

Title (en)

COOLING APPARATUS

Title (de)

KÜHLAPPARAT

Title (fr)

APPAREIL DE REFROIDISSEMENT

Publication

EP 3537089 B1 20210428 (EN)

Application

EP 19160861 A 20190305

Priority

IT 201800003296 A 20180306

Abstract (en)

[origin: EP3537089A1] Cooling apparatus (10) which comprises: a support structure (11) which comprises a resting surface (12); a micro-channel heat exchanger (15) arranged vertically on the resting surface (12), the heat exchanger comprising a plurality of micro-channel tubes (25) arranged horizontally for the flow of a fluid and transverse air passages (26) between the micro-channel tubes, wherein the heat exchanger is curved along a circular line so as to define a circular upper opening (27) for the passage of air entering through the transverse air passages and a circular surface on the resting surface (12) delimited at its perimeter by the heat exchanger; a fan (19) arranged on the circular upper opening (27), and an airflow guide element (40) comprising a body (40a) of a generally frusto-conical shape arranged centrally on the circular surface of the resting surface (12).

IPC 8 full level

F28F 13/06 (2006.01); **F24F 1/48** (2011.01); **F28D 1/02** (2006.01); **F28D 1/047** (2006.01); **F28D 3/00** (2006.01); **F28D 3/02** (2006.01);
F28D 3/04 (2006.01); **F28D 5/00** (2006.01); **F28D 5/02** (2006.01); **F28F 13/08** (2006.01); **F28D 21/00** (2006.01)

CPC (source: EP)

F24F 1/48 (2013.01); **F28D 1/024** (2013.01); **F28D 1/047** (2013.01); **F28D 3/00** (2013.01); **F28D 3/02** (2013.01); **F28D 3/04** (2013.01);
F28D 5/00 (2013.01); **F28D 5/02** (2013.01); **F28F 13/06** (2013.01); **F28F 13/08** (2013.01); **F28D 2021/007** (2013.01); **F28F 2260/02** (2013.01)

Cited by

CN114745940A; CN116841364A; CN112053836A; EP4286785A1

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

DOCDB simple family (publication)

EP 3537089 A1 20190911; **EP 3537089 B1 20210428**; **EP 3537089 B8 20210728**; DK 3537089 T3 20210719; ES 2882068 T3 20211201;
IT 201800003296 A1 20190906; PL 3537089 T3 20211213

DOCDB simple family (application)

EP 19160861 A 20190305; DK 19160861 T 20190305; ES 19160861 T 20190305; IT 201800003296 A 20180306; PL 19160861 T 20190305