AZABENZIMIDAZOLYL COMPOUNDS AS MGLUR2 POTENTIATORS

Compounds and pharmaceutically acceptable salts of the compounds are disclosed, wherein the compounds have the structure of Formula (I) or a pharmaceutically acceptable salt thereof, wherein $R^1$, $R^2$, $X^1$, $X^2$, $X^3$, $X^4$, $R^6$, $Y$ and $n$ are as defined in the detailed description of the invention. Corresponding pharmaceutical compositions, methods of treatment, methods of synthesis, and intermediates are also disclosed.
# INTERNATIONAL SEARCH REPORT

**PCT/IB2007/001293**

## A. CLASSIFICATION OF SUBJECT MATTER

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<th>C07D471/04</th>
<th>C07D471/14</th>
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<th>A61K31/437</th>
<th>A61K31/4745</th>
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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)

**C07D**

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic database consulted during the international search (name of database and, where practical, search terms used)

EPO-Internal, CHER ABS Data, WPI Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
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<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No</th>
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| A | WO 2004/092135 A (ASTRAZENECA [SE]; NPS PHARMA INC [US]; EGLE IAN [CA]; FREY JENNIFER [C] 28 October 2004 (2004-10-28) page 2, line 17 - line 19 claim 1 | 1, 2, 8, 29 |
| A | WO 2006/020879 A (ASTRAZENECA AB [SE]; NPS PHARMA INC [US]; CLAYTON JOSHUA [CA]; MA FUPE) 23 February 2006 (2006-02-23) claims 1, 29 | 1, 2, 8, 29 |

- **Category**
- **Citation of document, with indication, where appropriate, of the relevant passages**
- **Relevant to claim No**

** 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 novelty 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

Date of the actual completion of the international search: 13 February 2008

Date of mailing of the International search report: 20/02/2008

Name and mailing address of the ISA/
European Patent Office, P B 5818 Patentlaan 2 NL-2280 HV RUSSEL Tel (+31-70) 340-2040, Tx 31 651 epo nl, Fax (+31-70) 340-3016

Authorized officer: Fanni, Stefano

Form PCT/ISA/210 (second sheet) (April 2005)
Continuation of Box II.1

Although claims 25-27 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.

Continuation of Box II.1

Claims Nos.: -

Rule 39.1(iv) PCT - Method for treatment of the human or animal body by therapy
## 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:
     
     see FURTHER INFORMATION sheet PCT/ISA/210

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).

## 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 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.:**

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.
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