

Title (en)  
Air/water heat pump for external assembly

Title (de)  
Luft/Wasser-Wärmepumpe für eine Aussenaufstellung

Title (fr)  
Pompe à chaleur air/eau pour un montage extérieur

Publication  
**EP 2354709 A3 20160518 (DE)**

Application  
**EP 11000086 A 20110107**

Priority  
DE 202010001244 U 20100121

Abstract (en)  
[origin: EP2354709A2] The pump has a refrigerant circuit comprising a vaporizer (220) and fans, which are partly surrounded by a fan channel (330) for promotion of external air. An air circulation unit is formed between the vaporizer and the fan channel. The air circulation unit changes from a contour of the vaporizer into a form of the fan channel such that a closed air path is formed from the vaporizer to the fans by the circulation unit. The circulation unit is made of plastic foam such as expanded polystyrene (EPS) or expanded polypropylene (EPP). A channel extension (350) is attached to the circulation unit.

IPC 8 full level  
**F24H 4/02** (2006.01)

CPC (source: EP)  
**F24F 1/38** (2013.01); **F24F 1/46** (2013.01); **F24H 4/02** (2013.01); **F24H 9/001** (2013.01)

Citation (search report)

- [X] EP 0104306 A1 19840404 - SIEMENS AG OESTERREICH [AT]
- [A] US 6092377 A 20000725 - TSO MING-LI [TW]
- [A] DE 2802550 A1 19780720 - DANTHERM AS

Cited by  
EP4354066A1; DE102017101264A1; EP3704424A4; EP3252393A1; WO2023169927A1; CN112833544A; EP3974742A1; DE202012002894U1; EP2642222A2; EP3453982A1; DE102017120898A1; WO2019089559A1; US11859868B2

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 RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 2354709 A2 20110810; EP 2354709 A3 20160518; EP 2354709 B1 20230301**; DE 202010001244 U1 20110526; PL 2354709 T3 20230703

DOCDB simple family (application)  
**EP 11000086 A 20110107**; DE 202010001244 U 20100121; PL 11000086 T 20110107