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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
4 August 2005 (04.08.2005)

PCT

(10) International Publication Number
WO 2005/071110 A3

(51) International Patent Classification[7]: C12Q 1/68

(21) International Application Number:
PCT/GB2005/000218

(22) International Filing Date: 21 January 2005 (21.01.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

0401524.4	23 January 2004 (23.01.2004)	GB
60/560,321	6 April 2004 (06.04.2004)	US

(71) Applicant *(for all designated States except US)*: **LINGVITAE AS** [NO/NO]; Trimveien 6, A562, N-0372 Oslo (NO).

(71) Applicant *(for AG only)*: **JAPPY, John, William, Graham** [GB/GB]; Gill Jennings & Every, 7 Eldon Street, London EC2M 7LH (GB).

(72) Inventor; and

(75) Inventor/Applicant *(for US only)*: **LEXOW, Preben** [NO/NO]; Lingvitae AS, Trimveien 6, A562, N-0372 Oslo (NO).

(74) Agent: **GILL JENNINGS & EVERY**; Broadgate House, 7 Eldon Street, London EC2M 7HL (GB).

(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, 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, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, 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, MC, 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*
— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

(88) Date of publication of the international search report:
13 October 2005

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: IMPROVING POLYNUCLEOTIDE LIGATION REACTIONS

(57) Abstract: The method of the invention is useful in quantifying the absolute or relative number of unique molecules present in a sample after carrying out an analysis procedure on the sample, and comprises the steps of: (i) attaching a unique molecular tag to substantially all of the molecules in the sample; (ii) carrying out the analysis procedure using the molecules of the sample; and (iii) on the basis of the molecular tags determining the absolute or relative number of unique molecules present in the original sample which underwent the analysis procedure.

WO 2005/071110 A3