

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
14 February 2008 (14.02.2008)

PCT

(10) International Publication Number  
**WO 2008/018839 A1**

(51) International Patent Classification:  
*C12Q 1/68* (2006.01)

(21) International Application Number:  
PCT/SG2007/000248

(22) International Filing Date: 10 August 2007 (10.08.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/836,374 9 August 2006 (09.08.2006) US

(71) Applicant (for all designated States except US): **NATIONAL UNIVERSITY OF SINGAPORE** [SG/SG];  
21 Lower Kent Ridge Road, Singapore 119077 (SG).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **RAGHUNATH, Michael** [DE/SG]; c/o National University of Singapore, 21 Lower Kent Ridge Road, Singapore 119077 (SG). **LAREU, Ricardo, Rodolfo** [AU/SG]; c/o National University of Singapore, 21 Lower Kent Ridge Road, Singapore 119077 (SG). **HARVE, Subramhanya, Karthik** [IN/SG]; c/o National University of Singapore, 21 Lower Kent Ridge Road, Singapore 119077 (SG).

(74) Agent: **MATTEUCCI, Gianfranco**; Lloyd Wise, Tanjong Pagar, P.O. Box 636, Singapore 910816 (SG).

(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, 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, 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).

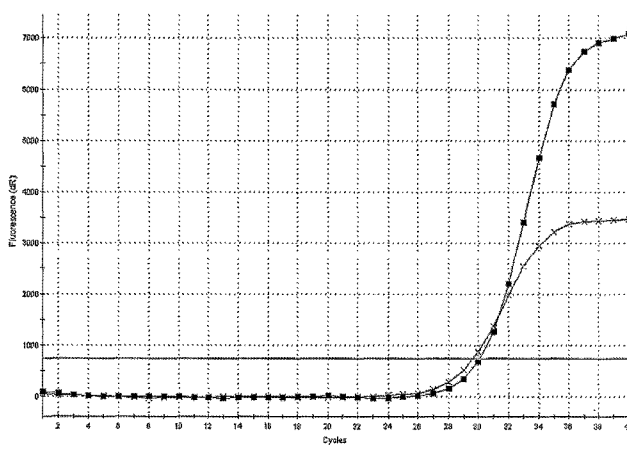
Declaration under Rule 4.17:

— of inventorship (Rule 4.17(iv))

[Continued on next page]

(54) Title: METHOD FOR MOLECULAR BIOLOGY APPLICATIONS

Amplification Plots



(57) Abstract: The invention provides a method of nucleic acid synthesis and/or amplification, and/or of improving the efficiency, activity and/or stability of at least one nucleic acid-modifying enzyme, comprising carrying out the method in the presence of (a) at least one organic-based macromolecule having a molecular weight of 50kDa to 500kDa and neutral surface charge; or (b) at least one organic-based macromolecule of radius 2 to 50nm and neutral surface charge. There is also provided a method of determining the optimum crowding conditions of macromolecule(s) in solution.

WO 2008/018839 A1



**Published:**

- *with international search report*
- *with sequence listing part of description published separately in electronic form and available upon request from the International Bureau*