

Title (en)  
Cross-flow heat exchanger

Title (de)  
Kreuzstrom-Wärmetauscher

Title (fr)  
Echangeur thermique à courants croisés

Publication  
**EP 2192372 B1 20190731 (DE)**

Application  
**EP 09176897 A 20091124**

Priority  
DE 102008059737 A 20081201

Abstract (en)  
[origin: EP2192372A2] The cross-flow heat exchanger (1) has pipes (10-12) which are passed through by a medium and are flowed by another medium. Two collecting boxes (2) are provided, in which the pipes are discharged. Conducting elements (13,14) are provided which are arranged between the pipes. The collecting boxes and the pipes are made up of plastics and the conducting elements are made up of metals. The pipes are filled with thermally conductive filler materials.

IPC 8 full level  
**F28F 1/12** (2006.01); **F28D 1/053** (2006.01); **F28F 9/18** (2006.01); **F28F 21/06** (2006.01); **F28F 21/08** (2006.01)

CPC (source: EP)  
**F28D 1/05383** (2013.01); **F28F 1/126** (2013.01); **F28F 1/128** (2013.01); **F28F 9/182** (2013.01); **F28F 21/062** (2013.01); **F28F 21/067** (2013.01); **F28F 21/08** (2013.01)

Citation (examination)

- JP 2002267389 A 20020918 - JAPAN CLIMATE SYSTEMS CORP
- EP 0745824 A1 19961204 - SANDEN CORP [JP]
- JP 2003028584 A 20030129 - DENSO CORP
- US 5918667 A 19990706 - CHIBA TOMOHIRO [JP], et al
- DE 19536117 A1 19970403 - BEHR GMBH & CO [DE]
- EP 0622599 A2 19941102 - SANDEN CORP [JP]
- GB 1332777 A 19731003 - UNITED STIRLING AB & CO
- US 4221263 A 19800909 - MEYER JOHN J

Cited by  
DE202012003241U1; CN112682500A; US2022042749A1; US2012312029A1; US9291375B2

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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

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