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(54) Title: METHODS AND COMPOSITIONS FOR TREATING AMYLOID-RELATED DISEASES

(57) Abstract: Methods, compounds, pharmaceutical compositions and kits are described for treating or preventing amyloid-related disease.



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INTERNATIONAL SEARCH REPORT

International Application No
PC B2004/002375

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C07C309/14

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)
IPC 7 C07C

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, BEILSTEIN Data, CHEM ABS Data, 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	WO 00/64420 A (KONG XIANQI ; NEUROCHEM INC (CA); SZAREK WALTER (CA); UNIV KINGSTON (C) 2 November 2000 (2000-11-02) claims fig. 2/12-4/12, 6/12-9/12 -----	1-16, 42-45, 48-55, 57, 59-68, 70-222
X	WO 96/28187 A (KISILEVSKY ROBERT ; SZAREK WALTER (CA); UNIV KINGSTON (CA); WEAVER DON) 19 September 1996 (1996-09-19) claims; table 2 fig. 9/17, 12/17-13/17 ----- -/--	1-16, 42-45, 48-55, 57, 59-68, 70-222

Further documents are listed in the continuation of box C.

Patent family members are listed in 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

24 February 2005

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INTERNATIONAL SEARCH REPORT

International Application No

PC B2004/002375

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>WO 00/71101 A (NEUROCHEM INC ; UNIV KINGSTON (CA)) 30 November 2000 (2000-11-30)</p> <p>claims; table 1 fig. 13/14</p> <p>-----</p>	<p>1-16, 42-45, 48-55, 57, 59-68, 70-222</p>
X	<p>WO 01/03680 A (FRASER PAUL ; NEUROCHEM INC (CA); SZAREK WALTER (CA); WEAVER DONALD (C) 18 January 2001 (2001-01-18)</p> <p>page 20 and 21, compound (i), (iv)claims</p> <p>-----</p>	<p>1-16, 42-45, 48-55, 57, 59-68, 70-222</p>
X	<p>WO 97/14306 A (DOVETAIL TECHNOLOGIES INC ; HAUSER CHEMICAL RES INC (US)) 24 April 1997 (1997-04-24)</p> <p>page 8, line 9 - line 19; claims 7-10,15,19; examples I,II</p> <p>-----</p>	<p>1-16, 42-45, 48,55, 57, 59-68, 70-222</p>
X	<p>DATABASE BEILSTEIN BEILSTEIN INSTITUT ZUR FÖRDERUNG DER CHEMISCHEN WISSENSCHAFTEN, FRANKFURT AM MAIN, DE; XP002314317 Database accession no. BRN 4261672 abstract & ISKANDER MN ET AL.: EUR. J. MED. CHEM. CHIM. THER., vol. 26, no. 2, 1991, pages 129-136,</p> <p>-----</p>	<p>1-3,77, 99-105, 159-191</p>
X	<p>DATABASE BEILSTEIN BEILSTEIN INSTITUT ZUR FÖRDERUNG DER CHEMISCHEN WISSENSCHAFTEN, FRANKFURT AM MAIN, DE; XP002314318 Database accession no. BRN 7023352 abstract & CAMPAGNA F. ET AL.: FARMACO, vol. 49, no. 10, 1994, pages 653-58,</p> <p>-----</p>	<p>1-3,15, 99-105, 159-191</p>
X	<p>DATABASE BEILSTEIN BEILSTEIN INSTITUT ZUR FÖRDERUNG DER CHEMISCHEN WISSENSCHAFTEN, FRANKFURT AM MAIN, DE; XP002314319 Database accession no. BRN 8919306 abstract</p> <p>-----</p> <p>-/--</p>	<p>1-3,15, 99-105, 159-191</p>

