

Title (en)

ELEMENT FOR SEPARATING A LIQUID MEDIUM WITH HIGH PARIETAL SHEAR STRESS

Title (de)

ELEMENT ZUR TRENNUNG EINES FLÜSSIGEN MEDIUMS MIT HOHER PARIETALER SCHERSpannung

Title (fr)

ELEMENT DE SEPARATION D'UN MILIEU LIQUIDE A CONTRAINTE DE CISAILLEMENT PARIETALE ELEVEE

Publication

EP 4247524 A1 20230927 (FR)

Application

EP 21830448 A 20211119

Priority

- FR 2012009 A 20201123
- FR 2021052038 W 20211119

Abstract (en)

[origin: CA3196863A1] The subject of the invention relates to a separating element comprising: - an inorganic one-piece rigid porous support (2) having, on one side, a first outer planar surface (3) and, on an opposite side, a second outer planar surface (4); - at least two circulation ducts (6) for the liquid medium that are formed in the porous support so as to each have a rectangular cross section; - at least one internal connection system for the distribution (10) of the liquid medium in a series of circulation ducts, and at least one internal connection system for the collection (12) of the retentate coming from the series of circulation ducts, the internal connection system for the distribution (10), the circulation ducts (6) and the internal connection system for the collection (12) being provided with at least one separating layer continuously deposited between the inlet (11) and the outlet (13) of the porous support; - and a collection system (7) for the permeate that has passed through the separating layer or layers.

IPC 8 full level

B01D 63/06 (2006.01); **B01D 46/24** (2006.01); **B01D 67/00** (2006.01); **B01J 20/28** (2006.01); **B33Y 80/00** (2015.01); **C04B 38/00** (2006.01); **F01N 3/022** (2006.01); **C04B 111/00** (2006.01)

CPC (source: EP KR US)

B01D 63/066 (2013.01 - EP KR US); **B01D 67/00045** (2022.08 - EP); **B01D 67/0041** (2013.01 - EP KR); **B01D 67/00415** (2022.08 - EP US); **B33Y 80/00** (2014.12 - EP); **C04B 38/0054** (2013.01 - EP KR); **B33Y 80/00** (2014.12 - US); **C04B 2111/00793** (2013.01 - EP KR)

C-Set (source: EP)

C04B 38/0054 + C04B 35/00 + C04B 38/0058 + C04B 38/0074

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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

FR 3116446 A1 20220527; **FR 3116446 B1 20221125**; AR 124106 A1 20230215; AU 2021383406 A1 20230615; CA 3196863 A1 20220527; CN 116472099 A 20230721; EP 4247524 A1 20230927; JP 2023551205 A 20231207; KR 20230113583 A 20230731; MX 2023005173 A 20230720; US 2023405529 A1 20231221; WO 2022106786 A1 20220527

DOCDB simple family (application)

FR 2012009 A 20201123; AR P210103205 A 20211119; AU 2021383406 A 20211119; CA 3196863 A 20211119; CN 202180078746 A 20211119; EP 21830448 A 20211119; FR 2021052038 W 20211119; JP 2023530828 A 20211119; KR 20237021419 A 20211119; MX 2023005173 A 20211119; US 202118250819 A 20211119