Title (en)

Mobile air conditioner

Title (de)

Tragbare Klimaanlage

Title (fr)

Climatiseur mobile

Publication

EP 1909043 A3 20090318 (EN)

Application

EP 07113596 A 20070801

Priority

CN 200610096263 A 20060929

Abstract (en)

[origin: EP1909043A2] The present invention relates to a mobile air conditioner which comprises an insulated housing (3) having a cooled air outlet (12) and a heated air outlet (13), an evaporator (1) located in the said housing (3), a condenser (2), an electrical fan (4) having an air chamber (5), and a reservoir (9) for collecting condensed water formed on the evaporator (1). The evaporator (1) is located between the air chamber (5) and cooled air outlet (12); while the condenser (2) is located between the air chamber (5) and heated air outlet (13). The cavity of the said reservoir (9) is in fluid connection with a drain channel (10) which has a drain meatus located in the air-discharge passage (6) extended from the air outlet (15) of the air chamber (5) to the condenser (2). The condensed water from the reservoir (9) to the drain channel can be atomized into tiny drips by rapid air flow from the air chamber (5). The tiny drips are blown through the drain channel (10) onto the condenser (2) for being heated and onto the evaporator (1) for being cooled, then flowing into the reservoir at last. The above-described process can be repeated circularly during the air conditioner being in operation. It is much more convenient that this treatment of condensed water can keep the reservoir (9) from being filled without emptying it manually.

IPC 8 full level

F24F 1/02 (2011.01); F24F 13/22 (2006.01)

CPC (source: EP US)

F24F 1/022 (2013.01 - EP US); F24F 1/04 (2013.01 - EP US); F24F 13/222 (2013.01 - EP US); F24F 2013/225 (2013.01 - EP US)

Citation (search report)

- [Y] US 4534179 A 19850813 STOCKING GEORGE E [US], et al
- [Y] EP 0979977 A2 20000216 BSH FABRICACION SA [ES]
- [A] US 4375752 A 19830308 STOCKING GEORGE E, et al
- [A] US 2003029184 A1 20030213 OHAMA YASUNORI [JP], et al

Cited by

US9644852B2; WO2013108276A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

EP 1909043 A2 20080409; EP 1909043 A3 20090318; CN 100535541 C 20090902; CN 1932403 A 20070321; US 2008078196 A1 20080403

DOCDB simple family (application)

EP 07113596 A 20070801; CN 200610096263 A 20060929; US 77389607 A 20070705