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(21) International Application Number: PCT/US98/27001 (22) International Filing Date: 18 December 1998 (18.12.98) (30) Priority Data: 60/068,251 19 December 1997 (19.12.97) US 09/213,192 17 December 1998 (17.12.98) US (71) Applicant (for all designated States except US): SARAWAK MEDICHEM PHARMACEUTICALS, INC. [US/US]; Suite O, 12305 South New Avenue, Lemont, IL 60439 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): LIN, Yuh-Meei [US/US]; 833 W. Bauer Road, Naperville, IL 60563 (US). ANDERSON, Herbert, M. [US/US]; 7309 Sprucewood Avenue, Woodridge, IL 60517 (US). JENTA, Tuah, R. [MY/US]; Apartment 3706-1, Presidential Towers, 555 West Madison Street, Chicago, IL 60661 (US). WILLIAMS, Michael, J. [US/US]; 601 East Norris Drive, Ottawa, IL 61350 (US). FLAVIN, Michael, T. [US/US]; 8817 Royal Lane, Darien, IL 60561 (US). XU, Ze-Qi [CN/US]; 1150 Greensfield Drive, Naperville, IL 60563 (US).		(74) Agent: MIAO, Emily; McDonnell Boehnen Hulbert & Berghoff, 300 South Wacker Drive, Chicago, IL 60606 (US). (81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>
(54) Title: A SCALABLE METHOD FOR THE ISOLATION OF ANTI-HIV AGENTS FROM THE TROPICAL PLANT <i>CALOPHYLLUM</i> (57) Abstract An efficient and scalable method is reported for the isolation of costatolide (2), an HIV-1-specific nonnucleoside reverse transcriptase inhibitor (NNRTI), from the latex of <i>Calophyllum</i> plants such as <i>C. teysmannii</i> var. <i>inophylloide</i>. An overall yield of 10.6 % of costatolide, with a purity of 96 %, was obtained by repetitive recrystallization of the latex from a single organic solvent after the oily material was removed by treatment with hexane. A second major component of the latex, soulatrolide (3), another HIV-1 NNRTI, was also isolated. Both compounds were characterized by spectroscopic and chromatographic analyses and their <i>in vitro</i> anti-HIV activities were also confirmed. The results suggest that sufficient supplies of costatolide can be obtained in a relatively low-cost manner from natural sources.		