

Title (en)  
Heat exchanger

Title (de)  
Wärmeübertrager

Title (fr)  
Caloporteur

Publication  
**EP 2393336 B1 20170517 (DE)**

Application  
**EP 10290296 A 20100604**

Priority  
EP 10290296 A 20100604

Abstract (en)  
[origin: EP2393336A1] The heat exchanger (2) has a positive temperature coefficient (PTC) heating element (5) provided in a housing (1), where opposite sides of the heating element are arranged adjacent to contact plates (7, 7'). The heating element and the contact plates are glued with one another to form a pre-mounted component (8). The housing is made of electrically conductive material i.e. aluminum, and designed as an extruded pipe. U-shaped insulations (10, 10') are provided between an inner wall (9) of the housing and one of the contact plates. Position profiles (11, 11') are attached at the insulation.

IPC 8 full level  
**H05B 3/50** (2006.01)

CPC (source: EP)  
**H05B 3/50** (2013.01); **H05B 2203/02** (2013.01)

Cited by  
EP2731400A1; EP4333558A1; US10136474B2; DE102012107985B4; DE102012013770A1; EP2608633A1; US9338831B2; EP2933577B1; EP2873296B1

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

DOCDB simple family (publication)  
**EP 2393336 A1 20111207; EP 2393336 A8 20120215; EP 2393336 B1 20170517**

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