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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
9 April 2009 (09.04.2009)

PCT

(10) International Publication Number
WO 2009/045116 A1

(51) International Patent Classification:
G01N 33/497 (2006.01) *C12Q 1/04* (2006.01)

(21) International Application Number:
PCT/NZ2008/000261

(22) International Filing Date: 6 October 2008 (06.10.2008)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
562236 5 October 2007 (05.10.2007) NZ

(71) Applicant *(for all designated States except US)*: **UNIVERSITY OF OTAGO** [NZ/NZ]; Leith Street, Dunedin (NZ).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **SYHRE, Mona** [DE/NZ]; 142 Fisher Avenue, Beckenham, Christchurch, 8023 (NZ). **CHAMBERS, Stephen T.** [NZ/NZ]; 27 Kiteroa Place, Cashmere, Christchurch, 8022 (NZ).

(74) Agent: **BALDWINS INTELLECTUAL PROPERTY**; P O Box 852, Wellington (NZ).

(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, 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, ME, 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, ST, 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, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, 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*
— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

(54) Title: DETECTION OF VOLATILE COMPOUNDS AS MARKERS FOR MYCOBACTERIA TUBERCULOSIS

(57) Abstract: The invention relates to the use of biomarkers for identifying bacterial pathogens. In particular, the invention relates to the detection and identification of certain compounds as markers for mycobacterial infections in a patient or from a culture by analysis of a gaseous sample.

WO 2009/045116 A1