

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
24 June 2004 (24.06.2004)

PCT

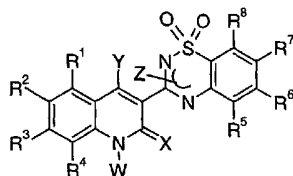
(10) International Publication Number
WO 2004/052313 A3

- (51) International Patent Classification⁷: **C07D 417/04**,
A61K 31/549, A61P 31/00, 31/12
- (21) International Application Number:
PCT/US2003/039983
- (22) International Filing Date:
11 December 2003 (11.12.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/432,462 11 December 2002 (11.12.2002) US
- (71) Applicant (for all designated States except US):
SMITHKLINE BEECHAM CORPORATION
[US/US]; One Franklin Plaza, P.O. Box 7929, Philadelphia, PA 19101 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **CHAI, Deping**
[CN/US]; 1250 South Collegeville Road, Collegeville, PA 19426 (US). **DUFFY, Kevin, J.** [GB/US]; 1250 South Collegeville Road, Collegeville, PA 19426 (US). **FITCH, Duke, M.** [US/US]; 1250 South Collegeville Road, Collegeville, PA 19426 (US). **SHAW, Antony, N.** [GB/US]; 1250 South Collegeville Road, Collegeville, PA 19426 (US). **TEDESCO, Rosanna** [IT/US]; 1250 South Collegeville Road, Collegeville, PA 19426 (US). **WIGGALL, Kenneth, J.** [GB/US]; 1250 South Collegeville Road, Collegeville, PA 19426 (US). **ZIMMERMAN, Michael**,
- (74) Agents: **SIEBURTH, Kathryn, L.** et al.; SmithKline Beecham Corporation, Corporate Intellectual Property, UW 2220, 709 Swedeland Road, P.O. Box 1539, King of Prussia, PA 19406-0939 (US).
- (81) Designated States (national): AE, AG, AL, AU, BA, BB, BR, BZ, CA, CN, CO, CR, CU, DM, DZ, EC, EG, GD, GE, HR, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MA, MG, MK, MN, MX, NO, NZ, OM, PH, PL, RO, SC, SG, TN, TT, UA, US, UZ, VN, YU, ZA.
- (84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
— with international search report
— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report:
2 September 2004
- 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 2004/052313 A3

(54) Title: ANTI-INFECTIVES



(I)

(57) Abstract: Compounds useful as HCV anti-infectives having the formula (I) wherein the formula variables are as defined herein, are disclosed. Also disclosed are methods of making and using the same.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/39983

A. CLASSIFICATION OF SUBJECT MATTER		
IPC(7) : CO7D 417/04; A61K 31/549; A61P 31/00, 31/12		
US CL : 544/12; 514/223.2		
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. : 544/12; 514/223.2		
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) CAS ONLINE, EAST		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 01/85172 A1 (SMITHKLINE BEECHAM CORPORATION) 15 November 2001 (15.11.2001), see entire document.	1-26
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.		
* Special categories of cited documents:		
"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	
Date of the actual completion of the international search 17 June 2004 (17.06.2004)		Date of mailing of the international search report 06 JUL 2004
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		Authorized officer <i>Valerie Bell Harris</i> Venkataratnam Balasubramanian Telephone No. 571/272-1600