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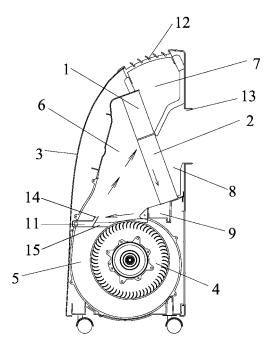
# (11) EP 1 909 043 A3

EUROPEAN PATENT APPLICATION

(88) Date of publication A3: (51) Int Cl.: F24F 1/02<sup>(2006.01)</sup> F24F 13/22 (2006.01) 18.03.2009 Bulletin 2009/12 (43) Date of publication A2: 09.04.2008 Bulletin 2008/15 (21) Application number: 07113596.6 (22) Date of filing: 01.08.2007 • Zou, Xiaohui (84) Designated Contracting States: AT BE BG CH CY CZ DE DK EE ES FI FR GB GR The Dorimitory of Jiangsu YO-AU Electric HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE Wujin District, Changzhou 213716, Jiangsu SI SK TR **Province (CN) Designated Extension States:** • Tian, Jianbin AL BA HR MK RS The Dorimitory of Jiangsu YO-AU Electric Wujin District, Changzhou 213716, Jiangsu (30) Priority: 29.09.2006 CN 200610096263 Province (CN) (71) Applicant: Jiangsu YO-AU Electric Appliance Ltd. (74) Representative: Hengelhaupt, Jürgen et al 213176 Jiangsu Province (CN) Gulde Hengelhaupt Ziebig & Schneider Patentanwälte - Rechtsanwälte (72) Inventors: Wallstrasse 58/59 · Chen, Yi 10179 Berlin (DE) The Dorimitory of Jiangsu YO-AU Electric Wujin District, Changzhou 213716, Jiangsu **Province (CN)** 

### (54) Mobile air conditioner

(57) 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.







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