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Declaration under Rule 4.17:

— of inventorship (Rule 4.17(iv))

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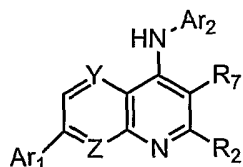
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For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: HETEROARYL SUBSTITUTED QUINOLIN-4-YLAMINE ANALOGUES



(I)

(57) Abstract: Heteroaryl substituted quinolin-4-ylamine analogues of Formula (I) are provided. Such compounds are ligands that may be used to modulate specific receptor activity in vivo or in vitro, and are particularly useful in the treatment of conditions associated with pathological receptor activation in humans, domesticated companion animals and livestock animals. Pharmaceutical compositions and methods for using such compounds to treat such disorders are provided, as are methods for using such ligands for receptor localization studies.

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# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US06/01345

<b>A. CLASSIFICATION OF SUBJECT MATTER</b> IPC: Please See Continuation Sheet  USPC: 514/249,252.02,252.04,275,300,313;546/122,160;544/238,295,323,350 According to International Patent Classification (IPC) or to both national classification and IPC		
<b>B. FIELDS SEARCHED</b>  Minimum documentation searched (classification system followed by classification symbols) U.S. : 514/249, 252.02, 252.04, 275, 300, 313; 546/122, 160; 544/238, 295, 323, 350  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: structure searched in file REGISTRY, answer set cross-referenced into file CAPLUS.		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 99/35146 (CARTER et al) 15 July 1999 (15.07.1999), pages 76, 77 and 79.	1, 5, 6, 7
X	GB 2 345 486 (CARTER et al) 7 December 2000 (07.12.2000), pages 129 and 130.	1, 5, 6, 7
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> 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 application or patent 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 28 April 2006 (28.04.2006)	Date of mailing of the international search report <b>20 JUN 2006</b>	
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. (571) 273-3201	Authorized officer Zachary C. Tucker <i>Maria J. Wat</i> Telephone No. (571) 272-1600	

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US06/01345

## 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:  
Please See Continuation Sheet
  
3.  Claims Nos.: 9-60  
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:

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 additional fees, this Authority did not invite payment of any 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.

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US06/01345

## Continuation of Box II Reason 2:

Claims 9-60 are improper multiple dependent claims, and as such are unsearchable and do not comply with PCT Rule 6.4(a). All claims 9-60 either are a multiple dependent claim which depends from another multiple dependent claim, or are a claim which depends from another improper multiple dependent claim, rendering said claim also an improper multiple dependent claim. Claim 6 is a multiple dependent claim; claim 9 is a multiple dependent claim which depends in part from claim 6, a multiple dependent claim. Further claims, such as 18, 21, 24, 39 depend from more than one improper multiple dependent claim.

## Continuation of IPC:

**C07D** 471/02( 2006.01),215/38( 2006.01),215/44( 2006.01),401/00( 2006.01),403/00( 2006.01),409/00( 2006.01),239/02( 2006.01),471/00( 2006.01),487/00( 2006.01),491/00( 2006.01),495/00( 2006.01),497/00( 2006.01)  
**A01N** 43/58( 2006.01),43/60( 2006.01),43/54( 2006.01),43/42( 2006.01);**A61K** 31/50( 2006.01),31/45( 2006.01),31/50( 2006.01),31/501( 2006.01),31/505( 2006.01),31/47( 2006.01)