

Title (en)
HEAT PUMP

Title (de)
WÄRMEPUMPE

Title (fr)
POMPE À CHALEUR

Publication
EP 3575700 A1 20191204 (EN)

Application
EP 19177502 A 20190530

Priority
IT 201800005938 A 20180601

Abstract (en)
The present invention regards a heat pump apparatus for an air conditioning plant, which comprises an external unit (1), provided with a first heat exchanger (3) susceptible of operating as an evaporator, and an internal unit (1'), provided with a second heat exchanger (19) thermally connected to the first heat exchanger (3) and susceptible of transferring heat (Q2) to an ambient air flow (26) for heating an environment (I). The heat pump apparatus (100) also comprises an incandescent emitter (8) configured for heating via irradiation the first heat exchanger (3) so as to prevent the formation of ice or frost on the surface of such first heat exchanger (3).

IPC 8 full level
F24F 11/42 (2018.01); **F25D 21/06** (2006.01); **F24F 5/00** (2006.01)

CPC (source: EP)
F24F 11/42 (2017.12); **F24F 5/0089** (2013.01); **F24F 2221/34** (2013.01); **F25D 21/12** (2013.01)

Citation (applicant)
• US 4995241 A 19910226 - VANDERVAART GERRY [CA]
• EP 0599625 A2 19940601 - THERMO KING CORP [US]

Citation (search report)
• [A] US 4995241 A 19910226 - VANDERVAART GERRY [CA]
• [A] EP 0599625 A2 19940601 - THERMO KING CORP [US]
• [A] CN 1227906 A 19990908 - TOSHIBA KK [JP]
• [A] US 3757531 A 19730911 - GEMENT P

Cited by
CN113639414A; EP3689650B1

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 3575700 A1 20191204; EP 3575700 B1 20210825; ES 2898888 T3 20220309; HU E056622 T2 20220228; IT 201800005938 A1 20191201; LT 3575700 T 20211227; PL 3575700 T3 20220328; PL 3575700 T4 20220328

DOCDB simple family (application)
EP 19177502 A 20190530; ES 19177502 T 20190530; HU E19177502 A 20190530; IT 201800005938 A 20180601; LT 19177502 T 20190530; PL 19177502 T 20190530