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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
27 December 2007 (27.12.2007)

PCT

(10) International Publication Number
WO 2007/148093 A1

(51) International Patent Classification:
A61K 31/428 (2006.01) *A61P 31/04* (2006.01)
A61K 31/4402 (2006.01) *C07D 277/00* (2006.01)
A61K 31/4406 (2006.01) *C07D 277/62* (2006.01)
A61K 31/497 (2006.01)

(21) International Application Number:
PCT/GB2007/002314

(22) International Filing Date: 21 June 2007 (21.06.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0612428.3 22 June 2006 (22.06.2006) GB

(71) Applicant *(for all designated States except US)*: **PROLYSIS LTD.** [GB/GB]; Begbroke Business & Science Park, Sandy Lane, Yarnton, Oxfordshire OX5 1PF (GB).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **HAYDON, David, Ryall** [GB/GB]; Prolysis Ltd., Begbroke Business & Science Park, Sandy Lane, Yarnton, Oxfordshire OX5 1PF (GB). **CZAPLEWSKI, Lloyd, George** [GB/GB]; Prolysis Ltd., Begbroke Business & Science Park, Sandy Lane, Yarnton, Oxfordshire OX5 1PF (GB). **PALMER, Nicholas, John** [GB/GB]; Biofocus DPI Ltd., Chesterford Research Park, Saffron Walden, Essex CB10 1XL (GB). **MITCHELL, Dale, Robert** [GB/GB]; Biofocus DPI Ltd., Chesterford Research Park, Saffron Walden, Essex CB10 1XL (GB). **ATHERALL, John, Frederick** [GB/GB]; Biofocus DPI Ltd., Chesterford Research Park, Saffron Walden, Essex CB10 1XL (GB). **STEELE, Christopher, Richard** [GB/GB]; Biofocus DPI Ltd., Chesterford Research Park, Saffron Walden, Essex CB10 1XL (GB). **LADDUWAHETTY, Tamara** [GB/GB]; Biofocus DPI Ltd., Chesterford Research Park, Saffron Walden, Essex CB10 1XL (GB).

(74) Agent: **WALLS, Alan, James**; PO Box 223, Tadworth, Surrey KT20 5YF (GB).

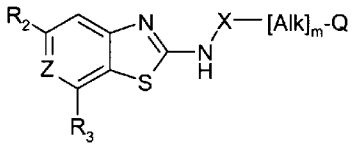
(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, 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.

(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).

Published:
— *with international search report*

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.

(54) Title: ANTIBACTERIAL COMPOSITIONS



(I)

(57) Abstract: Compounds of formula (I) have antibacterial activity: wherein: m is 0 or 1 ; Q is hydrogen or cyclopropyl; AIk is an optionally substituted, divalent C_1-C_6 alkylene, alkenylene or alkynylene radical which may contain an ether (-O-), thioether (-S-) or amino (-NR)- link, wherein R is hydrogen, -CN or C_1-C_3 alkyl; X is -C(=O)NR_6-, -S(O)NR_6-, -C(=O)O- or -S(=O)O- wherein R_6 is hydrogen, optionally substituted C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, -Cyc, or -(C_1-C_3 alkyl)-Cyc wherein Cyc is optionally substituted monocyclic carbocyclic or heterocyclic having 3-7 ring atoms; Z is N or CH, or CF; R_2 and R_3 are as defined in the description.

WO 2007/148093 A1