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(54) Title: ENANTIOMERICALLY ENRICHED IMINOPYRROLIDONE AZIRIDINE COMPOSITIONS

(57) Abstract: Enantiomerically enriched iminopyrrolidone aziridine compositions are disclosed herein. Embodiments of the present invention include enantiomerically enriched compositions, aqueous solutions of, and methods of increasing the aqueous solubility of, enantiomerically enriched compositions, and methods of formulating drug products comprising enantiomerically enriched iminopyrrolidone aziridine compounds for use in the treatment of cancer.



WO 2008/045998 A3

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 07/81085

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - C07D 487/00 (2008.01)

USPC - 514/389; 514/885

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)

USPC - 514/389; 514/885

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
USPC - 514/389; 514/885 (see search terms below)Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
USPTO-WEST - PGPB, USPT, USOC, EPAB, JPAB; Google. keywords: Imexon, enantiomer, solubility, aqueous solubility, 4-Imino-1,3-diazabicyclo[3.1.0]hexan-2-one, racemic, 4-amino-1,3-diazabicyclo[3.1.0]hex-3-en-2-one, 2-cyanoaziridine, enantiomeric excess, formulation, sterilization, freeze, vacuum

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|--|-----------------------|
| Y | US 4,083,987 A (Bicker et al.) 11 April 1978 (11.04.1978), Abstract; col 1, ln 31-47; col 4, ln 24-28, 51-61 | 1-42 |
| Y | Hicks et al., "Preparation And Antitumor Activity Of Imexon Enantiomers," 30th National Medicinal Chemistry Symposium, University of Washington, Seattle, Meeting Abstract #149, June 25-29, 2006 (25.06.2006) Abstract - pg 128 | 1-42 |
| Y | Duddu et al., "Formation of the Racemic Compound of Ephedrine Base from a Physical Mixture of Its Enantiomers in the Solid, Liquid, Solution, or Vapor State," Pharmaceutical Research, Volume 9, Number 8, August 1992, pp. 1083-1091(9), (08.1992), Abstract | 1-42 |
| Y | den Brok et al., "The pharmaceutical development of a lyophilised dosage form for the investigational anticancer agent Imexon using dimethyl sulfoxide as solubilising and stabilising agent," IMEXON, Chapter 1.2, pp 43-64, 06 December 2004 (06.12.2004), pg 48 | 1-42 |



Further documents are listed in the continuation of Box C.



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