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(54) Title: COMPOUNDS MODULATING C-FMS AND/OR C-KIT ACTIVITY AND USES THEREFOR

(57) Abstract: Compounds active on the receptor protein tyrosine kinases c-kit and/or c-fms are provided herewith. Also provided herewith are compositions useful for treatment of c-kit mediated diseases or conditions and/or c-fms-mediated diseases or conditions, and methods for the use thereof.

#### INTERNATIONAL SEARCH REPORT

International application No

PCT/US2007/085289 A. CLASSIFICATION OF SUBJECT MATTER INV. C07D471/04 A61K31/437 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 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, PAJ, BEILSTEIN Data, 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 2005/062795 A (PLEXXIKON INC [US]; 1,9,12, IBRAHIM PRABHA [US]) 14 July 2005 (2005-07-14) Page 189, 191-193 X WO 2006/009755 A (PLEXXIKON INC [US]; 1-22 IBRAHIM PRABHA N [US]; HURT CLARENCE R [US]; ZHANG) 26 January 2006 (2006-01-26) Formula I; paragraphs [0121] - [0132]; claims 1,35; tables 1,2 X WO 2006/009797 A (PLEXXIKON INC [US]; 15-22 IBRAHIM PRABHA N [US]; HURT CLARENCE R [US]; ZHANG) 26 January 2006 (2006-01-26) Formula I. paragraphs [0017] - [0019]; claims 1-20; examples 1-7 X Further documents are listed in the continuation of Box C. χ See patent family annex. \* Special categories of cited documents: '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 "A" document defining the general state of the art which is not considered to be of particular relevance invention "E" earlier document but published on or after the international '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 filing date "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 document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 26 May 2008 05/06/2008 Name and mailing address of the ISA/ Authorized officer Furopean Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016

Rudolf, Manfred

### INTERNATIONAL SEARCH REPORT

International application No
PCT/US2007/085289

|            | <u> </u>  | PCT/US200 | 0//085289             |  |
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| C(Continua | tion). DOCUMENTS CONSIDERED TO BE RELEVANT  |           |                       |  |
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# FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.1

Although claims 54-56 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.

Continuation of Box II.1

Claims Nos.: 18-20

Although claims 18-20 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.

International application No. PCT/US2007/085289

# INTERNATIONAL SEARCH REPORT

| 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. $\chi$ Claims Nos.: 18-20 because they relate to subject matter not required to be searched by this Authority, namely:   |  |  |  |  |  |
| see FURTHER INFORMATION sheet PCT/ISA/210   |  |  |  |  |  |
|   |  |  |  |  |  |
| 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: |  |  |  |  |  |
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| 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:   |  |  |  |  |  |
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| 1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable   |  |  |  |  |  |
| LI claims.  |  |  |  |  |  |
| 2. As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of  |  |  |  |  |  |
| additional fees.  |  |  |  |  |  |
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| 3. As only some of the required additional search fees were timely paid by the applicant, this international search reportcovers only those claims for which fees were paid, specifically claims Nos.:                      |  |  |  |  |  |
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| 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.:         |  |  |  |  |  |
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| 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.   |  |  |  |  |  |
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Information on patent family members

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