

Title (en)  
Heat exchanger for exhaust gases

Title (de)  
Abgaswärmetauscher

Title (fr)  
Echangeur de chaleur pour gaz d'échappement

Publication  
**EP 0981035 B1 20030611 (DE)**

Application  
**EP 99115443 A 19990805**

Priority  
DE 19836889 A 19980814

Abstract (en)  
[origin: EP0981035A2] The heat exchanger plates (6) have extending areas (7) forming the distribution and collection spaces for cooling water. The flow channels (14) for exhaust gas extend in a straight path through the heat exchanger, issuing at opposing ends in the pipe bases (13). At least one of the two types of flow channels (9,14) has a surface structure, whereby the full-surface contact between the flow channels is excluded. The flow channels for cooling water have a somewhat corrugated surface structure.

IPC 1-7  
**F28D 9/00**; **F28D 1/03**

IPC 8 full level  
**F28D 1/03** (2006.01); **F28D 7/00** (2006.01); **F28D 9/00** (2006.01)

CPC (source: EP)  
**F28D 7/0025** (2013.01); **F28D 9/0037** (2013.01); **F28D 9/0043** (2013.01); **F28D 21/0003** (2013.01); **F28F 2250/104** (2013.01); **F28F 2250/108** (2013.01)

Cited by  
DE102009010039A1; CN102597680A; EP1821044A1; EP0992756A3; DE102009010039B4; US7108054B2; WO2014052310A1; US10662823B2; US10697706B2; EP2064506B1

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