

Title (en)
Air conditioning apparatus

Title (de)
Klimaanlage

Title (fr)
Appareil de climatisation

Publication
EP 2138779 B1 20161109 (EN)

Application
EP 09250208 A 20090127

Priority
JP 2008165367 A 20080625

Abstract (en)
[origin: EP2138779A1] An air conditioning apparatus capable of continuously sterilizing drain water in a drain pan almost permanently and thereby solving a drain pump clogging problem in any installation environment of the drain pan and in any environment where bacteria, fungi, etc. can multiply. The air conditioning apparatus may be formed to include a heat exchanger 7, a drain pan 5 receiving condensed water from the heat exchanger 7, and a drain pump 4 discharging drain water 6 from the drain pan 5. The drain pan 5 may include a sterilizing device 1. The sterilizing device 1 may include: (1) a discharge electrode 2 that is formed to include at least one pair of a high-voltage electrode 2a and a ground electrode 2b that faces the high-voltage electrode 2a at a predetermined distance; and (2) a high-voltage power supply 3 that applies high-voltage pulses to the discharge electrode 2.

IPC 8 full level
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CPC (source: EP)
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Citation (examination)
• JP 2005058887 A 20050310 - MITSUBISHI HEAVY IND LTD
• JP 2007207540 A 20070816 - KURITA SEISAKUSHO KK

Cited by
US8683821B2; EP4023956A4

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BE ES GB

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