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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
21 November 2002 (21.11.2002)

PCT

(10) International Publication Number
WO 02/092844 A1

(51) International Patent Classification[7]: C12Q 1/37, C12N 1/20, 9/52, 9/54

(21) International Application Number: PCT/NZ02/00093

(22) International Filing Date: 14 May 2002 (14.05.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
511680 14 May 2001 (14.05.2001) NZ

(71) Applicant *(for all designated States except US)*: **THE UNIVERSITY OF WAIKATO** [NZ/NZ]; Gate 5, Hillcrest Road, 2001 Hamilton (NZ).

(72) Inventors; and
(75) Inventors/Applicants *(for US only)*: **DANIEL, Roy, McIver** [NZ/NZ]; 74 Nevada Road, 2001 Hamilton (NZ). **SAUL, David, J** [GB/NZ]; 37 Hill Road, Palm Beach, 1236 Auckland (NZ).

(74) Agents: **WILSON, Kathryn, Shelley** et al.; Private Bag 3140, Level 12, KPMG Centre, 85 Alexandra Street, 2001 Hamilton (NZ).

(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, 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, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.

(84) Designated States *(regional)*: ARIPO patent (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, 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, 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.

WO 02/092844 A1

(54) Title: THERMOSTABLE PROTEINASES FROM THERMOPHILIC BACTERIA

(57) Abstract: The present invention relates to thermostable proteinases from thermophilic Bacillus species and their uses in the preparation of nucleic acid samples. The enzymes of the invention are stable and active at 65-80 °C, but are readily autolysed or denatured above 90 °C.