

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
28 October 2004 (28.10.2004)

PCT

(10) International Publication Number
WO 2004/091280 A3

- (51) International Patent Classification⁷: **A61K 31/665**, 31/34
- (21) International Application Number:
PCT/US2004/009644
- (22) International Filing Date: 30 March 2004 (30.03.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/459,298 1 April 2003 (01.04.2003) US
- (71) Applicant (for all designated States except US):
SMITHKLINE BEECHAM CORPORATION
[US/US]; One Franklin Plaza, Philadelphia, Pennsylvania 19101 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **SAYANI, Aryn, Pyarali** [KE/CA]; c/o GlaxoSmithKline, 7333 Road North, Mississauga, Ontario L5N 6L4 (CA). **MALEKI, Mehran** [CA/CA]; c/o GlaxoSmithKline, 7333 Road North, Mississauga, Ontario L5N 6L4 (CA). **CHOW, Kwok, Yui** [CA/CA]; 5276 Champlain Trail, Mississauga, Ontario L5R 2Y9 (CA).
- (74) Agents: **LEVY, David, J.** et al.; GlaxoSmithKline, Corporate Intellectual Property Dept., Five Moore Drive, PO Box 13398, Research Triangle Park, NC 27709 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, 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, IT, LU, MC, 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).
- Published:
— with international search report
- (88) Date of publication of the international search report:
17 February 2005
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.



WO 2004/091280 A3

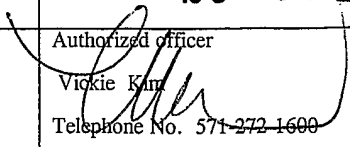
(54) Title: PHARMACEUTICAL COMPOSITIONS

(57) Abstract: The present invention relates to pharmaceutical liquid compositions of (3S)-tetrahydrofuran-3-yl (1S, 2R)-[[[4-aminophenyl]sulphonyl](isobutyl)amino]-1-benzyl-2-(phosphonoxy)propylcarbamate.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/09644

<p>A. CLASSIFICATION OF SUBJECT MATTER IPC(7) : A61K 31/665; 31/34 US CL : 514/473, 478, 495, 492, 218, 220 According to International Patent Classification (IPC) or to both national classification and IPC</p>												
<p>B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) U.S. : 514/473, 478, 495, 492, 218, 220</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) Please See Continuation Sheet</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>X</td> <td>US 6,436,989 B1 (HALE et al) 20 August 2002 (20.08.2002), see full text, especially columns 36-38.</td> <td>1-17</td> </tr> <tr> <td>X,P</td> <td>US 2003/0176319 A1 (WATANABE et al) 18 September 2003(18.09.20003), see full text.</td> <td>1-17</td> </tr> </tbody> </table>			Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	X	US 6,436,989 B1 (HALE et al) 20 August 2002 (20.08.2002), see full text, especially columns 36-38.	1-17	X,P	US 2003/0176319 A1 (WATANABE et al) 18 September 2003(18.09.20003), see full text.	1-17	
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.										
X	US 6,436,989 B1 (HALE et al) 20 August 2002 (20.08.2002), see full text, especially columns 36-38.	1-17										
X,P	US 2003/0176319 A1 (WATANABE et al) 18 September 2003(18.09.20003), see full text.	1-17										
<p><input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.</p>												
<p>* Special categories of cited documents:</p> <table border="0"> <tr> <td>"A" document defining the general state of the art which is not considered to be of particular relevance</td> <td>"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</td> </tr> <tr> <td>"E" earlier application or patent published on or after the international filing date</td> <td>"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</td> </tr> <tr> <td>"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)</td> <td>"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</td> </tr> <tr> <td>"O" document referring to an oral disclosure, use, exhibition or other means</td> <td>"&" document member of the same patent family</td> </tr> <tr> <td>"P" document published prior to the international filing date but later than the priority date claimed</td> <td></td> </tr> </table>			"A" document defining the general state of the art which is not considered to be of particular relevance	"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	"E" earlier application or patent published on or after the international filing date	"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	"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)	"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	"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family	"P" document published prior to the international filing date but later than the priority date claimed	
"A" document defining the general state of the art which is not considered to be of particular relevance	"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											
"E" earlier application or patent published on or after the international filing date	"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											
"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)	"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											
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family											
"P" document published prior to the international filing date but later than the priority date claimed												
<p>Date of the actual completion of the international search 18 October 2004 (18.10.2004)</p>		<p>Date of mailing of the international search report 23 NOV 2004</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. (703) 305-3230</p>		<p>Authorized officer  Vickie Kim Telephone No. 571-272-1600</p>										

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US04/09644

Continuation of B. FIELDS SEARCHED Item 3:
CAS ONLINE, USPATFUL, CAPLUS, REGISTRY
structure searched and term searched: fosamprenavir, suspension, solution, liquid preparation, calcium and sodium chloride, cellulose,
etc