

Title (en)  
Heat exchanger for exhaust pipes

Title (de)  
Wärmetauscher für Abgasleitungen

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

Publication  
**EP 1770250 B1 20120606 (DE)**

Application  
**EP 06020114 A 20060926**

Priority  
DE 102005046536 A 20050928

Abstract (en)  
[origin: EP1770250A2] The exchanger has inner and outer flow areas for exhaust gas (G) and cooling water (W), respectively. The inner area is formed by a hose line (10) and the outer area is formed between the hose line and a casing line (2), where the hose line extends concentrically to the casing line and has annular wave-shaped corrugation. Spacing units (16, 17, 18) are arranged in the outer flow area between the casing line and the hose line. An axial curved area is formed by the deformation of the hose and casing lines, and the spacing units are formed in a ring or helical shape.

IPC 8 full level  
**F01N 13/08** (2010.01); **F01N 3/04** (2006.01); **F01N 3/05** (2006.01); **F01N 13/18** (2010.01); **F02M 25/07** (2006.01); **F28D 7/10** (2006.01)

CPC (source: EP)  
**F01N 13/08** (2013.01); **F01N 13/141** (2013.01); **F02M 26/11** (2016.02); **F02M 26/32** (2016.02); **F28D 7/106** (2013.01); **F28F 1/08** (2013.01);  
**F01N 2240/02** (2013.01); **F01N 2470/12** (2013.01); **F28F 2240/00** (2013.01); **F28F 2265/26** (2013.01)

Cited by  
DE102013111033B4; DE102011007748A1; DE102007003684B4; DE102007003684A1; FR2926845A1; EP3123093A4; EP2570646A1;  
JP2005199347A; EP2354521A3; CN108223093A; US9169756B2; WO2009022113A1; WO2009060487A1

Designated contracting state (EPC)  
DE FR

DOCDB simple family (publication)  
**EP 1770250 A2 20070404; EP 1770250 A3 20071107; EP 1770250 B1 20120606;** DE 102005046536 A1 20070329

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**EP 06020114 A 20060926;** DE 102005046536 A 20050928