

Title (en)
Flat pipe for a heat exchanger

Title (de)
Flachrohr für einen Wärmetauscher

Title (fr)
Tube plat pour un échangeur thermique

Publication
EP 2299223 A3 20131211 (DE)

Application
EP 10175275 A 20100903

Priority
DE 102009041618 A 20090917

Abstract (en)
[origin: EP2299223A2] The pipe has metal strips comprising a fold at a longitudinal direction (L) of the pipe so that long side walls (1, 2) of the pipe are formed by sections (1a-1e, 2a-2d) of a cross section line of the metal strips. The sections are alternatively tracked in a course of the cross section line. A separate section is formed between sections of the long side walls. Chambers of the pipe are separated from each other by the separate section. The metal strips consist of a soldered plate with aluminum base and stainless steel base. Short side walls (3, 4) exhibit a double layer of the metal strips. An independent claim is also included for a heat exchanger comprising a flat pipe and ribs.

IPC 8 full level
F28D 1/03 (2006.01); **F28F 1/02** (2006.01); **F28F 1/04** (2006.01)

CPC (source: EP)
F28D 1/0391 (2013.01); **F28F 1/022** (2013.01); **F28F 1/04** (2013.01); **F28F 2265/00** (2013.01); **F28F 2275/06** (2013.01)

Citation (search report)

- [X] DE 102006054036 A1 20080521 - BEHR GMBH & CO KG [DE]
- [X] DE 102008007610 A1 20090806 - BEHR GMBH & CO KG [DE]
- [X] JP H11101586 A 19990413 - TOYO RADIATOR CO LTD
- [X] DE 3327660 A1 19841220 - MTU MUENCHEN GMBH [DE]
- [X] DE 2031904 A1 19720113 - SIEMENS AG
- [A] DE 3610618 A1 19871001 - MTU MUENCHEN GMBH [DE]

Cited by
WO2020073744A1

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 SE SI SK SM TR

Designated extension state (EPC)
BA ME RS

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EP 10175275 A 20100903; DE 102009041618 A 20090917