

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

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
11 December 2008 (11.12.2008)

PCT

(10) International Publication Number
WO 2008/148143 A1

- (51) International Patent Classification:
C12Q 1/68 (2006.01) *G01N 33/68* (2006.01)
- (21) International Application Number:
PCT/AU2007/000798
- (22) International Filing Date: 6 June 2007 (06.06.2007)
- (25) Filing Language: English
- (26) Publication Language: English
- (71) Applicants (for all designated States except US): **UNIVERSITY OF WOLLONGONG** [AU/AU]; Northfields Avenue, Wollongong, New South Wales 2522 (AU). **JAMES COOK UNIVERSITY** [AU/AU]; Angus Smith Drive, Townsville, Queensland 4811 (AU).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **DIXON, Nicholas, Edward** [AU/AU]; 46 Asquith Street, Austinmer, NSW 2515 (AU). **SCHAEFFER, Patrick, Marcel** [AU/AU]; 7 Anew Court, Alice River, QLD 4817 (AU).
- (74) Agent: **SPRUSON & FERGUSON**; GPO 3898, Sydney, NSW 2001 (AU).

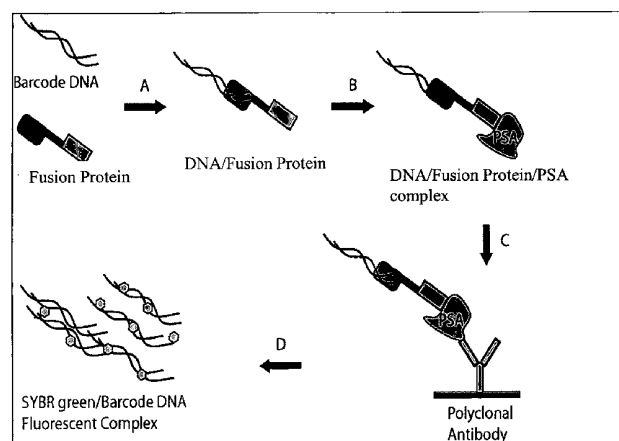
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, 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
- with sequence listing part of description published separately in electronic form and available upon request from the International Bureau

(54) Title: DIAGNOSTICS IN A MONOPLEX/MULTIPLEX FORMAT

FIG. 1



(57) Abstract: The present invention relates to a method of detecting and/or quantifying a target molecule from a sample obtained from a subject wherein the method comprises: (i) incubating a fusion protein or conjugate comprising a Ter binding polypeptide fused to at least one anti-target molecule or fragment thereof with a partially double-stranded oligonucleotide for a time and under conditions sufficient to bind to said Ter binding polypeptide thereby producing a complex; (ii) incubating said complex in the presence of said sample comprising said target molecule for a time and under conditions sufficient for said anti-target molecule to bind to said target molecule thereby producing a target-bound complex; (iii) incubating said target-bound complex in the presence of at least one immobilised molecule wherein said immobilised molecule has an affinity to said target molecule; (iv) incubating said immobilised molecule for a time and under conditions sufficient to bind to said target molecule thus immobilising said target molecule; and (v) detecting and/or quantifying said target molecule.

WO 2008/148143 A1