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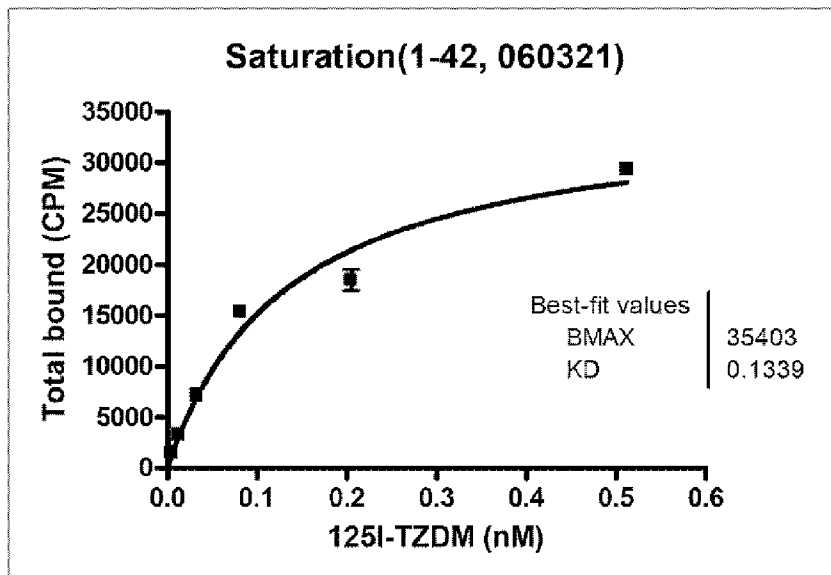
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(54) Title: ISOINDOLONES WITH HIGH BINDING AFFINITY TO BETA-AMYLOID AGGREGATES AND FIBRILS, AND ITS USE AND PREPARATION METHOD

[Fig. 2]



(57) Abstract: The present invention relates to isoindolone compounds having high binding affinity to beta-amyloid fibrils, thereby being useful for an early diagnosis of degenerative cerebral diseases including dementia, and prevention and treatment of such diseases, its use and a method for preparing the same.

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A. CLASSIFICATION OF SUBJECT MATTER*C07D 209/48(2006.01)i*

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 : C12N, A61k, C07D

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)

eKIPASS(KIPO internal), STN database, PubMed

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	WO 02096078 A2 (University of Virginia Patent Foundation) 31.10.2002. see page 4, 13, 23 and claim 1	1-5, 9-11 6-8, 12-15,17
X Y A	US 6429212 B1 (Yuichi Hashimoto) 06.08.2002. see column 2 line 19-52, column 14 line 25-45 and claim 1-8	1-5, 9 6-8 10-15,17
Y	US 6365753 B1 (Bunji Natsume, et al.) 02.04.2002. see column 11-12 and example 5	1-15,17
Y	WO 2005021532 A1 (Amgen Inc.,) 10.03.2005. see page 64 and claims	1-15,17
Y A	Anthony H Vagnucci Jr, et al., Alzheimer's disease and angiogenesis, The Lancet, 2003, Vol.361, pp. 605-608.	6-8 1-5,9-15,17

 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 application or patent but published on or after the international filing date

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"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

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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.: 16,18,19
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:

No search can be performed for claim 16,18,19 since no definition is present for the substituent X, n and R6 rendering the claimed subject-matter of claim 16,18,19 fully unclear. hence, no opinion will be established for said claim 16,18,19.
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:

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.:

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.

INTERNATIONAL SEARCH REPORT

Information on patent family members

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PCT/KR2008/006183

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