

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
17 March 2022 (17.03.2022)



(10) International Publication Number
WO 2022/056332 A1

(51) International Patent Classification:

B01D 15/22 (2006.01) *B01D 71/26* (2006.01)
B01D 15/38 (2006.01) *B01J 20/28* (2006.01)
B01D 63/08 (2006.01) *B01J 20/286* (2006.01)
B01D 63/10 (2006.01) *G01N 30/60* (2006.01)
B01D 69/02 (2006.01)

(21) International Application Number:

PCT/US2021/049970

(22) International Filing Date:

10 September 2021 (10.09.2021)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/077,523 11 September 2020 (11.09.2020) US
63/159,621 11 March 2021 (11.03.2021) US

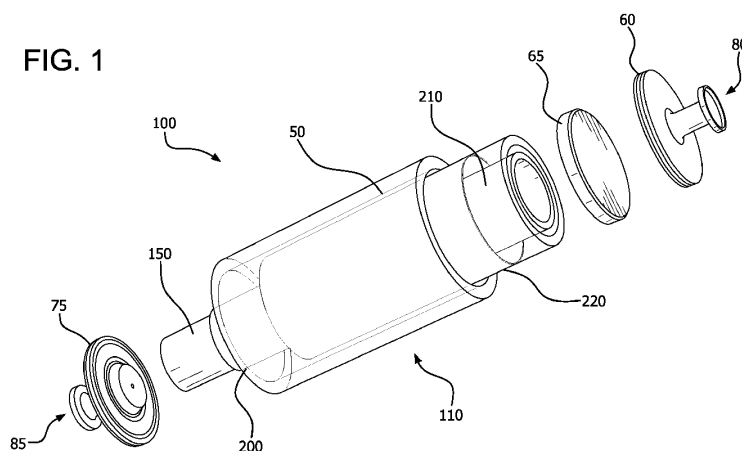
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(54) Title: AFFINITY CHROMATOGRAPHY DEVICES CONTAINING A HEAT TREATED FIBRILLATED POLYMER MEMBRANE AND MANIFOLDS CONTAINING THE SAME

FIG. 1



(57) Abstract: Affinity chromatography devices that include a fibrillated heat treated polymer membrane that contains inorganic particles having a spherical shape and a particle size distribution that has a D90/D10 less than or equal to 3 are disclosed. A blend or combination of spherical inorganic particles having a nominal particle size from about 5 microns to about 20 microns may be utilized. Also, the devices have a hydraulic permeability from about 200 ($\times 10^{-12} \text{ cm}^2$) to about 700 ($\times 10^{-12} \text{ cm}^2$). The affinity chromatography devices have a dynamic binding capacity (DBC) greater than 35 mg/ml at 10% breakthrough at a residence time of 20 seconds. Additionally, the affinity chromatography devices have a cycling durability of at least 100 cycles without exceeding an operating

[Continued on next page]

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, IT, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*

Published:

— *with international search report (Art. 21(3))*

pressure of 0.3 MPa. Manifolds containing multiple affinity chromatography devices and manifolds in a parallel configuration are also disclosed.