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EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID,
IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK,
LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW,
MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT,
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23 April 2009

(54) Title: MICROPARTICLES COMPRISING PCL AND USES THEREOF

(57) Abstract: The invention relates to a process for preparing PCL-comprising microparticles, to microparticles obtainable by said process, to gel hence obtained and to several uses of the gel such as for the preparation of a medicament for treating a skin abnormality or disfigurement, and/or for controlling bladder function and/or controlling gastric reflux and/or for treating erectile dysfunction and/or for treating vocal cords. The gel may also be used for cosmetic applications.



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INTERNATIONAL SEARCH REPORT

International application No

PCT/NL2008/050506

A. CLASSIFICATION OF SUBJECT MATTER

INV. A61K9/16 A61L27/18

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)

A61K A61L A61Q

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, WPI Data, EMBASE, BIOSIS, COMPENDEX

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	IOOSS P ET AL: "A new injectable bone substitute combining poly(@-caprolactone) microparticles with biphasic calcium phosphate granules" BIOMATERIALS, ELSEVIER SCIENCE PUBLISHERS BV., BARKING, GB, vol. 22, no. 20, 15 October 2001 (2001-10-15), pages 2785-2794, XP004297229 ISSN: 0142-9612 page 2786 - page -2788; examples 2.2.2-2.2.3 abstract ----- -/--	1,2,4-16



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

3 February 2009

Date of mailing of the international search report

06/03/2009

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INTERNATIONAL SEARCH REPORT

International application No

PCT/NL2008/050506

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	KIM B S: "Novel therapeutic use of biodegradable polymer microspheres" WPI / THOMSON, 1 October 2003 (2003-10-01), XP002458304 abstract -----	10-15
X	US 2003/157187 A1 (HUNTER WILLIAM L [CA]) 21 August 2003 (2003-08-21) page 58; example 41 paragraphs [0029] - [0033] -----	1,2,8,9
X,P	EP 1 872 803 A (ETHICON INC [US]) 2 January 2008 (2008-01-02) page 3 - page 4; example 1 paragraphs [0001], [0002] paragraph [0014] -----	1,2,4-15
X	EP 1 754 469 A (ALKERMES INC [US]) 21 February 2007 (2007-02-21) p. 16, amended claim 1 -----	1,2, 6-10,12, 13,15
A	LIN W-J ET AL: "A novel fabrication of poly(@?-caprolactone) microspheres from blends of poly(@?-caprolactone) and poly(ethylene glycol)s" POLYMER, ELSEVIER SCIENCE PUBLISHERS B.V, GB, vol. 40, no. 7, 1 March 1999 (1999-03-01), pages 1731-1735, XP004155472 ISSN: 0032-3861 the whole document -----	1-15

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.2

Claims Nos.: 1

The initial phase of the search revealed a very large number of documents relevant to the issue of novelty. So many documents were retrieved that it is impossible to determine which parts of the claim 1 may be said to define subject-matter for which protection might legitimately be sought (Article 6 PCT). For these reasons, the search was performed taking into consideration the non-compliance in determining the extent of the search of claim 1.

The search of claim 1 was restricted to: the solvents dichlormethan and Tween as these solvents are disclosed in examples 1-7 and in claim 2.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.2), should the problems which led to the Article 17(2)PCT declaration be overcome.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/NL2008/050506

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claims Nos.: 1
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers allsearchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search reportcovers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

see annex

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1, 2 (partly), 3, 4, 6, 7, 8-15 (partly); examples 3 and 7

are directed to a process for preparing PCL comprising microparticles, wherein the process comprises the following steps:

- i) solubilizing a PCL polymer in pure Tween
 - ii) forming PCL-Comprising microparticles from the solution obtained in i)
- and are directed to the PCL microparticles their formulation as an injectable gel and the medical and cosmetic use of said gel.
-

2. claims: 1, 2 (partly), 5, 8-15 (partly) and examples 1, 2, 4 and 5

are directed to a process for preparing PCL comprising microparticles, wherein the process comprises the following steps:

- i) solubilizing a PCL polymer in Dichlormethane
 - ii) forming PCL microparticles from the solution obtained in i)
- and are directed to the PCL microparticles their formulation as an injectable gel and the medical and cosmetic use of said gel.
-

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/NL2008/050506

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2003157187 A1	21-08-2003	NONE	
EP 1872803 A	02-01-2008	US 2007298113 A1	27-12-2007
EP 1754469 A	21-02-2007	SI 1283699 T1	31-10-2007