

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
4 September 2014 (04.09.2014)



(10) International Publication Number
WO 2014/132244 A9

- (51) International Patent Classification:
C12Q 1/68 (2006.01) *G06F 19/00* (2011.01)
- (21) International Application Number:
PCT/IB2014/059351
- (22) International Filing Date:
28 February 2014 (28.02.2014)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
61/770,985 28 February 2013 (28.02.2013) US
- (71) Applicant: **THE CHINESE UNIVERSITY OF HONG KONG** [CN/CN]; c/o Knowledge Transfer Office, Rm 301, Pi Ch'iu Building, Shatin, New Territories, Hong Kong (CN).
- (72) Inventors: **LO, Yuk Ming Dennis**; 4th Floor, 7 King Tak Street, Homantin, Kowloon, Hong Kong (CN). **CHIU, Rossa Wai Kwun**; House 31, Double Haven, 52 Ma Lok Path, Shatin, New Territories, Hong Kong (CN). **CHAN, Kwan Chee**; Flat A, 13/F, Block 34, Broadway Street, Mei Foo Sun Chuen, Kowloon, Hong Kong (CN). **JIANG, Peiyong**; Flat 7 on 1st Floor of Block B, Kwong Lam Court, Nos. 62-66 Siu Lek Yuen Road, Shatin, New Territories, Hong Kong (CN). **TSUI, Bo Yin**; Rm. H, 2/F, Block
- (74) Agent: **WANG, Daz**; Insight Intellectual Property Limited, 19A, Tower A, InDo Building, No. 48A Zhichun Road, Haidian District, Beijing 100098 (CN).
- (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, BN, BR, BW, BY, BZ, CA, CH, CL, 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, IR, IS, JP, KE, KG, 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, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, 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, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM,

[Continued on next page]

(54) Title: MATERNAL PLASMA TRANSCRIPTOME ANALYSIS BY MASSIVELY PARALLEL RNA SEQUENCING

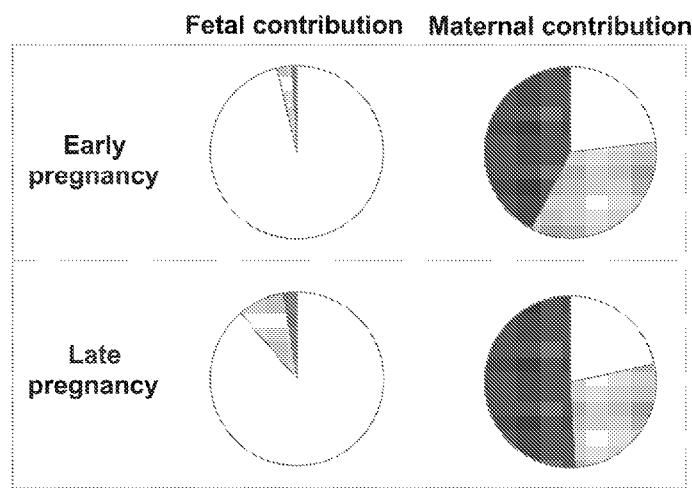


FIG. 18A

(57) Abstract: Methods are provided for diagnosing pregnancy-associated disorders, determining allelic ratios, determining maternal or fetal contributions to circulating transcripts, and/or identifying maternal or fetal markers using a sample from a pregnant female subject. Also provided is use of a gene for diagnosing a pregnancy-associated disorder in a pregnant female subject.



TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

(88) Date of publication of the revised international search report:

27 November 2014

Published:

— *with international search report (Art. 21(3))*

(15) Information about Correction:
see Notice of 27 November 2014