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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
24 May 2007 (24.05.2007)

PCT

(10) International Publication Number
WO 2007/059501 A3

(51) International Patent Classification:
C12N 5/08 (2006.01)

(21) International Application Number:
PCT/US2006/060904

(22) International Filing Date:
15 November 2006 (15.11.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/736,873 16 November 2005 (16.11.2005) US

(71) Applicant *(for all designated States except US)*: **UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL** [US/US]; 308 Bynum Hall, Campus Box 4105, Chapel Hill, NC 27599 (US).

(72) Inventors; and
(75) Inventors/Applicants *(for US only)*: **MCCLELLAND, Randall, E.** [US/US]; 102 Apt. B. Melrose Place, Chapel Hill, NC 27516 (US). **REID, Lola, M.** [US/US]; 3621 Sweeten Creek Road, Chapel Hill, NC 27514 (US).

(74) Agents: **VILLACORTA, Gilberto, M.** et al.; WASHINGTON HARBOUR, 3000 K St., NW, Suite 500, Washington, DC 20007 (US).

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

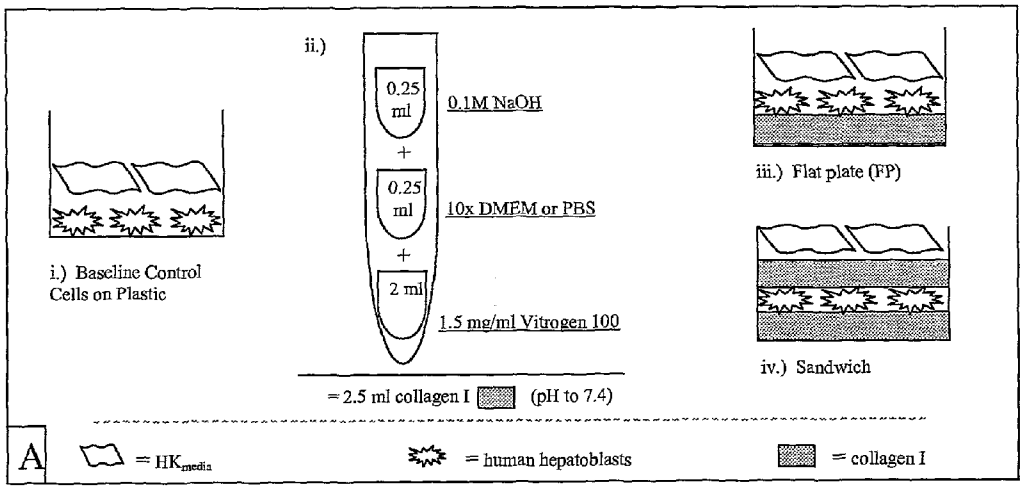
(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— *with international search report*
— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

(88) Date of publication of the international search report:
13 September 2007

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: EXTRACELLULAR MATRIX COMPONENTS FOR EXPANSION OR DIFFERENTIATION OF HEPATIC PROGENITORS



(57) Abstract: A method is provided of propagating hepatic progenitors *in vitro* on or in one or multiple extracellular matrix components found in the stem cell compartment or niche of liver. A container for the propagation of the progenitors and comprising culture dishes, bioreactors, or lab chips.

WO 2007/059501 A3