

Title (en)
BATTERY BASED ON ORGANOSULFUR SPECIES

Title (de)
AUF SCHWEFELOORGANISCHEN SPEZIES BASIERENDE BATTERIE

Title (fr)
BATTERIE BASÉE SUR DES ESPÈCES ORGANOSULFURÉES

Publication
EP 3548459 A4 20200722 (EN)

Application
EP 17875212 A 20171201

Priority
• US 201615367379 A 20161202
• US 2017064185 W 20171201

Abstract (en)
[origin: WO2018102667A1] Metal-sulfur batteries, such as lithium-sulfur batteries, are prepared using one or more organosulfur species such as organic polysulfides and organic polythiolates as part of the liquid or gel electrolyte solution, as part of the cathode, as part of the anode (or used to treat the anode), and/or as part of a functionalized porous polymer providing an intermediate separator element.

IPC 8 full level
C07C 39/06 (2006.01); **C07C 39/373** (2006.01); **C07C 321/24** (2006.01); **H01M 4/02** (2006.01); **H01M 4/60** (2006.01); **H01M 10/052** (2010.01); **H01M 50/414** (2021.01)

CPC (source: EP KR RU US)
C07C 321/14 (2013.01 - EP KR); **C07C 323/12** (2013.01 - EP KR); **H01M 4/13** (2013.01 - EP KR); **H01M 4/134** (2013.01 - EP KR); **H01M 4/136** (2013.01 - EP KR); **H01M 4/38** (2013.01 - EP KR); **H01M 4/581** (2013.01 - EP KR); **H01M 4/5815** (2013.01 - EP KR); **H01M 4/60** (2013.01 - EP KR); **H01M 6/16** (2013.01 - KR RU); **H01M 10/052** (2013.01 - EP KR); **H01M 10/054** (2013.01 - EP KR); **H01M 10/056** (2013.01 - EP KR); **H01M 10/0567** (2013.01 - KR RU); **H01M 10/0568** (2013.01 - KR RU); **H01M 50/414** (2021.01 - EP KR RU US); **H01M 50/446** (2021.01 - EP KR); **H01M 2220/30** (2013.01 - EP KR); **H01M 2300/0025** (2013.01 - EP KR); **H01M 2300/0085** (2013.01 - EP KR); **Y02E 60/10** (2013.01 - EP KR)

Citation (search report)
• [X] WO 2013155038 A1 20131017 - ARKEMA INC [US]
• [X] US 4833048 A 19890523 - DEJONGHE LUTGARD C [US], et al
• [X] WO 0135483 A1 20010517 - MOLTECH CORP [US]
• See references of WO 2018102667A1

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

DOCDB simple family (publication)
WO 2018102667 A1 20180607; BR 112019011107 A2 20191008; BR 112019011107 B1 20220830; CA 3045463 A1 20180607; CN 110023275 A 20190716; CN 110023275 B 20221129; EP 3548459 A1 20191009; EP 3548459 A4 20200722; JP 2020501314 A 20200116; KR 102600942 B1 20231114; KR 20190083672 A 20190712; RU 2019120395 A 20210111; RU 2019120395 A3 20210722; RU 2755479 C2 20210916; SG 10202006657S A 20200828

DOCDB simple family (application)
US 2017064185 W 20171201; BR 112019011107 A 20171201; CA 3045463 A 20171201; CN 201780074924 A 20171201; EP 17875212 A 20171201; JP 2019529905 A 20171201; KR 20197018913 A 20171201; RU 2019120395 A 20171201; SG 10202006657S A 20171201