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- (71) Applicants (for all designated States except US): CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE (CNRS) [FR/FR]; 3, rue Michel-Ange, F-75794 Paris (FR). UNIVERSITE PIERRE ET MARIE CURIE [FR/FR]; 4, Place Jussieu, F-75005 Paris (FR). UNIVERSITE DE RENNES I [FR/FR]; 2, rue du Thabor, CS 46510, F-35065 Rennes Cédex (FR). UNIVERSITY OF LLEIDA [ES/ES]; Pl. Victor Siurana, 1, E-25003 Lleida (ES). UNIVERSITE D'ATHENES [GR/GR]; Panepistimiopolis Zografou, GR-157 71 Athens (GR).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): MEIJER, Laurent [FR/FR]; 16, rue de Bir-Hakeim, F-29680 Roscoff (FR). BETTAYEB, Karima [FR/FR]; 11, Avenue Victor Hugo, F-29680 Roscoff (FR). SKALTSOUNIS, Alexios-Leandros [GR/GR]; 25, rue Lefkosisa, GR-112 53 Athens (GR). MAGLATIS, Prokopios [GR/GR]; 10A, El Veniezlou, GR-189 02 Ambelakia (GR). BOIX, Jacint [ES/ES]; 11, 3A, Avenue Rovina Roure, E-25006 Lleida (ES).

RIBAS, Judit [ES/ES]; 3, C Témens, E-25690 Vilanova de la Barea, Lleida (ES).

- (74) Agents: PEAUCELLE, Chantal et al.; Cabinet Armengaud Aine, 3, Avenue Bugeaud, F-75116 Paris (FR).
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(54) Title: NEW 3'-, 7-SUBSTITUTED INDIRUBINS AND THEIR APPLICATIONS



(57) Abstract: The invention relates to new 3'-, 7-substituted-indirubins of formula (I) wherein R represents N-OH, N-O-alkyl or N-O-CO-alkyl, NO-(Ra)n1-Het, N-O-(Y)n1-N Ra Rb, N-O-CO-N(Rb Rc), radical with Het representing an aliphatic nitrogeneous heterocycle, Y being an optionally substituted -CH2- radical, n1 being 1 to 3, and X is an halogen atom selected in the group comprising F, Cl, Br,I, and Z is H or CH3 and the salts thereof.

INTERNATIONAL SEARCH REPORT International application No PCT/IB2006/004152 A. CLASSIFICATION OF SUBJECT MATTER INV. C07D209/40 C07D403/12 A61K31/404 A61P35/00 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) CO7D 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, 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. P. POLYCHRONOPOULOS ET AL.: "Structural Α 1,6,10, basis for the synthesis of Indirubins as 11 potent and selective inhibitors of glycogen synthase kinase-3 and cyclin-dependent kinases." JOURNAL OF MEDICINAL CHEMISTRY, vol. 47, 2004, pages 935-946, XP002453468 cited in the application See Table 1, page 939. L. MEIJER ET AL.: "GSK-3-Selective Α 1,6,10, inhibitors derived from Tyrian Purple Indirubins" CHEMISTRY & BIOLOGY, vol. 10, 2003, pages 1255-1266, XP002453469 cited in the application See Figure 1, page 1257.

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| Date of the actual completion of the international search 2 October 2007 | Date of mailing of the international search report 23/10/2007 | |
| Name and mailing address of the ISA/ European 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 | Authorized officer Menchaca, Roberto | |

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Information on patent family members

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