<table>
<thead>
<tr>
<th><strong>Publication Date</strong></th>
<th>14 October 2004 (14.10.2004)</th>
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<tbody>
<tr>
<td><strong>Publication Number</strong></td>
<td>WO 2004/087650 A3</td>
</tr>
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</table>

**International Patent Classification:** C07C 229/00, C07D 497/00, 205/00

**Applicant:** MERCK & CO, INC. [US/US]; 126 East Lincoln Avenue, Rahway, NJ 07065-0907 (US).

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**Title:** PROCESS AND INTERMEDIATES FOR THE PREPARATION OF BETA-AMINO ACID AMIDE DIPEPTIDYL PEPTIDASE-IV INHIBITORS

**Abstract:** A novel process is provided for the preparation of chiral beta-amino acid amide inhibitors of the dipeptidyl peptidase-IV and the useful intermediates obtained therein. The products resulting from the instant process are inhibitors of dipeptidyl peptidase-IV and thereby useful for the treatment of Type 2 diabetes.
# INTERNATIONAL SEARCH REPORT

**A. CLASSIFICATION OF SUBJECT MATTER**

| IPC(7) | C07C 229/00; C07D 497/00, 205/00 |
| US CL | 544/350; 548/952; 562/444 |

**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)
  - U.S.: 544/350; 548/952; 562/444

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)

- STN: REGISTRY and CAPLUS databases.

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

<table>
<thead>
<tr>
<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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</table>

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

- Special categories of cited documents:
  - "*" document defining the general state of the art which is not considered to be of particular relevance
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  - "P*" document published prior to the international filing date but later than the priority date claimed

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  - "&" document member of the same patent family

**Date of the actual completion of the international search**


**Date of mailing of the international search report**

20 OCT 2004

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