Abstract: This invention relates to selective m1 muscarinic agonist, their use or a formulation thereof in the treatment of glaucoma and/or other conditions which are related to elevated intraocular pressure in the eye of a patient. This invention also relates to the use of such compounds to provide a neuroprotective effect to the eye of mammalian species, particularly humans. In addition, the present invention relates to the use of the compounds in the treatment of dementia such as Alzheimer's disease and vascular dementia, depression, attention deficit disorder, sleep disorder, schizophrenia, pain, ischemia, atrophic gastritis, and atony of gastrointestinal tract.
**INTERNATIONAL SEARCH REPORT**

**A. CLASSIFICATION OF SUBJECT MATTER**

<table>
<thead>
<tr>
<th>IPC(7)</th>
<th>A61K 31/4545 ; C07D 401/14, 405/14, 41/14, 409/14</th>
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<tr>
<td>US CL</td>
<td>514/316 ; 546/187</td>
</tr>
</tbody>
</table>

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. : 514/316 ; 546/187

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)

CAS ONLINE

**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>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>US 5,574,044 A (THOMPSON et al.) 12 November 1996 (12.11.1996), compounds in columns 5-8 and tables 2-4.</td>
<td>1-8</td>
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<tr>
<td>Y</td>
<td></td>
<td>9-12, 14-26</td>
</tr>
<tr>
<td>X</td>
<td>US 5,691,323 A (THOMPSON et al.) 25 November 1997 (25.11.1997), compounds in columns 5-10 and tables 1-4.</td>
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</table>

Further documents are listed in the continuation of Box C.

See patent family annex.

Date of the actual completion of the international search: 23 October 2003 (23.10.2003)

Date of mailing of the international search report: 19 APR 2004

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No.

Form PCT/ISA/210 (second sheet) (July 1998)
INTERNATIONAL SEARCH REPORT

Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This international report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. □ Claim Nos.: 
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☑ Claim Nos.: 13
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:
Claim 13 depends upon claim 19 and further defines beta-adrenergic blocking agent etc. However, there is no antecedent basis for these blockers in claim 19.

3. □ Claim Nos.: 
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of Item 2 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.
□ No protest accompanied the payment of additional search fees.

Form PCT/ISA/210 (continuation of first sheet(1)) (July 1998)