

Title (en)
POLYMERS BASED ON IONIC MONOMERS, COMPOSITIONS COMPRISING SAME, METHODS FOR MANUFACTURING SAME, AND USE THEREOF IN ELECTROCHEMICAL APPLICATIONS

Title (de)
POLYMERE AUF DER BASIS VON IONISCHEN MONOMEREN, ZUSAMMENSETZUNGEN DAMIT, HERSTELLUNGSVERFAHREN DAFÜR UND VERWENDUNG DAVON IN ELEKTROCHEMISCHEN ANWENDUNGEN

Title (fr)
POLYMÈRES À BASE DE MONOMÈRES IONIQUES, LES COMPOSITIONS LES COMPRENANT, LEURS PROCÉDÉS DE FABRICATION ET LEUR UTILISATION DANS DES APPLICATIONS ÉLECTROCHIMIQUES

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Application
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Priority

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- CA 2021050071 W 20210122

Abstract (en)
[origin: EP3854835A1] The present technology relates to an ionic polymer comprising at least one repeating unit comprising the reaction product between at least one compound comprising two or more functional groups and a metal bis(halosulfonyl)imide for use in electrochemical applications, particularly in electrochemical accumulators such as batteries, electrochromic devices, and supercapacitors. The present technology also relates to a polymer composition, a solid polymer electrolyte composition, a solid polymer electrolyte, an electrode material comprising said ionic polymer. Their uses in electrochemical cells and electrochemical accumulators as well as their processes of manufacturing are also described.

IPC 8 full level
C08G 75/30 (2006.01); **C08L 81/10** (2006.01); **H01L 21/00** (2006.01); **H01M 10/00** (2006.01)

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C08G 65/34 (2013.01 - US); **C08G 65/4031** (2013.01 - KR); **C08G 65/4056** (2013.01 - KR); **C08G 75/30** (2013.01 - EP KR); **C08K 3/22** (2013.01 - KR); **C08K 3/36** (2013.01 - KR); **C08L 71/12** (2013.01 - KR); **C08L 81/10** (2013.01 - EP KR); **H01G 11/38** (2013.01 - EP KR); **H01G 11/56** (2013.01 - EP KR); **H01M 4/0404** (2013.01 - US); **H01M 4/131** (2013.01 - EP KR); **H01M 4/366** (2013.01 - EP KR US); **H01M 4/485** (2013.01 - EP KR); **H01M 4/5825** (2013.01 - US); **H01M 4/583** (2013.01 - US); **H01M 4/62** (2013.01 - EP KR); **H01M 4/622** (2013.01 - EP KR US); **H01M 4/625** (2013.01 - EP KR US); **H01M 10/052** (2013.01 - EP KR); **H01M 10/0525** (2013.01 - EP KR US); **H01M 10/054** (2013.01 - EP); **H01M 10/0565** (2013.01 - EP KR); **C08G 2650/36** (2013.01 - US); **C08G 2650/38** (2013.01 - US); **C08G 2650/50** (2013.01 - US); **C08G 2650/54** (2013.01 - US); **H01M 2004/027** (2013.01 - EP KR US); **H01M 2004/028** (2013.01 - KR); **H01M 2300/0082** (2013.01 - EP KR); **H01M 2300/0085** (2013.01 - US); **H01M 2300/0091** (2013.01 - EP KR); **Y02E 60/10** (2013.01 - EP KR); **Y02E 60/13** (2013.01 - EP KR)

Citation (search report)

- [X] JP 2003215791 A 20030730 - CENTRAL GLASS CO LTD
- [X] CN 1320979 A 20011107 - UNIV HUAZHONG SCIENCE TECH [CN]
- [X] JP H10168194 A 19980623 - TOYOTA MOTOR CORP
- [X] US 6235921 B1 20010522 - KOBAYASHI HIROSHI [JP], et al
- [X] JIN N ET AL: "Synthesis of new polyfluorinated nitrogen acids bis(polyfluoroalkoxy)sulfonylamines", JOURNAL OF FLUORINE CHEMISTRY, ELSEVIER, NL, vol. 87, no. 1, 2 January 1998 (1998-01-02), pages 45 - 47, XP004108767, ISSN: 0022-1139, DOI: 10.1016/S0022-1139(97)00103-6
- [X] LIU DA-FAN ET AL: "New type of lithium poly(polyfluoroalkoxy)sulfonylimides as salts for PEO-based solvent-free electrolytes", JOURNAL OF APPLIED POLYMER SCIENCE, vol. 82, no. 8, 21 November 2001 (2001-11-21), US, pages 1882 - 1885, XP055798086, ISSN: 0021-8995, DOI: 10.1002/app.2032
- See also references of WO 2021146815A1

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EP 20206000 A 20201105; CA 2021050071 W 20210122; CA 3163834 A 20210122; CN 202180010617 A 20210122; EP 21743892 A 20210122; JP 2022544291 A 20210122; KR 20227029291 A 20210122; US 202117758365 A 20210122