

Title (en)

METHOD FOR MANUFACTURING A MEMBRANE WITH HIGH PERCOLATION POWER

Title (de)

VERFAHREN ZUR HERSTELLUNG EINER MEMBRAN MIT HOHER PERKOLATIONSLEISTUNG

Title (fr)

PROCÉDÉ DE FABRICATION D'UNE MEMBRANE À HAUT POUVOIR DE PERCOLATION

Publication

EP 3959004 A1 20220302 (FR)

Application

EP 20731529 A 20200424

Priority

- FR 1904290 A 20190424
- FR 2020050701 W 20200424

Abstract (en)

[origin: WO2020217029A1] The invention relates to a method for manufacturing a membrane (1), which comprises the following steps: a) a mixture is prepared that contains at least: - an aqueous solution of cationic polymer with a pH between 5 and 8, the cationic polymer having positively charged groups in said aqueous solution; an aqueous solution of anionic polymer, the anionic polymer having negatively charged groups in said aqueous solution; b) the mixture is agitated; c) the mixture is allowed to mature in order to cause ionic interaction between the positively charged groups of the cationic polymer and the negatively charged groups of the anionic polymer, until a membrane in the form of a hydrogel is obtained within the mixture; d) at least one crosslinking agent is added in such a way as to crosslink the membrane; e) the crosslinked membrane that was obtained is dried after step d). The invention also relates to the use of this membrane (1) for treating liquid or gaseous effluents, and as antimicrobial support or for heterogeneous catalysis.

IPC 8 full level

B01D 67/00 (2006.01); **B01D 69/14** (2006.01); **B01D 71/08** (2006.01); **B01D 71/60** (2006.01); **B01J 8/00** (2006.01); **B01J 20/26** (2006.01); **B01J 20/28** (2006.01); **B01J 23/44** (2006.01); **B01J 23/96** (2006.01); **B01J 35/06** (2006.01); **B01J 35/10** (2006.01); **B01J 37/02** (2006.01); **B01J 37/03** (2006.01); **B01J 38/48** (2006.01); **C08J 3/075** (2006.01)

CPC (source: EP US)

B01D 67/0006 (2013.01 - EP US); **B01D 69/145** (2013.01 - EP); **B01D 69/148** (2013.01 - EP US); **B01D 71/08** (2013.01 - EP US); **B01D 71/601** (2022.08 - EP US); **B01J 20/103** (2013.01 - EP); **B01J 20/20** (2013.01 - EP); **B01J 20/267** (2013.01 - EP); **B01J 20/28011** (2013.01 - EP); **B01J 20/28028** (2013.01 - EP); **B01J 20/28033** (2013.01 - EP); **B01J 20/28047** (2013.01 - EP); **B01J 20/28078** (2013.01 - EP); **B01J 23/44** (2013.01 - EP); **B01J 23/96** (2013.01 - EP); **B01J 35/59** (2024.01 - EP); **B01J 35/60** (2024.01 - EP); **B01J 37/0201** (2013.01 - EP); **B01J 37/036** (2013.01 - EP); **B01J 38/48** (2013.01 - EP); **C08J 3/075** (2013.01 - EP); **B01D 2323/30** (2013.01 - US); **B01D 2325/02** (2013.01 - EP US); **B01D 2325/30** (2013.01 - EP); **B01D 2325/48** (2013.01 - EP US); **C08J 2305/04** (2013.01 - EP); **C08J 2479/02** (2013.01 - EP); **Y02P 20/584** (2015.11 - EP)

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 2020217029 A1 20201029; EP 3959004 A1 20220302; FR 3095353 A1 20201030; FR 3095353 B1 20230414; US 2022193617 A1 20220623

DOCDB simple family (application)

FR 2020050701 W 20200424; EP 20731529 A 20200424; FR 1904290 A 20190424; US 202017604906 A 20200424