

Title (en)
BATTERY HAVING A THERMAL SWITCH

Title (de)
BATTERIE MIT THERMOSCHALTER

Title (fr)
BATTERIE À INTERRUPTEUR THERMIQUE

Publication
EP 2878019 A2 20150603 (DE)

Application
EP 13748278 A 20130725

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Abstract (en)
[origin: WO2014016382A2] The invention relates to a battery, comprising a housing, at least one individual cell having at least one positive and at least one negative electrode, the at least one individual cell being arranged in the housing, a positive tapping terminal, which is connected to the at least one positive electrode, and a negative tapping terminal, which is connected to the at least one negative electrode, and a method for safely operating such a battery. The battery is characterized in particular in that the battery comprises at least one thermal switch, which changes the switching state thereof in the event of a temperature rise within the housing beyond a temperature threshold value as the result of temperature-related expansion and/or deformation and in the process triggers a safety mechanism that prevents a further temperature rise.

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H01M 10/4235 (2013.01 - US); **H01M 10/48** (2013.01 - KR); **H01M 10/637** (2015.04 - US); **H01M 50/543** (2021.01 - KR); **H01M 50/578** (2021.01 - CN EP KR US); **H01M 50/581** (2021.01 - CN EP KR US); **H01M 10/48** (2013.01 - CN EP US); **H01M 50/55** (2021.01 - CN EP US); **H01M 50/553** (2021.01 - CN EP US); **H01M 2200/101** (2013.01 - CN EP KR US); **H01M 2200/103** (2013.01 - CN EP KR US); **H01M 2200/20** (2013.01 - CN EP KR US); **Y02E 60/10** (2013.01 - EP KR)

Citation (search report)
See references of WO 2014016382A2

Citation (examination)
• US 2011039147 A1 20110217 - CHEON SANG-EUN [KR], et al
• US 2010291421 A1 20101118 - BYUN SANG-WON [KR], et al
• US 2012183817 A1 20120719 - GUEN MINHUNG [KR], et al
• US 2010143786 A1 20100610 - KIM TAE-YONG [KR]
• US 2011183167 A1 20110728 - MOON JONGSEOK [KR], et al

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Designated extension state (EPC)
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