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(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, 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, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

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(54) Title: NEURAL STEM CELLS AND METHODS OF GENERATING AND UTILIZING SAME

(57) Abstract: Methods of generating neural stem cells and neural stem cell culture generated by such methods are provided.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/IL04/00489

A. CLASSIFICATION OF SUBJECT MATTER
IPC(8): **A01N 63/00**(2006.01),**65/00**(2006.01);**A61K 48/00**(2006.01);**C12N 5/00**(2006.01),**5/02**(2006.01),**5/08**(2006.01)

USPC: 424/93.1,93.2,93.21;435/325,366,368,377
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 424/93.1, 93.2, 93.21; 435/325, 366,368, 377

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- A	FUJIKURA et al. Differentiation of embryonic stem cells is induced by GATA factors. Genes and Development. 2002, Vol. 16, pages 784-789, entire document.	1-3, 5, and 7-12 --- 4, 6, and 13-43
X --- A	KOUTSOURAKIS et al. The transcription factor GATA6 is essential for early extraembryonic development. Development. 1999, Vol. 126, pages 723-732, entire document.	10 --- 1-9 and 11-43
A	MOLKENTIN et al. The zinc finger-containing transcription factors GATA-4, -5, and -6. J. Biol. Chem. 2000, Vol 275, No. 50, pages 38949-38952, entire document.	1-43
X --- A	MORRISEY et al. GATA-4 activates transcription via two novel domains that are conserved within the GATA-4/5/6 subfamily. J. Biol. Chem. 1997, Vol. 272, No. 13, pages 8515-8524, entire document.	10 and 11 --- 1-9 and 12-43

☒ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

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"A" document defining the general state of the art which is not considered to be of particular relevance

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Date of the actual completion of the international search	Date of mailing of the international search report
01 April 2008 (01.04.2008)	05 MAY 2008
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (571) 273-3201	Authorized officer Anne-Marie Falk, Ph.D. Telephone No. (571) 272-0547

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INTERNATIONAL SEARCH REPORT

International application No.
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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- A	MORRISEY et al. GATA6 regulates HNF4 and is required for differentiation of visceral endoderm in the mouse embryo. Genes & Development. 1998, Vol. 12, pages 3579-3590, entire document.	10 --- 1-9 and 11-43
A	OKABE et al. Development of neuronal precursor cells and functional postmitotic neurons from embryonic stem cells in vitro. Mechanisms of Development. 1996, Vol. 59, pages 89-102, entire document.	1-43

Continuation of B. FIELDS SEARCHED Item 3:
WEST.
Dialog (file: medicine)
search terms: GATA-4, GATA-6, stem, neural, neuronal, neuron, differentiat?