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(54) Title: ENCAPSULATED MESENCHYMAL STEM CELLS AND USES THEREOF

(57) Abstract: Provided is a composition-of-matter comprising a microcapsule encapsulating mesenchymal stem cells, wherein at least 97 % of cells in said microcapsule are said mesenchymal stem cells. Also provided are methods of generating and using the composition-of-matter.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

INV. C12N5/06

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)
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, EMBASE, BIOSIS, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>WEBER M ET AL: "Formation of cartilage matrix proteins by BMP-transfected murine mesenchymal stem cells encapsulated in a novel class of alginates"</p> <p>BIOMATERIALS, ELSEVIER SCIENCE PUBLISHERS BV., BARKING, GB, vol. 23, no. 9, 1 May 2002 (2002-05-01), pages 2003-2013, XP004345246 ISSN: 0142-9612 cited in the application</p> <p>2. Materials and methods: 2.1. Cell culture; 2.2. Alginate encapsulation 3. Results: 3.1. Proliferation and ALP activity 4. Discussion: first and last paragraphs figure 1</p> <p style="text-align: center;">----- -/--</p>	1-12, 15-17, 19

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

☒ See patent family annex.

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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	US 2007/116680 A1 (STEGEMANN JAN P [US] ET AL) 24 May 2007 (2007-05-24) paragraph [0029] examples 1-8 Embodiments 1 and 2 -----	1-12, 15-17,19
X	JOKI T ET AL: "Continuous release of endostatin from microencapsulated engineered cells for tumor therapy" NATURE BIOTECHNOLOGY, NATURE PUBLISHING GROUP, NEW YORK, NY, US, vol. 19, no. 1, 1 January 2001 (2001-01-01), pages 35-39, XP002244221 ISSN: 1087-0156 Experimental protocol: Microencapsulation of BHK-endo and BHK-neo cells figure 1 Third full paragraph of the introduction -----	13,14,19
A	ABBAH ET AL: "In vitro evaluation of alginate encapsulated adipose-tissue stromal cells for use as injectable bone graft substitute" BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, ACADEMIC PRESS INC. ORLANDO, FL, US, vol. 347, no. 1, 18 August 2006 (2006-08-18), pages 185-191, XP005534439 ISSN: 0006-291X -----	
P,X	WO 2007/136760 A (UNIV JOHNS HOPKINS [US]; MCNIECE IAN [US]) 29 November 2007 (2007-11-29) examples 1,2 -----	1-19
P,X	EP 1 854 455 A (BIOCOMPATIBLES UK LTD [GB]) 14 November 2007 (2007-11-14) examples 10,11 -----	1-19
P,X	WO 2008/078157 A (UNIV HONG KONG [CN]; CHAN BARBARA PUI [CN]; CHEUNG KENNETH MAN CHEE [C]) 3 July 2008 (2008-07-03) the whole document ----- -/--	1-19

INTERNATIONAL SEARCH REPORT

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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.
P,X	CHAN ET AL: "Self-assembled collagen-human mesenchymal stem cell microspheres for regenerative medicine" BIOMATERIALS, ELSEVIER SCIENCE PUBLISHERS BV., BARKING, GB, vol. 28, no. 31, 18 August 2007 (2007-08-18), pages 4652-4666, XP022207006 ISSN: 0142-9612 the whole document	1-19
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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

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