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(54) Title: PENTACYCLIC ALKALOID COMPOUNDS AND METHODS OF USE THEREOF

(57) Abstract: The present invention relates to Pentacyclic Alkaloid Compounds, compositions comprising an effective amount of a Pentacyclic Alkaloid Compound and methods for treating or preventing cancer, a bacterial infection, a fungal infection, or a yeast infection, comprising administering to a subject in need thereof an effective amount of a Pentacyclic Alkaloid Compound. The present invention also relates to compounds and methods that are useful for making Cribrostatin IV.

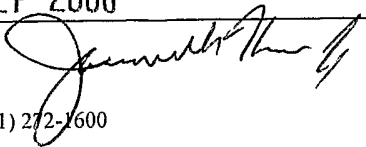


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INTERNATIONAL SEARCH REPORT

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<p>A. CLASSIFICATION OF SUBJECT MATTER IPC: A01N 43/58(2006.01),43/60(2006.01);A61K 31/50(2006.01),31/495(2006.01);C07D 241/36(2006.01)</p> <p>USPC: 514/249;544/342 According to International Patent Classification (IPC) or to both national classification and IPC</p>												
<p>B. FIELDS SEARCHED</p> <p>Minimum documentation searched (classification system followed by classification symbols) U.S. : 514/249; 544/342</p> <p>Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched</p> <p>Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) STN: structure search was conducted in file REGISTRY, answer set was cross-referenced into file CAPLUS.</p>												
<p>C. DOCUMENTS CONSIDERED TO BE RELEVANT</p> <table border="1"> <thead> <tr> <th>Category *</th> <th>Citation of document, with indication, where appropriate, of the relevant passages</th> <th>Relevant to claim No.</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>PETTIT et al, "Antineoplastic Agents 430. Isolation and Structure of Cribrostatins 3, 4 and 5 from the Republic of Maldives Cribrochalina Species" Journal of Natural Products, Vol. 63, No. 6, pages 793-798 (2000), whole document.</td> <td>26-29</td> </tr> <tr> <td>X</td> <td>US 6,686,470 B2 (DANISHEFSKY et al) 3 February 2004 (03.02.2004), columns 41-54.</td> <td>31, 36 and 37</td> </tr> </tbody> </table>			Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	A	PETTIT et al, "Antineoplastic Agents 430. Isolation and Structure of Cribrostatins 3, 4 and 5 from the Republic of Maldives Cribrochalina Species" Journal of Natural Products, Vol. 63, No. 6, pages 793-798 (2000), whole document.	26-29	X	US 6,686,470 B2 (DANISHEFSKY et al) 3 February 2004 (03.02.2004), columns 41-54.	31, 36 and 37	
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<p>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</p>		<p>Authorized officer  Zachary C. Tucker Telephone No. (571) 272-1600</p>										