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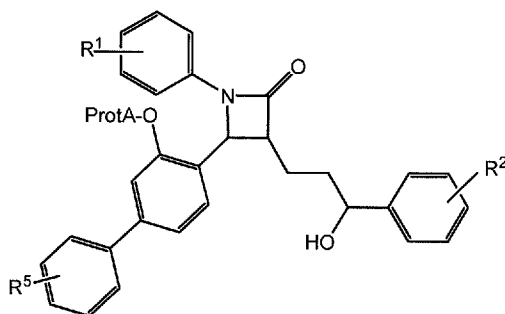
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Published:
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25 September 2008

(54) **Title:** PROCESSES FOR PRODUCTION OF 4-BIPHENYLYAZETIDIN-2-ONES



(I)

(57) **Abstract:** The present invention relates to processes for the production of 4-biphenylazetididin-2-one derivatives of formula (I)-



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INTERNATIONAL SEARCH REPORT

International application No PCT/US2007/085003

A. CLASSIFICATION OF SUBJECT MATTER
 INV. C07D205/08 A61K31/397 A61P9/00

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 A61K A61P

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 , 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 2006/116499 A (MICROBIA INC [US]; MARTINEZ EDUARDO [US]; TALLEY JOHN J [US]; LUNDIGRA) 2 November 2006 (2006-11-02) Compound 2 on page 179 and paragraph [00222], page 178 the whole document	1-3,5-21
X	WO 2004/099132 A (RANBAXY LAB LTD [IN]; KAROOTI KIRAN KUMAR GANAGAKHED [IN]; RATHOD PARE) 18 November 2004 (2004-11-18) especially Claim 1 of that document and pages 2-3 the whole document	1-3,5-21
P,Y	WO 2006/127893 A (MICROBIA INC [US]; ANTONELLI STEPHEN [US]; BARDEN TIMOTHY C [US]; LEE) 30 November 2006 (2006-11-30) the whole document	1-3,5-21

Further documents are listed in the continuation of Box C See patent family annex

* Special categories of cited documents

'A ¹ document defining the general state of the art which is not considered to be of particular relevance 'E ¹ earlier document but published on or after the international filing date "L ¹ document which may throw doubts on priority claim (SI) 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 ¹ 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 1X ¹ 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 "& ¹ document member of the same patent family
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Date of the actual completion of the international search 25 April 2008	Date of mailing of the international search report 09/07/2008
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Name and mailing address of the ISA/ European Patent Office P B 5818 Palentlaan 2 NL - 2280 HV RIJSWIJK Tel (+31-70) 340-2040 Tx 31 651 epo nl, Fax (+31-70) 340-3016	Authorized officer Lange, Tim
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INTERNATIONAL SEARCH REPORT

International application No PCT/US2007/085003

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
P, Y	WO 2006/122020 A (MICROBIA INC [US]; LEE PETER [US]; ANTONELLI STEPHEN [US]; LUNDIGRAN-S) 16 November 2006 (2006-11-16) the whole document -----	1-3,5-21
P, Y	WO 2006/124713 A (MICROBIA INC [US]; MARTINEZ EDUARDO [US]; SCHAIRER WAYNE C [US]; TALLE) 23 November 2006 (2006-11-23) the whole document -----	1-3,5-21
P, Y	WO 2006/122186 A (MICROBIA INC [US]; MARTINEZ EDUARDO [US]; TALLEY JOHN J [US]; ZIMMER D) 16 November 2006 (2006-11-16) the whole document -----	1-3,5-21

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. **D** 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 D** 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:

see additional sheet

1. As all required additional search fees were timely paid by the applicant, this international search report covers allsearchable Etiaaimss.

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.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-3, 5-21, 22

A process of synthesis of
trans-1, 4-Diphenyl -3-(3-phenyl-3-hydroxy-propyl)-azetidine-2
-ones from Diphenyl imines from chiral
6-Phenyl-tetrahydro-pyrane-2-one with a 1,2-diphenylimine
derivative in the presence of base to arrive at
hypocholesterolemic agents.

2. claim: 4

A process of synthesis of 1,2-diphenyl imine derivatives from
aldehydes and anilines as suitable intermediates in the
synthesis of hypocholesterolemic Azetidinone derivatives.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2007/085003

Patent document cited in search report	Publication date	Patent family - member(s)	Publication date
UO 2006116499 A	02-11-2006	EP 1877067 A1	16-01-2008
MO 2004099132 A	18-11-2004	CN 1805926 A EP 1626954 A	19-07-2006 22-02-2006
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