

Title (en)
TEMPERATURE-REGULATING DEVICE

Title (de)
TEMPERIERVORRICHTUNG

Title (fr)
DISPOSITIF DE RÉGULATION THERMIQUE

Publication
EP 4360158 A1 20240501 (FR)

Application
EP 22733625 A 20220614

Priority
• FR 2106559 A 20210621
• EP 2022066219 W 20220614

Abstract (en)
[origin: WO2022268582A1] A device (4) for regulating the temperature of a plurality of electrical and/or electronic components (6) liable to release heat during their operation, the temperature-regulating device (4) comprising a casing (8) configured to house the electrical and/or electronic components (6) and means (12) for regulating the temperature of the electrical and/or electronic components (6) by way of a dielectric fluid in which the electrical and/or electronic components (6) are able to be at least partially submerged, characterized in that the temperature-regulating means (12) comprise on the one hand a heat exchanger (24) able to be passed through by the dielectric fluid and a heat-transfer fluid, the heat exchanger (24) comprising at least a dielectric-fluid inlet (34) and a dielectric-fluid outlet (36), the temperature-regulating means (12) comprising on the other hand a system (26) for distributing the dielectric fluid that is placed at the dielectric-fluid outlet (36) of the heat exchanger (24) and that comprises at least two orifices (42) for spraying the dielectric fluid, the distributing system (26) participating in defining at least partially a duct (40) that extends in a main direction of elongation (A) in the extension of the dielectric-fluid outlet (36) of the heat exchanger (24), the duct (40) being configured so as to present to the dielectric fluid a variable flow cross section.

IPC 8 full level
H01M 10/613 (2014.01); **H01M 10/6556** (2014.01); **H01M 10/6557** (2014.01); **H01M 10/6568** (2014.01); **H05K 7/20** (2006.01)

CPC (source: EP)
H01M 10/613 (2015.04); **H01M 10/6556** (2015.04); **H01M 10/6557** (2015.04); **H01M 10/6568** (2015.04); **H05K 7/20236** (2013.01); **H05K 7/20763** (2013.01); **Y02E 60/10** (2013.01)

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

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
FR 3124320 A1 20221223; **FR 3124320 B1 20231020**; CN 117751482 A 20240322; EP 4360158 A1 20240501; WO 2022268582 A1 20221229

DOCDB simple family (application)
FR 2106559 A 20210621; CN 202280052475 A 20220614; EP 2022066219 W 20220614; EP 22733625 A 20220614