

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
2 May 2008 (02.05.2008)

PCT

(10) International Publication Number  
**WO 2008/051465 A3**

(51) International Patent Classification:  
A01N 43/02 (2006.01) A61K 31/335 (2006.01)

Yongkang City, Tainan County, 710 (TW). **HSIAO, Tsung-yu**; No. 36, Lane 160, Jhongjhen Road, Neimen Township, Kaohsiung County, 845 (TW).

(21) International Application Number:  
PCT/US2007/022309

(74) Agent: **MORRISON, Alan, J.**; Cohen Pontani Lieberman & Pavane Llp, 551 Fifth Avenue, New York, NY 10176 (US).

(22) International Filing Date: 19 October 2007 (19.10.2007)

(25) Filing Language: English

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(26) Publication Language: English

(30) Priority Data:  
60/853,341 20 October 2006 (20.10.2006) US

(71) Applicant (for all designated States except US): **SCINOPHARM SINGAPORE PTE, LTD.** [SG/SG]; 168 Robinson Road, #25-01 Capital Tower, Singapore 068912 (SG).

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant (for LC only): **CHAN, Hardy** [US/US]; 708 Vista Del Sol, San Mateo, CA 94404 (US).

Published:  
— with international search report

(72) Inventors; and

(75) Inventors/Applicants (for US only): **LIAO, Yuan-xiu**; No. 3, Lane 251, Dasyue, 16th Street, Nanzih District, Lantian Village, Kaohsiung City, 811 (TW). **HO, Meng-fen**; No. 416-5, Baosi Village, Anding, Township, Tainan County, 745 (TW). **CHEN, Shu-ping**; No. 56, Liaoning 2nd Street, Sanmin District, Kaohsiung City, 807 (TW). **LIN, Chia-ning**; No. 52, Lane 100, Sec. 2, Jhuangjing Street, Pingtung City, Pingtung County, 900 (TW). **LIN, Yu-li**; 6f., No. 236, Jhongjiheng Rd.,

(88) Date of publication of the international search report:  
16 April 2009

(54) Title: PROCESS FOR MAKING CRYSTALLINE ANHYDROUS DOCETAXEL

(57) Abstract: New anhydrous crystalline form of docetaxel and process of making anhydrous docetaxel and docetaxel trihydrate are provided.



WO 2008/051465 A3

**INTERNATIONAL SEARCH REPORT**

International application No.  
PCT/US 07/22309

<p><b>A. CLASSIFICATION OF SUBJECT MATTER</b>                  IPC(8) - A01N 43/02; A61K 31/335 (2008.01)                  USPC - 514/449                  According to International Patent Classification (IPC) or to both national classification and IPC</p>														
<p><b>B. FIELDS SEARCHED</b></p> <p>Minimum documentation searched (classification system followed by classification symbols)                  USPC: 514/449</p> <p>Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched                  USPC: 549/510</p> <p>Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)                  PubWEST(USPT,PGPB,EPAB,JPAB); GoogleScholar                  Search Terms: docetaxel, taxane, oxazole, baccatin, acetonitrile, heptane</p>														
<p><b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b></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>X</td> <td>US 6,838,569 B2 (SHARMA et al.) 4 January 2005 (04.01.2005) col 2, ln 55-68; col 3, ln 40-55</td> <td>1-7, 9-23</td> </tr> <tr> <td>Y</td> <td>US 6,531,611 B2 (SCHLOEMER et al.) 11 March 2003 (11.03.2003) col 3, ln 15-68; col 4, ln 1-68</td> <td>8</td> </tr> <tr> <td>Y</td> <td>US 5,688,977 A (SISTI et al.) 18 November 1997 (18.11.1997) Abstract</td> <td>8</td> </tr> </tbody> </table>			Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	X	US 6,838,569 B2 (SHARMA et al.) 4 January 2005 (04.01.2005) col 2, ln 55-68; col 3, ln 40-55	1-7, 9-23	Y	US 6,531,611 B2 (SCHLOEMER et al.) 11 March 2003 (11.03.2003) col 3, ln 15-68; col 4, ln 1-68	8	Y	US 5,688,977 A (SISTI et al.) 18 November 1997 (18.11.1997) Abstract	8
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.												
X	US 6,838,569 B2 (SHARMA et al.) 4 January 2005 (04.01.2005) col 2, ln 55-68; col 3, ln 40-55	1-7, 9-23												
Y	US 6,531,611 B2 (SCHLOEMER et al.) 11 March 2003 (11.03.2003) col 3, ln 15-68; col 4, ln 1-68	8												
Y	US 5,688,977 A (SISTI et al.) 18 November 1997 (18.11.1997) Abstract	8												
<p><input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/></p>														
<p>* Special categories of cited documents:</p> <table border="0"> <tr> <td> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"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)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> </td> <td> <p>"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 invention</p> <p>"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</p> <p>"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</p> <p>"&amp;" document member of the same patent family</p> </td> </tr> </table>			<p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"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)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p>	<p>"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 invention</p> <p>"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</p> <p>"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</p> <p>"&amp;" document member of the same patent family</p>										
<p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"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)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p>	<p>"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 invention</p> <p>"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</p> <p>"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</p> <p>"&amp;" document member of the same patent family</p>													
<p>Date of the actual completion of the international search 6 February 2008 (06.02.2008)</p>		<p>Date of mailing of the international search report <b>14 MAR 2008</b></p>												
<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:                  Lee W. Young                  PCT Helpdesk: 571-272-4300                  PCT OSP: 571-272-7774</p>												