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(54) Title: METHODS OF DETERMINING RELATIVE GENETIC LIKELIHOODS OF AN INDIVIDUAL MATCHING A POPULATION

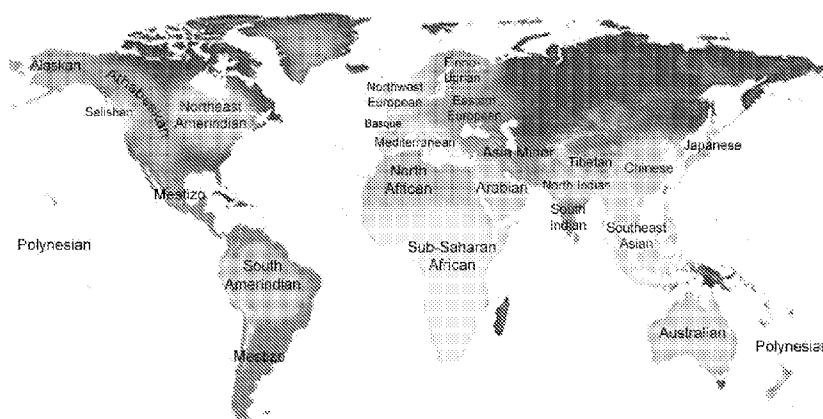


FIG. 1

(57) Abstract: Provided are methods of determining an individual's relative likelihood of having a genetic match with one or more local populations as compared to a generic index population. Also provided are systems, apparatuses, kits, and machine-readable medium relating to such methods. The methods may be used for example, to identify an individual's or individual's ancestor's most likely geographic origin, or to identify the breed, species, kingdom, etc. of an organism.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 07/60605

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - C12Q 1/68 (2008.04)

USPC - 435/6

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC(8) - C12Q 1/68 (2008.04)

USPC - 435/6

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

USPC - 435/6; 702/20; 707/6, 707/7

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

PubWEST(USPT,PGPB,EPAB,JPAB); Google Patents; Google Scholar

Search terms: population, likelihood, STR, SNP, population, local, global, geographic origin, computer or software, database, ratio, joint probability, confidence, K group, dog or canine, genetics, Bayesian, Z-score, loci or gene or allele

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X -- Y	US 2004/0229231 A1 (FRUDAKIS et al.) 18 November 2004 (18.11.2004) para [0015]-[0016], [0021], [0024], [0026]-[0027], [0036], [0044], [0068], [0070], [0153]-[0155], [0158], [0237] and [0239].	1-5, 13, 15, 17-20 and 23-29 ----- 6-12, 14, 16, 21-22 and 30-32
Y	US 2004/0126782 A1 (HOLDEN et al.) 1 July 2004 (01.07.2004) para [0014], [0065] and [0070].	6-12
Y	US 2003/0224394 A1(SCHADT et al.) 4 December 2003 (04.12.2003) para [0036] and [0185]-[0187].	14 and 30-32
Y	US 2005/0009069 A1 (LIU et al.) 13 January 2005 (13.01.2005) para [0161].	16
Y	US 2006/0008815 A1 (ROSENFELD et al.) 12 January 2006 (12.01.2006) para [0027] and [0051].	21-22
Y	FRIEDMAN et al., Using Bayesian Networks to Analyze Expression Data, Journal of Computational Biology. 1 August 2000, Vol 7, No 3-4, pp 601-620 (p 601, abstract; p 603, para 4).	7-12

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