

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
31 July 2008 (31.07.2008)

PCT

(10) International Publication Number
WO 2008/091908 A2

(51) International Patent Classification:

C12N 5/06 (2006.01) **G01N 33/574** (2006.01)
A61K 39/00 (2006.01) **A61P 37/00** (2006.01)
A61K 35/00 (2006.01)

(21) International Application Number:

PCT/US2008/051730

(22) International Filing Date: 22 January 2008 (22.01.2008)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/881,497	22 January 2007 (22.01.2007)	US
60/907,180	23 March 2007 (23.03.2007)	US
60/924,247	4 May 2007 (04.05.2007)	US
60/950,714	19 July 2007 (19.07.2007)	US
60/972,613	14 September 2007 (14.09.2007)	US

(71) Applicant (for all designated States except US): **RAVEN BIOTECHNOLOGIES** [US/US]; One Corporate Drive, South San Francisco, CA 94080 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **MATHER, Jennie P.** [—/US]; One Corporate Drive, South San Francisco, CA 94080 (US). **ROBERTS, Penelope** [—/US]; One Corporate Drive, South San Francisco, CA 94080 (US).

(74) Agents: **AMAYA, Edward I.** et al.; Cooley Godward Kronish, 777 6th Street, NW, Suite 1100, Washington, DC 20001 (US).

(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, BR, BW, BY, BZ, CA, CH, 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, IS, JP, KE, KG, KM, 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, 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, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, 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:

— without international search report and to be republished upon receipt of that report

(54) Title: HUMAN CANCER STEM CELLS

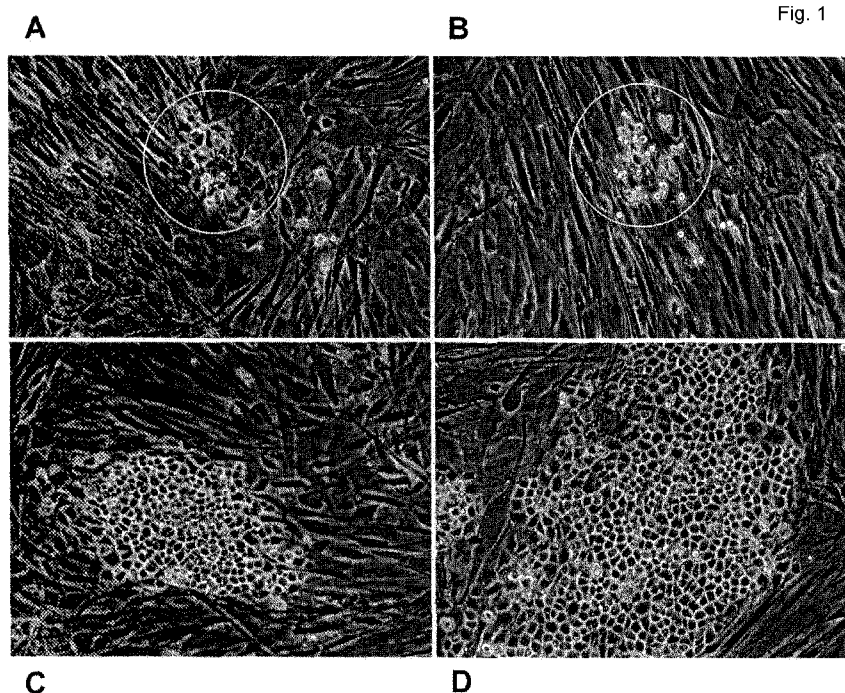


Fig. 1

(57) Abstract: This invention discloses isolated populations of human cancer stem cells. Methods for characterizing, isolating and culturing human cancer stem cells are also disclosed. Uses for human cancer stem cells are provided.