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(54) Title: SOMATIC CELL REPROGRAMMING

(57) Abstract: The present invention relates to methods for reprogramming a somatic cell to pluripotency by administering into the somatic cell at least one or a plurality of potency- determining factors. The invention also relates to pluripotent cell populations obtained using a reprogramming method.



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INTERNATIONAL SEARCH REPORT

International application No
PCT/US2008/057924

A. CLASSIFICATION OF SUBJECT MATTER

INV. C12N5/06

According to International patent Classification (JPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
C12N

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 practical, search terms used)

EPO-Internal , BIOSIS, CHEM ABS Data, EMBASE, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, X	<p>YU JUNYING ET AL: "Induced pluripotent stem cell lines derived from human somatic cells." SCIENCE, vol. 318, no. 5858, 21 December 2007 (2007-12-21), pages 1917-1920, XP009105055 ISSN: 1095-9203 the whole document</p> <p style="text-align: center;">----- - / - -</p>	1-24

☒ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

* Special categories of cited documents :

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

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

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INTERNATIONAL SEARCH REPORT

International application No

PCT/US2008/057924

(^Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
P, X	TAKAHASHI KAZUTOSHI ET AL: "Induction of pluripotent stem cells from adult human fibroblasts by defined factors" CELL, vol. 131, no. 5, 30 November 2007 (2007-11-30), pages 861-872, XP002478584 ISSN: 0092-8674 the whole document	15-23
X	YU JUNYING ET AL: "Human embryonic stem cells reprogram myeloid precursors following cell-cell fusion." STEM CELLS, vol. 24, no. 1, January 2006 (2006-01), pages 168-176, XP002493953 ISSN: 1066-5099 cited in the application abstract	25-27
A	TAKAHASHI K ET AL: "Induction of pluripotent stem cells from mouse embryonic and adult fibroblast cultures by defined factors" CELL, vol. 126, no. 4, 25 August 2006 (2006-08-25), pages 663-676, XP003013968 ISSN: 0092-8674 cited in the application abstract; figures 1-6 page 670, right-hand column page 671, left-hand column, paragraph 3	15-27
A	ALBERIO R ET AL: "Reprogramming somatic cells into stem cells" REPRODUCTION, vol. 132, no. 5, 1 November 2006 (2006-11-01), pages 709-720, XP002481665 ISSN: 1470-1626 figure 1; table 1 page 715, left-hand column, paragraph 2	1-27
A	PAN GUANGJIN ET AL: "Nanog and transcriptional networks in embryonic stem cell pluripotency." CELL RESEARCH, vol. 17, no. 1, January 2007 (2007-01), pages 42-49, XP009105096 ISSN: 1748-7838 page 48, left-hand column	1-27

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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.
A	<p>RICHARDS M ET AL: "The transcriptome profile of human embryonic stem cells as defined by SASE"</p> <p>STEM CELLS,</p> <p>vol. 22, no. 1,</p> <p>1 January 2004 (2004-01-01), pages 51-64,</p> <p>XP002350243</p> <p>ISSN: 1066-5099</p> <p>abstract</p> <p>-----</p>	1-27

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2 008/ 057924

Box No. I Nucleotide and/or amino acid sequence(s) (Continuation of item 1.b of the first sheet)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed Invention, the international search was carried out on the basis of:
 - a. type of material
☒ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material
☒ on paper
☒ in electronic form
 - c. time of filing/furnishing
☒ contained in the international application as filed
☒ filed together with the international application in electronic form
☐ furnished subsequently to this Authority for the purpose of search
2. ☒ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the Information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
3. Additional comments: