

Title (en)

HEAT EXCHANGER IN POLYMER AND COMPOSITE MATERIALS

Title (de)

WÄRMETAUSCHER AUS POLYMER- UND VERBUNDWERKSTOFFEN

Title (fr)

ÉCHANGEUR DE CHALEUR EN MATÉRIAUX POLYMÈRES ET COMPOSITES

Publication

**EP 2661597 B1 20141112 (FR)**

Application

**EP 11802449 A 20111229**

Priority

- FR 1150043 A 20110104
- EP 2011074205 W 20111229

Abstract (en)

[origin: WO2012093063A1] The invention essentially relates to a heat exchanger (10) for exchanging heat between a first gas flow and a second fluid flow, which comprises parallel plates (2) made of a polymer material and comprising a plurality of longitudinal ducts (22) defining a space (14) intended for the first gas to flow therethrough, and which comprises vanes (16) made of a polymer composite material provided in said horizontal space (14), characterized in that each vane (16) comprises at least one layer of pyrolytic carbon fibers and at least two layers of a polymer material on either side of the layer of the carbon-fiber material, and in that the vanes (16) provided in said space (14) are made of a single piece from an embossed plate (18).

IPC 8 full level

**F28D 9/00** (2006.01); **F28F 3/02** (2006.01); **F28F 21/06** (2006.01)

CPC (source: EP)

**F28D 9/0081** (2013.01); **F28F 3/025** (2013.01); **F28F 21/065** (2013.01); **F28F 2255/06** (2013.01); **F28F 2255/16** (2013.01)

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)

**FR 2970070 A1 20120706**; EP 2661597 A1 20131113; EP 2661597 B1 20141112; WO 2012093063 A1 20120712

DOCDB simple family (application)

**FR 1150043 A 20110104**; EP 11802449 A 20111229; EP 2011074205 W 20111229