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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
18 September 2014 (18.09.2014)

WIPO | PCT

(10) International Publication Number
WO 2014/140921 A3

(51) International Patent Classification:
C12N 5/0789 (2010.01) *C12N 5/00* (2006.01)
C12N 5/071 (2010.01)

(21) International Application Number:
PCT/IB2014/001200

(22) International Filing Date:
14 March 2014 (14.03.2014)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/801,280 15 March 2013 (15.03.2013) US

(72) Inventors; and
(71) Applicants : **LARSSON, Marcus Kare, Torleif** [SE/SE]; Norra Villavagen 7b, S-23734 Bjarred (SE). **HERBST, Andreas Nils, Walter** [SE/SE]; Anna Sommerskas Vag 4, S-23734 Bjarred (SE). **WOODS, Niels-bjarne, Roland** [CA/SE]; Kavlingevagen 8, S-24460 Furulund (SE).

(74) Agent: **WITTE, WELLER & PARTNER PATENTANWÄLTE**; Partnerschaftsgesellschaft mbB, Königstrasse 5, 70173 Stuttgart (DE).

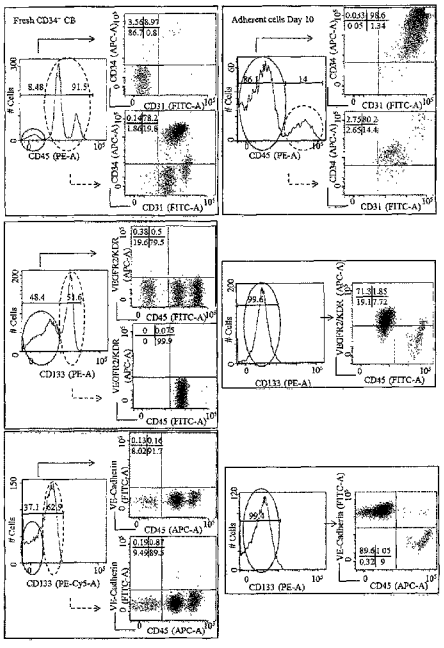
(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, 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).

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

(88) Date of publication of the international search report:
16 April 2015

(54) Title: CELLS, METHODS AND APPARATUSES FOR UMBILICAL CORD BLOOD COLLECTION AND ISOLATION OF CELLS



(57) Abstract: The invention relates to method for the separation of cord blood endothelial cells from hematopoietic cells in a manner that preserves the hematopoietic cells' repopulating ability and primitivity, without significantly reducing the yield of hematopoietic cells. The said endothelial cells from cord blood have a utility in cell based therapeutics. The system described takes advantage of the endogenous adherence properties of the cells to facilitate the separation and separate storage of the cell types.

WO 2014/140921 A3