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(54) Title: CHEMOKINE RECEPTOR BINDING HETEROCYCLIC COMPOUNDS WITH ENHANCED EFFICACY

(57) Abstract: The invention relates to heterocyclic compounds consisting of a core nitrogen atom surrounded by three pendant groups, wherein two of the three pendant groups are preferably benzimidazolyl methyl and tetrahydroquinolyl, and the third pendant group contains N and optionally contains additional rings. The compounds bind to chemokine receptors, including CXCR4 and CCR5, and demonstrate protective effects against infections of target cells by a human immunodeficiency virus (HIV).

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/15977

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A01N 43/58, 43/60, 43/42, 43/52, 43/50; A61K 31/495, 31/50, 31/47, 31/415
 US CL : 514/249, 311-314, 393-400

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)
 U.S. : 514/249, 311-314, 393-400

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)
 Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
<i>XP</i>	US 2003/0220341 A1 (BRIDGER et al.) 27 November 2003 (27.11.2003); [0007], [0016], [0020]-[0042].	1-50
A	US 4,933,447 (KOONO et al.) 12 June 1990 (12.06.1990) <i>see document.</i>	1-50



Further documents are listed in the continuation of Box C.



See patent family annex.

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INTERNATIONAL SEARCH REPORT

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Continuation of B. FIELDS SEARCHED Item 3:
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