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Declarations under Rule 4.17:

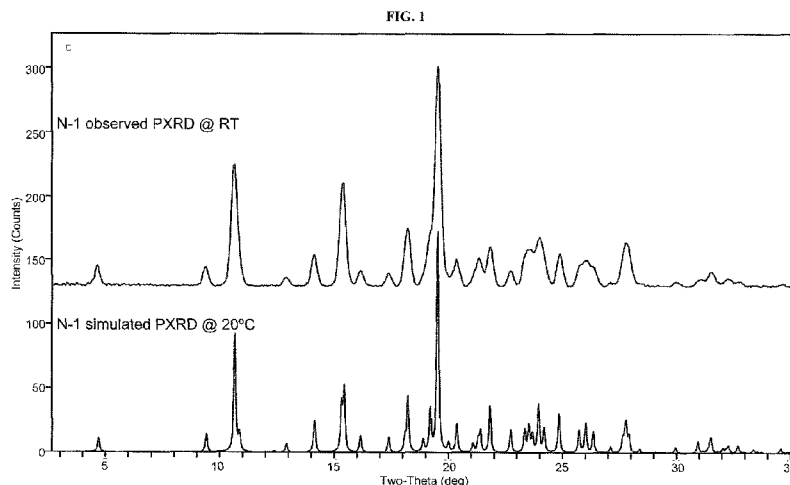
— of inventorship (Rule 4.17(iv))

Published:

— with international search report (Art. 21(3))

[Continued on next page]

(54) Title: PROCESSES FOR PREPARING TETRAHYDROISOQUINOLINES



(57) Abstract: Disclosed are processes for preparing tetrahydroisoquinolines, intermediates useful in the preparation of tetrahydroisoquinolines, processes for preparing such intermediates, and a crystalline form of 6-[(4S)-2-methyl-4-(naphthyl)-1,2,3,4-tetrahydroisoquinolin-7-yl]pyridazin-3-amine. Also disclosed are pharmaceutical compositions comprising tetrahydroisoquinolines, methods of using tetrahydroisoquinolines in the treatment of depression and other conditions and methods for obtaining the crystalline form.

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— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

(88) Date of publication of the international search report:
15 April 2010

INTERNATIONAL SEARCH REPORT

International application No
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A. CLASSIFICATION OF SUBJECT MATTER
 INV. C07D401/04 C07C225/10 C07D215/20 C07D215/28 C07D237/20
 C07C215/20 C07F5/04

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 C07C C07F

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, CHEM ABS 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 2006/020049 A2 (AMR TECHNOLOGY INC [US]; SQUIBB BRISTOL MYERS CO [US]) 23 February 2006 (2006-02-23) page 161, line 16 - line 17 page 205, line 23 - page 206, line 12 example 139 claim 61	1-8, 13, 17, 19, 26
X	WO 2008/058126 A2 (SUPERGEN INC [US]; BEARSS DAVID J [US]; LIU XIAO-HUI [US]; VANKAYALAPA) 15 May 2008 (2008-05-15) page 49, paragraph 139	15
X	WO 2008/005368 A2 (ABBOTT LAB [US]; BETSCHMANN PATRICK [US]; CARROLL WILLIAM A [US]; ERIC) 10 January 2008 (2008-01-10) page 79, paragraph a); example 35	15
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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	"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
"E" earlier document but published on or after the international filing date	"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
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"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.
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"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 18 February 2010	Date of mailing of the international search report 01/03/2010
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Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer Hoepfner, Wolfgang
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INTERNATIONAL SEARCH REPORT

International application No

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2008/003665 A1 (JANSSEN PHARMACEUTICA NV [BE]; GIJSEN HENRICUS JACOBUS MARIA [NL]; DE) 10 January 2008 (2008-01-10) intermediate (56); page 33 -----	15
X	DATABASE CAPLUS [Online] CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US; 2006, XP002569155 Database accession no. 2006:664520 abstract & F.-Z. HU ET AL.: "Synthesis and herbicidal activity of 3-arylalkylamino-6-chloropyridazines" YOUJI HUAXUE / CHINESE JOURNAL OF ORGANIC CHEMISTRY., vol. 26, no. 6, 2006, pages 808-812, SCIENCE PRESS, BEIJING. ISSN: 0253-2786 -----	15
X	EP 0 694 543 A1 (BAYER AG [DE]) 31 January 1996 (1996-01-31) page 30 - page 31; example XIII; table 2 -----	15
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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2009/046259

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.:
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).

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 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.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

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

1. claims: 1-14, 17-27, 30

Compounds of general formula 4R and related compounds and methods for their preparation.

2. claims: 15-16, 32-33

Compounds of general formula 11R and related compounds.

3. claims: 28-29, 31

Compounds of general formula 22R, methods for their preparation and related processes.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2009/046259

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