

Title (en)
PRESSURE EQUALIZATION DEVICE, METHOD FOR PRESSURE EQUALIZATION, AND HOUSING, IN PARTICULAR BATTERY HOUSING

Title (de)
DRUCKAUSGLEICHSEINRICHTUNG, VERFAHREN ZUM DRUCKAUSGLEICH UND GEHÄUSE, INSBESONDERE BATTERIEGEHÄUSE

Title (fr)
DISPOSITIF D'ÉQUILIBRAGE DE PRESSION, PROCÉDÉ D'ÉQUILIBRAGE DE PRESSION ET BOÎTIER, EN PARTICULIER BOÎTIER DE BATTERIE

Publication
EP 4252308 A1 20231004 (DE)

Application
EP 21815934 A 20211115

Priority
• DE 102020131594 A 20201130
• EP 2021081683 W 20211115

Abstract (en)
[origin: WO2022112036A1] The invention relates to a pressure equalization device (10) for a housing, in particular for a battery housing, having a main body (12), through which flow can pass, and having a closure element (32), wherein, in a normal operating state, a flow path (36) is opened up between the main body (12) and the closure element (32), and a flow opening (24) in the main body (12), which flow opening (24) is situated in the flow path (36), is spanned by a membrane (26), and wherein the pressure equalization device (10) is configured to change over to an emergency operating state after an emergency venting operation, in which emergency operating state the closure element (32) closes the main body (12). The invention furthermore relates to a housing having such a pressure equalization device (10). The invention furthermore relates to a method for pressure equalization between an interior space of such a housing and an environment (16), having the steps of performing an exchange of gas between the interior space (14) of the housing (18) and the surroundings through the membrane (26) and between the closure element (32) and the main body (12); performing an emergency venting operation; and closing the main body (12) by means of the closure element (32).

IPC 8 full level
H01M 50/308 (2021.01); **H01M 50/317** (2021.01); **H01M 50/333** (2021.01); **H01M 50/342** (2021.01); **H01M 50/375** (2021.01)

CPC (source: EP US)
F16K 17/0413 (2013.01 - US); **F16K 17/048** (2013.01 - US); **F16K 17/403** (2013.01 - US); **H01M 50/308** (2021.01 - EP); **H01M 50/317** (2021.01 - EP); **H01M 50/333** (2021.01 - EP); **H01M 50/3425** (2021.01 - EP US); **H01M 50/375** (2021.01 - EP); **Y02E 60/10** (2013.01 - EP)

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 2022112036 A1 20220602; CN 116601825 A 20230815; DE 102020131594 A1 20220602; EP 4252308 A1 20231004; US 2023291067 A1 20230914

DOCDB simple family (application)
EP 2021081683 W 20211115; CN 202180080373 A 20211115; DE 102020131594 A 20201130; EP 21815934 A 20211115; US 202318320985 A 20230521