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IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR,  
LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY,  
MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS,  
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28 February 2008

(54) Title: A PROCESS FOR CONCENTRATION OF A POLYPEPTIDE

(57) Abstract: The present invention comprises a method of concentrating a composition comprising a polypeptide of interest and the use of such a concentrated composition for the treatment of diseases in mammals, in particular by subcutaneous injection.



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**INTERNATIONAL SEARCH REPORT**

International application No  
PCT/DK2007/000177

**A. CLASSIFICATION OF SUBJECT MATTER**  
 INV. C07K1/34 C07K1/36 A61K38/43 C12N9/00 A61P25/00

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)  
 C07K A61K A61P 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, WPI Data, BIOSIS, EMBASE, Sequence Search

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 00/67789 A (CSL LTD [AU]; COPPOLA GERMANO [AU]; BERTOLINI JOSEPH [AU]) 16 November 2000 (2000-11-16) examples	1-19
X	WO 99/64462 A (STATENS SERUMINSTITUT [DK]; LAURSEN INGA [DK]; TEISNER BOERGE [DK]) 16 December 1999 (1999-12-16) page 7, line 20 - line 26; example 1 page 9, line 1 - line 10 page 21, line 9 - line 11	1-19
X	WO 03/066669 A (MILLIPORE CORP [US]) 14 August 2003 (2003-08-14) the whole document	1-19
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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	*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
*E* earlier document but published on or after the international filing date	*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
*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)	*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.
*O* document referring to an oral disclosure, use, exhibition or other means	*Z* document member of the same patent family
*P* document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search <b>8 January 2008</b>	Date of mailing of the international search report <b>17/01/2008</b>
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Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer  <b>Bayrak, Sinasi</b>
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## INTERNATIONAL SEARCH REPORT

International application No  
PCT/DK2007/000177

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2005/073367 A (ZYMENEX AS [DK]; FOGH JENS [DK]; ANDERSSON CLAES [SE]; WEIGELT CECILIA) 11 August 2005 (2005-08-11) cited in the application page 53, line 6 - line 11; claim 24; examples -----	1-24,26
X	WO 02/098455 A (HEMEBIOTECH AS [DK]; FOGH JENS [DK]; IRANI MEHER [US]; ANDERSSON CLAES) 12 December 2002 (2002-12-12) claim 13; example 6 -----	1-24,26
X	STEVENS R L ET AL: "PURIFICATION AND PROPERTIES OF ARYL SULFATASE A FROM HUMAN URINE" JOURNAL OF BIOLOGICAL CHEMISTRY, THE AMERICAN SOCIETY OF BIOLOGICAL CHEMISTS, INC.,, US, vol. 250, no. 7, 1975, pages 2495-2501, XP002300885 ISSN: 0021-9258 page 2498, column 1, line 6 - line 8 -----	1-21
X	SEVIN CAROLINE ET AL: "Intracerebral adeno-associated virus-mediated gene transfer in rapidly progressive forms of metachromatic leukodystrophy." HUMAN MOLECULAR GENETICS 1 JAN 2006, vol. 15, no. 1, 1 January 2006 (2006-01-01), pages 53-64, XP002463697 ISSN: 0964-6906 the whole document -----	22-24,26
A	WO 01/07065 A (HEMEBIOTECH AS [DK]; GELLERFORS PAER [SE]; FOGH JENS [DK]) 1 February 2001 (2001-02-01) cited in the application -----	1-19
A	POHL T: "CONCENTRATION OF PROTEINS AND REMOVAL OF SOLUTES" METHODS IN ENZYMOLOGY, ACADEMIC PRESS INC, SAN DIEGO, CA, US, vol. 182, 1990, pages 68-83, XP009052406 ISSN: 0076-6879 -----	1-19

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/DK2007/000177

## 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.:  
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:
  
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 report covers only those claims for which fees were paid, specifically claims Nos.:  
1-19,26 and partially claims 20-24
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.:

### 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: 1-19

A method of concentrating a composition comprising a polypeptide of interest.

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2. claims: 20-24 (all in part) and claim 25

A composition comprising at least 10 mg/ml porphobilinogen deaminase and medical uses thereof.

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3. claims: 20-24 (all in part) and claim 26

A composition comprising at least 10 mg/ml aryl sulfatase A and medical uses thereof.

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4. claims: 20-24 (all in part) and claim 27

A composition comprising at least 10 mg/ml lysosomal alpha mannosidase and medical uses thereof.

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5. claims: 20-24 (all in part) and claim 28

A composition comprising at least 10 mg/ml galactosylcerebrosidase and medical uses thereof.

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## INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/DK2007/000177

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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