Title (en)

POWER ELECTRICAL APPARATUS COMPRISING TWO POWER ELECTRONIC MODULES AND AN INTEGRATED COOLING SYSTEM

Title (de)

LEISTUNGSELEKTROGERÄT MIT ZWEI LEISTUNGSELEKTRONIKMODULEN UND EINEM INTEGRIERTEN KÜHLSYSTEM

Title (fr)

EQUIPEMENT ÉLECTRIQUE DE PUISSANCE COMPRENANT DEUX MODULES ÉLECTRONIQUES DE PUISSANCE ET UN SYSTÈME DE REFROIDISSEMENT INTÉGRÉ

Publication

EP 4197302 A1 20230621 (FR)

Application

EP 21745794 A 20210716

Priority

- FR 2008488 A 20200813
- EP 2021069935 W 20210716

Abstract (en)

[origin: WO2022033803A1] The invention relates to a power electrical apparatus comprising a first electrical module (21) forming a power electronic module, a second electrical module (22) forming a power electronic module, a third electrical module (4) forming a capacitive module which comprises a plurality of electrical components and a housing, a cooling system, configured to cool said second electrical module (22), a connecting portion of the cooling circuit connecting a first (31) and a second (32) cooling module, said connecting portion providing a fluidic connection between said first (31) and said second (32) cooling module, said first and second cooling modules (31-32) being positioned on either side of said third electrical module (4), said first and second cooling modules (31-32) each having a portion extending beyond one and the same lateral face of said third electrical module (4), vertically in line therewith, said portions facing one another.

IPC 8 full level

H05K 7/20 (2006.01)

CPC (source: EP US)

H01L 23/473 (2013.01 - US); **H02M 3/003** (2021.05 - US); **H05K 7/20254** (2013.01 - US); **H05K 7/2089** (2013.01 - US); **H05K 7/20927** (2013.01 - EP US)

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)

WO 2022033803 A1 20220217; CN 116472787 A 20230721; EP 4197302 A1 20230621; FR 3113451 A1 20220218; US 2023309274 A1 20230928

DOCDB simple family (application)

EP 2021069935 W 20210716; CN 202180064337 A 20210716; EP 21745794 A 20210716; FR 2008488 A 20200813; US 202118041350 A 20210716