

Title (en)

ION-EXCHANGE MEMBRANE MADE OF A BIAXIALLY STRETCHED BETA-POROUS FILM

Title (de)

IONENAUSTAUSCHER-MEMBRAN AUS BIAKAL VERSTRECKER BETA-PORÖSER FOLIE

Title (fr)

MEMBRANE ÉCHANGEUSE D'IONS COMPOSÉE D'UN FILM POREUX BETA ÉTIRÉ BIAXIALEMENT

Publication

**EP 3083782 A1 20161026 (DE)**

Application

**EP 14824372 A 20141216**

Priority

- DE 102013021292 A 20131219
- EP 2014003383 W 20141216

Abstract (en)

[origin: WO2015090571A1] The invention relates to an ion-exchange membrane made of a biaxially oriented mono- or multilayer β-porous polypropylene film which contains at least one β-nucleating agent and an ion-conducting polymer and which has a Gurley number of at least 10.000 s.

IPC 8 full level

**C08J 5/22** (2006.01); **B01D 71/00** (2006.01); **H01M 8/10** (2006.01)

CPC (source: EP KR US)

**B29C 48/0018** (2019.01 - EP KR US); **B29C 55/14** (2013.01 - KR US); **C08J 5/22** (2013.01 - EP KR US); **C08J 5/2231** (2013.01 - EP KR US); **C08L 23/12** (2013.01 - KR); **H01M 8/1011** (2013.01 - EP KR US); **H01M 8/1023** (2013.01 - EP KR US); **H01M 8/1025** (2013.01 - KR); **H01M 8/103** (2013.01 - KR); **H01M 8/1039** (2013.01 - EP KR US); **H01M 8/1053** (2013.01 - EP KR US); **H01M 8/106** (2013.01 - EP KR US); **H01M 8/1067** (2013.01 - EP KR US); **H01M 8/1081** (2013.01 - EP KR US); **H01M 8/1083** (2013.01 - KR US); **H01M 8/1086** (2013.01 - KR US); **H01M 8/188** (2013.01 - EP KR US); **H01M 8/20** (2013.01 - KR US); **H01M 50/411** (2021.01 - KR); **H01M 50/449** (2021.01 - KR); **B29K 2023/12** (2013.01 - KR US); **B29L 2031/3468** (2013.01 - KR US); **B29L 2031/755** (2013.01 - KR US); **C08J 2323/10** (2013.01 - EP KR US); **C08J 2323/12** (2013.01 - KR US); **H01M 8/1025** (2013.01 - EP US); **H01M 8/103** (2013.01 - EP US); **H01M 2008/1095** (2013.01 - EP KR US); **H01M 2300/008** (2013.01 - EP KR US); **H01M 2300/0082** (2013.01 - KR US); **Y02E 60/10** (2013.01 - EP KR); **Y02E 60/50** (2013.01 - KR US); **Y02P 70/50** (2015.11 - KR US)

Citation (search report)

See references of WO 2015090571A1

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**WO 2015090571 A1 20150625**; CA 2934381 A1 20150625; CN 105829411 A 20160803; EP 3083782 A1 20161026; JP 2017503054 A 20170126; KR 20160102187 A 20160829; MX 2016008147 A 20160914; US 10340544 B2 20190702; US 2016322662 A1 20161103

DOCDB simple family (application)

**EP 2014003383 W 20141216**; CA 2934381 A 20141216; CN 201480068446 A 20141216; EP 14824372 A 20141216; JP 2016541393 A 20141216; KR 20167016151 A 20141216; MX 2016008147 A 20141216; US 201415105286 A 20141216