INTERNATIONAL SEARCH REPORT

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.
X	<p>& KILLDAY K. B. ET AL.: J. NAT. PROD., vol. 64, no. 4, 2001, pages 525-526, -----</p> <p>DATABASE BEILSTEIN BEILSTEIN INSTITUT ZUR FÖRDERUNG DER CHEMISCHEN WISSENSCHAFTEN, FRANKFURT AM MAIN, DE; XP002314320 Database accession no. BRN 6023409 abstract</p>	1-5,15, 42,43,45
X	<p>& TOMSON ET AL.: J. APPL. CHEM. USSR, ENGL. TRANSL., vol. 57, no. 9, 1984, pages 1885-91, -----</p> <p>DATABASE BEILSTEIN BEILSTEIN INSTITUT ZUR FÖRDERUNG DER CHEMISCHEN WISSENSCHAFTEN, FRANKFURT AM MAIN, DE; XP002314321 Database accession no. BRN 2272192 abstract</p>	1-3,7, 42,43, 45,49
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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.
X	<p>DATABASE BEILSTEIN BEILSTEIN INSTITUT ZUR FÖRDERUNG DER CHEMISCHEN WISSENSCHAFTEN, FRANKFURT AM MAIN, DE; XP002314325 Database accession no. BRN 2434022 abstract & JUSTUS LIEBIGS ANN. CHEM., 647, 1961, pages 37-40,</p> <p style="text-align: center;">-----</p>	1-5,15, 16,42, 43,45
X	<p>US 4 085 134 A (REDMORE DEREK ET AL) 18 April 1978 (1978-04-18) examples</p> <p style="text-align: center;">-----</p>	1-5,15, 42-45
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X	<p>DATABASE BEILSTEIN BEILSTEIN INSTITUT ZUR FÖRDERUNG DER CHEMISCHEN WISSENSCHAFTEN, FRANKFURT AM MAIN, DE; XP002314327 Database accession no. BRN 2846394 abstract & IIDA ET AL.: KOGYO KAGAKU ZASSHI, 72, 1969, page 887,</p> <p style="text-align: center;">-----</p>	1-3,7,8, 15,42,45
X	<p>DATABASE BEILSTEIN BEILSTEIN INSTITUT ZUR FÖRDERUNG DER CHEMISCHEN WISSENSCHAFTEN, FRANKFURT AM MAIN, DE; XP002314328 Database accession no. BRN 3952462, 3935697 abstract & ALLEN ET AL.: ANAL. CHEM., 37, 1965, page 156,</p> <p style="text-align: center;">-----</p>	1-3,6,7, 13,49,50
X	<p>DATABASE BEILSTEIN BEILSTEIN INSTITUT ZUR FÖRDERUNG DER CHEMISCHEN WISSENSCHAFTEN, FRANKFURT AM MAIN, DE; XP002314329 Database accession no. BRN5568774 abstract & IENAGA, KAZUHARA ET AL.: CHEM. PHARM. BULL., vol. 36, no. 1, 1988, pages 70-77,</p> <p style="text-align: center;">-----</p>	1-3,42, 43,48, 49,52, 54,55, 57,59,61

INTERNATIONAL SEARCH REPORT

International application No.
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Box 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:

Although claims 78-97, 106-158 and 192-222 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
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 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 all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
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.:
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.:

Claim 1 and part of 2-16, 42-45, 48-55, 57, 59-68, 70-222

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
 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: Claim 1 and part of 2-16, 42-45, 48-55, 57, 59-68, 70-222

Compounds according to formula (I) and those of formula (II), (V), (VI), (VII) and of claim 75 which fall within the formula (I)

2. claims: Part of claim 2 and part of 3-45, 48-55, 57, 59-222

Compounds of formula (II), which are outside the scope of formula (I) and those of formula (III), (IV), (V), (VI), (VII), and of claim 75 which fall within formula (II) but outside of formula (I) ;

3. claims: Part of claim 17 and part of 18-33, 76-222

Compounds of formula (III), which are outside the scope of formula (II);

4. claims: Part of claim 34 and part of claim 35-41, 76-222

Compounds of formula (IV) outside the scope of formula (II)

5. claims: Part of claims 42 and 52 and part of claim 43-45, 48-51, 53-55, 57, 59-222 and 46, 47, 56, 58 complete

Compounds of formula (V) and (VI), which are outside the scope of formula (I) and (II), and those of formula (VII) and of claim 75 which fall outside of formula (I) and (II) but within formulae (V) and (VI);

6. claims: Part of claim 64 and part of 65-74, 76-222

compounds of formula (VII), which are outside the scope of formula (I), (II), (V) and (VI);

7. claims: Part of claim 75 and 76-222

Compounds of claim 75, which are outside the scope of any of the other formulae

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/B2004/002375

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Information on patent family members

International Application No

PCT/IB2004/002375

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