

Title (en)  
HEAT EXCHANGER UNIT

Title (de)  
WÄRMETAUSCHEREINHEIT

Title (fr)  
UNITÉ D'ÉCHANGEUR DE CHALEUR

Publication  
**EP 3081867 A1 20161019 (EN)**

Application  
**EP 15164039 A 20150417**

Priority  
EP 15164039 A 20150417

Abstract (en)  
Heat exchanger unit (1) comprising a casing (2) defining a duct to be flown through by a fluid, a fan (20) disposed in the casing (2) and configured to induce a flow of the fluid through the duct in a flow direction (F), a heat exchanger (5) being V-shaped in side view with an apex (8) at one end and an opening (12) at the opposite end, the heat exchanger (5) being disposed in the duct with the opening (12) directed towards the flow direction (F), wherein a line (CL) passing the apex (8) of the V-shaped heat exchanger (5) in the side view extends horizontally, wherein the fan (20) is disposed downstream of the heat exchanger (5) in the flow direction (F).

IPC 8 full level  
**F24F 1/0067** (2019.01); **F24F 13/30** (2006.01); **F28D 1/04** (2006.01); **F28F 13/06** (2006.01); **F28F 17/00** (2006.01); **F28F 9/22** (2006.01)

CPC (source: EP US)  
**F24F 1/0047** (2019.01 - EP); **F24F 1/005** (2019.01 - EP); **F24F 1/0067** (2019.01 - EP US); **F24F 13/30** (2013.01 - EP); **F28D 1/0426** (2013.01 - EP); **F28F 17/005** (2013.01 - EP); **F28D 2001/0266** (2013.01 - EP); **F28F 2009/222** (2013.01 - EP); **F28F 2250/08** (2013.01 - EP)

Citation (applicant)  
• EP 2108897 A1 20091014 - HITACHI APPLIANCES INC [JP]  
• EP 2402669 A2 20120104 - SANYO ELECTRIC CO [JP]

Citation (search report)  
• [XYI] US 5964370 A 19991012 - RUST JR RAYMOND A [US], et al  
• [XI] CN 1782601 A 20060607 - LG ELECTRONICS TIANJIN [CN]  
• [Y] EP 2520893 A1 20121107 - DANFOSS SANHUA HANGZHOU MICRO [CN]  
• [A] US 2007169499 A1 20070726 - RIOS ARTURO [US], et al

Cited by  
EP4053462A4; CN109425026A; US12123614B2; US11365892B2; WO2019009681A1; WO2021082333A1

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)  
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**EP 3081867 A1 20161019**; **EP 3081867 A8 20161228**; **EP 3081867 B1 20171122**; ES 2658148 T3 20180308

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