Title: NOVEL INJECTABLE MACROMONOMERS FOR THE FABRICATION OF HYDROGELS

Abstract: Novel amphiphilic macromonomers that are capable of both physical crosslinking and chemical crosslinking are described herein. The combination of chemical crosslinking and physical crosslinking provides the ability to generate rapidly gelling hydrogels for many different applications. Moreover, the macromonomers may incorporate functional groups that allow for two different gelation mechanisms i.e. thermal gelation and ionic gelation, further improving mechanical stability of hydrogels formed from the disclosed macromonomers.
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER
IPC(8)- COBL 61/14 (2008.01)
USPC - 156/335
According to International Patent Classification (IPC) or to both national classifications and IPC

B. FIELDS SEARCHED
Minimum documentation searched (classification system followed by classification symbols)
USPC - 156/335

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)
WEST(PGPB,USPT,USOC,EPAB,JPAB); Google Scholar/Patents: macromonomer formula fatty acid repeating and hydrogels

C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>US 2005/0238722 A1 (PATHAK et al) 27 Oct 2005 (27.10.2005); para [0007], [0025], [0027]-[0032], [0038], [0040], [0041], [0045], [0058], [0084], [0086], [0087], [0097], [0098], [0100], [0101], [0117]; Table 1</td>
<td>1-49</td>
</tr>
<tr>
<td>Y</td>
<td>US 5,418,301 A (HULT et al) 23 May 1995 (23.05.1995); Col 1, In 45-55; Col 2, In 24-30; Col 3, In 45-50 and 63-65; Col 4, In 20-27 and 56-68; Col 5, In 39-40; Col 6, In 55-60; Col 27, In 22-29; Fig 1</td>
<td>1-49</td>
</tr>
<tr>
<td>Y</td>
<td>US 5,478,894 A (CHIANG et al) 26 Dec 1995 (26.12.1995); Col 5, In 9-12 and 57-62; Col 4, In 31-44; Col 6, In 1-7; Col 9, In 9-25</td>
<td>37-39, 45, 46, 49</td>
</tr>
</tbody>
</table>

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

* Special categories of cited documents:
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"&" document member of the same patent family

Date of the actual completion of the international search
11 March 2008 (11/03/2008)

Date of mailing of the international search report
24 APR 2008

Authorised officer:
Lee W. Young

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
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