

Title (en)  
Heat exchanger

Title (de)  
Wärmetauscher

Title (fr)  
Echangeur thermique

Publication  
**EP 1939549 A2 20080702 (EN)**

Application  
**EP 07120246 A 20071108**

Priority  
TR 200607538 A 20061227

Abstract (en)  
The present heat exchanger (A) comprises a thermal element (1), one side of which becomes cold and the other side becomes hot once energized with electricity, a high heat-conductive intermediate plate (2) in contact with one surface of this element (1); a high heat-conductive porous material (3) in contact with the other surface of the intermediate plate (2); and an upper plate (4) provided on the other side of this material (3). Once the thermal element (1) is activated in the heat exchanger (A), the intermediate plate (2) and the porous material (3) are rapidly cooled or heated. Meanwhile, since the temperature of fluid passing through within the porous material (3) is different than the temperature of the material itself (3), heat exchange is ensured between the fluid and the porous material.

IPC 8 full level  
**F25B 21/04** (2006.01); **F28F 13/00** (2006.01)

CPC (source: EP)  
**F25B 21/04** (2013.01); **F28F 13/003** (2013.01)

Citation (applicant)  
• US 2005243515 A1 20051103 - CHIN SIM W [KR], et al  
• WO 0169160 A1 20010920 - DELPHI TECH INC [US]  
• RU 2115869 C1 19980720 - GADEL SHIN MARAT SHAVKATOVICH

Cited by  
US9631844B2; DE102008013850B3; DE102008013850B8; US2014230455A1; AU2012311283B2; US8499575B2; WO2013041841A3

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)  
AL BA HR MK RS

DOCDB simple family (publication)  
**EP 1939549 A2 20080702; EP 1939549 A3 20100519; TR 200607538 A2 20080721**

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