

Title (en)
ELECTRIC MODULE COMPRISING A PLURALITY OF BATTERY CELLS SUBMERGED IN A DIELECTRIC FLUID

Title (de)
ELEKTRISCHES MODUL MIT MEHREREN IN EINER DIELEKTRISCHEN FLÜSSIGKEIT UNTERGETAUCHTEN BATTERIEZELLEN

Title (fr)
MODULE ELECTRIQUE COMPRENANT UNE PLURALITE DE CELLULES DE BATTERIES IMMERGEES DANS UN FLUIDE DIELECTRIQUE

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Application
EP 19774165 A 20190902

Priority
• FR 1857915 A 20180904
• FR 2019052019 W 20190902

Abstract (en)
[origin: WO2020049248A1] The present invention concerns an electric module comprising a housing (100) containing a plurality of battery cells, at least partially submerged in a dielectric fluid (140), having a liquid phase and having a boiling temperature at a reference pressure of between -40°C and 80°C, characterised in that it further comprises a deformable balloon (160) inside the module (1), connected to a reference pressure, such that the balloon compensates for variations in the internal gas and liquid volumes in order to prevent operation at a pressure lower than the reference pressure and maintain a pressure that is higher than the reference pressure by ensuring that the liquid volume of the dielectric fluid (140) is equal to the free internal volume of the module (1) minus the volume of the inflated balloon (160).

IPC 8 full level
H01M 10/651 (2014.01); **H01M 10/42** (2006.01); **H01M 10/48** (2006.01); **H01M 10/613** (2014.01); **H01M 10/625** (2014.01); **H01M 10/653** (2014.01); **H01M 10/6567** (2014.01); **H01M 10/6569** (2014.01); **H01M 50/213** (2021.01); **H01M 50/242** (2021.01); **H01M 50/271** (2021.01); **H01M 50/291** (2021.01); **H01M 50/293** (2021.01); **H01M 50/503** (2021.01)

CPC (source: EP US)
H01M 10/613 (2015.04 - EP); **H01M 10/625** (2015.04 - EP); **H01M 10/651** (2015.04 - EP); **H01M 10/653** (2015.04 - EP); **H01M 10/6567** (2015.04 - EP); **H01M 10/6569** (2015.04 - EP); **H01M 50/213** (2021.01 - EP US); **H01M 50/242** (2021.01 - EP US); **H01M 50/271** (2021.01 - EP US); **H01M 50/291** (2021.01 - EP US); **H01M 50/293** (2021.01 - EP US); **H01M 10/425** (2013.01 - EP); **H01M 10/48** (2013.01 - EP US); **H01M 10/486** (2013.01 - EP US); **H01M 10/643** (2015.04 - EP); **H01M 10/6568** (2015.04 - EP); **H01M 10/667** (2015.04 - EP); **H01M 50/503** (2021.01 - EP US); **H01M 2220/20** (2013.01 - EP); **Y02E 60/10** (2013.01 - EP)

Citation (search report)
See references of WO 2020049248A1

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