

Title (en)

Core unit of heat exchanger having electric heater

Title (de)

Kerneinheit eines Wärmetauschers mit elektrischem Heizer

Title (fr)

Noyau d'un échangeur de chaleur avec réchauffeur électrique

Publication

EP 0857922 A3 19991208 (EN)

Application

EP 98102091 A 19980206

Priority

- JP 2415497 A 19970206
- JP 9241797 A 19970410
- JP 21504297 A 19970808

Abstract (en)

[origin: EP0857922A2] A core unit (3) of a heat exchanger is composed of a plurality of parallel flat tubes (6), a plurality of corrugated fins (7), a support member (100) disposed between two of the corrugated fins (7) and an electric heater (9) disposed inside the support member (100). The support member (100) has a pair of parallel plates (10, 11) bonded to the corrugated fins (7) at the summits of corrugation of the corrugated fins (7). The electric heater (9) is composed of a heating element (9a) and an insulation member (9d) inserted between the heating element (9a) and the parallel plates (10, 11). <IMAGE>

IPC 1-7

F24H 3/04

IPC 8 full level

F24H 3/04 (2006.01); **F28F 1/12** (2006.01)

CPC (source: EP KR)

F24H 1/009 (2013.01 - EP KR); **F24H 3/0405** (2013.01 - EP); **F24H 3/0429** (2013.01 - EP); **F24H 3/0435** (2013.01 - EP KR); **F24H 3/0441** (2013.01 - KR); **F24H 3/047** (2013.01 - EP KR); **F24H 3/082** (2013.01 - EP KR); **F24H 3/085** (2013.01 - EP KR); **F24H 9/1872** (2013.01 - EP KR); **F28F 1/128** (2013.01 - EP)

Citation (search report)

[A] DE 4433814 A1 19960328 - BEHR GMBH & CO [DE]

Cited by

FR2826711A1; EP0937595A3; FR3083301A1; CN115250548A; DE19925444A1; DE19925444C2; US2013188937A1; EP2695756A4; EP1961591A4; CN105150805A; US2009165991A1; WO0204879A1; WO03002920A1; WO2017141215A1; US6911631B2; FR2793546A1; US10451309B2; WO2022217418A1

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