(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
8 November 2001 (08.11.2001)

PCT

(10) International Publication Number
WO 01/083800 A3

(51) International Patent Classification[7]: C12N 15/52, 15/74, 9/00, 1/21, C12P 17/16, 17/18, C07D 313/00, 413/06, 417/06, 493/04, 493/06 // (C12N 1/21, C12R 1:01) (C12P 17/16, C12R 1:01)

(21) International Application Number: PCT/US01/13793

(22) International Filing Date: 26 April 2001 (26.04.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

09/560,367	28 April 2000 (28.04.2000)	US
60/232,696	14 September 2000 (14.09.2000)	US
60/257,517	21 December 2000 (21.12.2000)	US
09/825,856	3 April 2001 (03.04.2001)	US
09/825,876	3 April 2001 (03.04.2001)	US
60/269,020	13 April 2001 (13.04.2001)	US

(71) Applicant *(for all designated States except US)*: **KOSAN BIOSCIENCES, INC.** [US/US]; 3832 Bay Center Place, Hayward, CA 94545 (US).

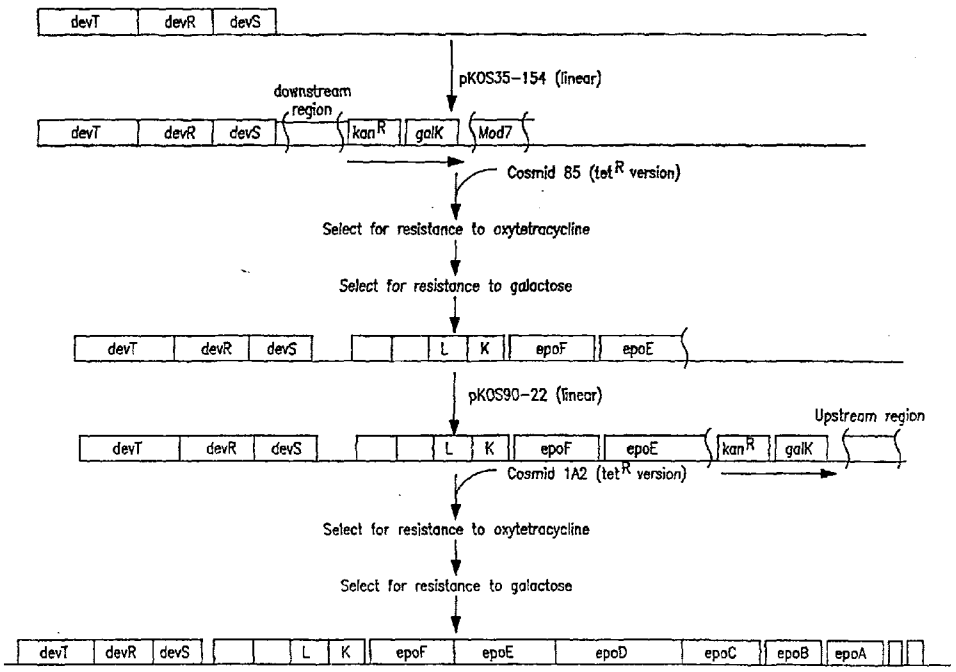
(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **ARSLANIAN, Robert, L.** [US/US]; 920 Monte Verde Drive, Pacifica, CA 94044 (US). **ASHLEY, Gary** [US/US]; 1102 Verdemar Drive, Alameda, CA 94502 (US). **FRYKMAN, Scott** [US/US]; 610 Buckwheat Court, Apartment 1205, Hayward, CA 94544 (US). **JULIEN, Bryan** [US/US]; 4514 Fleming Avenue, Oakland, CA 94619 (US). **KATZ, Leonard** [US/US]; 6389 Longcroft Drive, Oakland, CA 94611 (US). **KHOSLA, Chaitan** [IN/US]; 740 La Para Avenue, Palo Alto, CA 94306 (US). **LAU, Janice** [US/US]; 186 36th Avenue, Apartment G, San Mateo, CA 94403 (US). **LICARI, Peter, J.** [US/US]; 35417 Terra Cotta Circle, Fremont, CA 94536 (US). **REGENTIN, Rika** [US/US]; 25409 Modoc Court, Hayward, CA 94542 (US). **SANTI, Daniel** [US/US]; 211 Belgrave Avenue, San Francisco, CA 94117 (US). **TANG, Li** [CN/US]; 905 Virgo Lane, Foster City, CA 94404 (US).

(74) Agents: **MURASHIGE, Kate, H.** et al.; Morrison & Foerster LLP, Suite 500, 3811 Valley Centre Drive, San Diego, CA 92130-2332 (US).

[Continued on next page]

(54) Title: HETEROLOGOUS PRODUCTION OF POLYKETIDES



(57) Abstract: Recombinant *Myxococcus* host cells can be used to produce polyketides, including epothilone and epothilone analogs that can be purified from the fermentation broth and crystallized.

WO 01/083800 A3

(81) **Designated States** *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, 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, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) **Designated States** *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, 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, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:
— *with international search report*

(88) **Date of publication of the international search report:**
10 April 2003

(15) **Information about Correction:**
Previous Correction:
see PCT Gazette No. 01/2003 of 3 January 2003, Section II

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.