

Title (en)
MECHANICALLY STABILIZED POLYAZOLES

Title (de)
MECHANISCH STABILISIERTE POLYAZOLE

Title (fr)
POLYAZOLES MÉCANIQUEMENT STABILISÉS

Publication
EP 2576670 A4 20131218 (EN)

Application
EP 11789338 A 20110530

Priority

- US 34991210 P 20100531
- EP 10164510 A 20100531
- IB 2011052366 W 20110530
- EP 11789338 A 20110530

Abstract (en)
[origin: WO2011151775A1] A process for preparing mechanically stabilized polyazoles, comprising the following steps: I) treating at least one polyazole having at least one amino group in a repeat unit with a solution comprising (i) at least one strong acid and (ii) at least one stabilizing reagent, the total content of stabilizing reagents in the solution being in the range from 0.01 to 30% by weight, II) performing the stabilization reaction directly and/or in a subsequent processing step by heating to a temperature greater than 25°C, using at least one high-functionality polyether as the stabilizing reagent. The polyazoles thus obtainable are notable especially for a high conductivity and a very good mechanical stability. They are therefore especially suitable for applications in fuel cells.

IPC 8 full level
C08J 5/22 (2006.01); **H01M 8/10** (2006.01)

CPC (source: EP US)
B01D 67/00113 (2022.08 - EP US); **B01D 71/62** (2013.01 - EP); **B01D 71/82** (2013.01 - EP); **H01M 8/103** (2013.01 - EP); **H01M 8/1044** (2013.01 - EP); **H01M 8/1048** (2013.01 - EP); **H01M 8/1072** (2013.01 - EP); **B01D 2325/14** (2013.01 - EP); **Y02E 60/50** (2013.01 - EP); **Y02P 70/50** (2015.11 - EP)

Citation (search report)

- [X] US 2005074654 A1 20050407 - KIEFER JOACHIM [DE], et al
- [A] WO 2009101141 A1 20090820 - BASF SE [DE], et al
- See also references of WO 2011151775A1

Cited by
WO2016205973A1

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 2011151775 A1 20111208; EP 2576670 A1 20130410; EP 2576670 A4 20131218

DOCDB simple family (application)
IB 2011052366 W 20110530; EP 11789338 A 20110530