation of the liquid heated medium in the unit of interconnected panel plates (1) has a medium flow velocity within the range 0.5 - 2 m/s and is of a two-stage type. During the first stage, the main process of heat exchange on the working surface takes place. During the second stage, the combustion chamber (2) is cooled by the water jacket constituting the upper part of the panel plates (1).

IPC 8 full level

F24H 1/32 (2006.01)

CPC (source: EP)

F24H 1/32 (2013.01)

Cited by

US8813688B2; US8720387B2; WO2016010500A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 2123991 A1 20091125; EP 2123991 B1 20120125; AT E543055 T1 20120215; DK 2123991 T3 20120521; ES 2381216 T3 20120524; PL 2123991 T3 20120731

DOCDB simple family (application)

EP 08009326 A 20080520; AT 08009326 T 20080520; DK 08009326 T 20080520; ES 08009326 T 20080520; PL 08009326 T 20080520