

Title (en)

GEL POLYMER ELECTROLYTE COMPOSITION AND APPLICATIONS THEREOF

Title (de)

GELPOLYMERELEKTROLYTZUSAMMENSETZUNG UND ANWENDUNGEN DAVON

Title (fr)

COMPOSITION D'ÉLECTROLYTE POLYMÈRE EN GEL ET APPLICATIONS ASSOCIÉES

Publication

**EP 4364227 A1 20240508 (EN)**

Application

**EP 22747558 A 20220628**

Priority

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- US 2022073222 W 20220628

Abstract (en)

[origin: WO2023278996A1] The disclosure relates to a gel polymer electrolyte (GPE) for use with an electrochemical cell, e.g., a lithium ion battery. The GPE comprises a polymer matrix containing a sulfonated block copolymer and water in salt electrolyte (WiSE). The GPE is characterized as being stable in an electrochemical cell environment, with enhanced ionic conductivity and ionic barrier properties. the WiSE is a metal salt having a salt concentration above saturation point. The polymer matrix is characterized as having an ion exchange capacity (IEC) of at least 0.5 meg/g.

IPC 8 full level

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CPC (source: EP)

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