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

(19) World Intellectual Property Organization
International Bureau

162162

(43) International Publication Date
22 November 2001 (22.11.2001)

PCT

(10) International Publication Number
WO 01/88104 A2

(51) International Patent Classification[7]: C12N 5/06, 1/36, 15/11, C12Q 1/68, A61K 35/30, A61P 25/00

(21) International Application Number: PCT/US01/15861

(22) International Filing Date: 16 May 2001 (16.05.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/205,600 17 May 2000 (17.05.2000) US
60/257,608 22 December 2000 (22.12.2000) US

(71) Applicant *(for all designated States except US)*: GERON CORPORATION [US/US]; 230 Constitution Drive, Menlo Park, CA 94025 (US).

(72) Inventor; and

(75) Inventor/Applicant *(for US only)*: CARPENTER, Melissa, K. [US/US]; 20750 Edgewood Circle, Castro Valley, CA 94552 (US).

(74) Agent: SCHIFF, J., Michael; Geron Corporation, 230 Constitution Drive, Menlo Park, CA 94025 (US).

(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

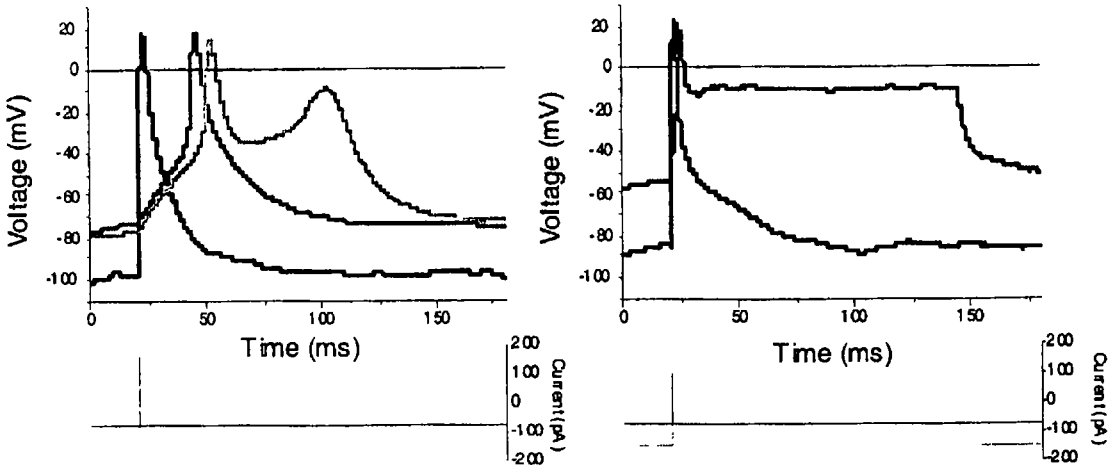
(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

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

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.

G00002

(54) Title: NEURAL PROGENITOR CELL POPULATIONS



(57) Abstract: The invention provides populations of neural progenitor cells, differentiated neurons, glial cells, and astrocytes. The populations are obtained by culturing stem cell populations (such as embryonic stem cells) in a cocktail of growth conditions that initiates differentiation, and establishes the neural progenitor population. The progenitors can be further differentiated in culture into a variety of different neural phenotypes, including dopaminergic neurons. The differentiated cell populations or the neural progenitors can be generated in large quantities for use in drug screening and the treatment of neurological disorders.

WO 01/88104 A2