

Title (en)
CATION EXCHANGE POLYMERS AND ANION EXCHANGE POLYMERS AND CORRESPONDING (BLEND) MEMBRANES MADE OF POLYMERS CONTAINING HIGHLY FLUORINATED AROMATIC GROUPS, BY WAY OF NUCLEOPHILIC SUBSTITUTION

Title (de)
KATIONENAUSTAUSCHER- UND ANIONENAUSTAUSCHERPOLYMERE UND -(BLEND)MEMBRANEN AUS HOCHFLUORIERTE AROMATISCHE GRUPPEN ENTHALTENDEN POLYMEREN MITTELS NUCLEOPHILER SUBSTITUTION

Title (fr)
POLYMÈRES ÉCHANGEURS DE CATIONS ET POLYMÈRES ÉCHANGEURS D'ANIONS ET MEMBRANES (MIXTES) CORRESPONDANTES CONSTITUÉES DE POLYMÈRES CONTENANT DES GROUPES AROMATIQUES HAUTEMENT FLUORÉS, PAR SUBSTITUTION NUCLÉOPHILE

Publication
EP 4061879 A1 20220928 (DE)

Application
EP 20810888 A 20201117

Priority
• DE 102019008024 A 20191118
• EP 2020082403 W 20201117

Abstract (en)
[origin: CA3158871A1] The present invention relates to new anion exchange polymers and corresponding (blend) membranes made of polymers containing highly fluorinated groups, by way of nucleophilic substitution, and method for producing same by way of nucleophilic aromatic substitution, and their use in membrane processes, in particular electrochemical membrane processes such as in fuel cells, in electrolysis and in redox flow batteries.

IPC 8 full level
C08J 9/28 (2006.01); **B01D 71/32** (2006.01); **C08F 8/30** (2006.01); **C08F 12/20** (2006.01); **C08G 73/00** (2006.01); **C08L 25/18** (2006.01); **H01M 8/1039** (2016.01)

CPC (source: EP KR US)
B01D 61/44 (2013.01 - US); **B01D 67/0006** (2013.01 - EP); **B01D 67/00931** (2022.08 - US); **B01D 71/32** (2013.01 - EP US); **B01D 71/36** (2013.01 - EP); **B01D 71/82** (2013.01 - EP US); **B01J 41/07** (2017.01 - US); **B01J 41/14** (2013.01 - US); **B01J 47/12** (2013.01 - US); **C08F 8/30** (2013.01 - EP KR); **C08F 12/20** (2013.01 - KR); **C08F 112/20** (2020.02 - KR); **C08F 212/20** (2020.02 - KR); **C08J 5/2237** (2013.01 - US); **C08J 5/225** (2013.01 - EP KR); **C08J 7/12** (2013.01 - US); **C08J 9/28** (2013.01 - EP); **C25B 13/08** (2013.01 - EP US); **H01M 8/1023** (2013.01 - EP KR); **H01M 8/1027** (2013.01 - EP KR); **H01M 8/1032** (2013.01 - EP KR US); **H01M 8/1039** (2013.01 - EP KR US); **H01M 8/1044** (2013.01 - EP KR); **H01M 8/1081** (2013.01 - EP KR); **H01M 8/188** (2013.01 - EP KR US); **H01M 8/227** (2013.01 - EP KR); **B01D 2323/30** (2013.01 - EP US); **C08J 2325/18** (2013.01 - EP US); **H01M 2008/1095** (2013.01 - US); **H01M 2300/0082** (2013.01 - EP); **H01M 2300/0091** (2013.01 - EP US); **Y02E 60/50** (2013.01 - EP)

C-Set (source: EP)
1. **C08F 8/30 + C08F 112/20**
2. **C08F 8/30 + C08F 212/20**
3. **C08F 8/30 + C08F 12/20**

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)
DE 102019008024 A1 20210520; CA 3158871 A1 20210527; CN 114945627 A 20220826; CN 114945627 B 20240524; EP 4061879 A1 20220928; JP 2023503064 A 20230126; KR 20220105654 A 20220727; US 2023014901 A1 20230119; WO 2021099315 A1 20210527

DOCDB simple family (application)
DE 102019008024 A 20191118; CA 3158871 A 20201117; CN 202080092440 A 20201117; EP 2020082403 W 20201117; EP 20810888 A 20201117; JP 2022529056 A 20201117; KR 20227020556 A 20201117; US 202017777397 A 20201117