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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
31 December 2014 (31.12.2014)

WIPO | PCT

(10) International Publication Number
WO 2014/207763 A1

(51) **International Patent Classification**:
C07K 1/36 (2006.01) *C07K 16/00* (2006.01)

(21) **International Application Number**:
PCT/IN2014/000421

(22) **International Filing Date**:
25 June 2014 (25.06.2014)

(25) **Filing Language**: English

(26) **Publication Language**: English

(30) **Priority Data**:
2145/MUM/2013 25 June 2013 (25.06.2013) IN

(71) **Applicant**: **CADILA HEALTHCARE LIMITED** [IN/IN]; Zydus Tower, Satellite Cross Roads, Ahmedabad - 380015, Gujarat (IN).

(72) **Inventors**: **MENDIRATTA, Sanjeev Kumar**; Cadila Healthcare Limited, Zydus Tower, Satellite Cross Roads, Ahmedabad-380015, Gujarat (IN). **BANDYOPADHYAY, Sanjay**; Cadila Healthcare Limited, Zydus Tower, Satellite Cross Roads, Ahmedabad-380015, Gujarat (IN). **SINGH, Avanish Kumar**; Cadila Healthcare Limited, Zydus Tower, Satellite Cross Roads, Ahmedabad-380015, Gujarat (IN).

(74) **Agents**: **CHAUDHRY, Mansi** et al.; Subramaniam & Associates, Central Square, Suite- 328, Plaza III, 20 Manoharlal, Khurana Marg, Bara Hindu Rao (off Rani Jhansi Road), Delhi - 110006 (IN).

(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, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, 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, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, 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, 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))*

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

WO 2014/207763 A1

(54) **Title**: PURIFICATION PROCESS FOR MONOCLONAL ANTIBODIES

(57) **Abstract**: The present invention provides an improved method for the purification of monoclonal antibody from cell culture. Process of purification of the desired monoclonal antibody comprises affinity, hydrophobic interaction and optionally ion exchange column chromatography. It provides more than 99% purity of the desired monoclonal antibody.