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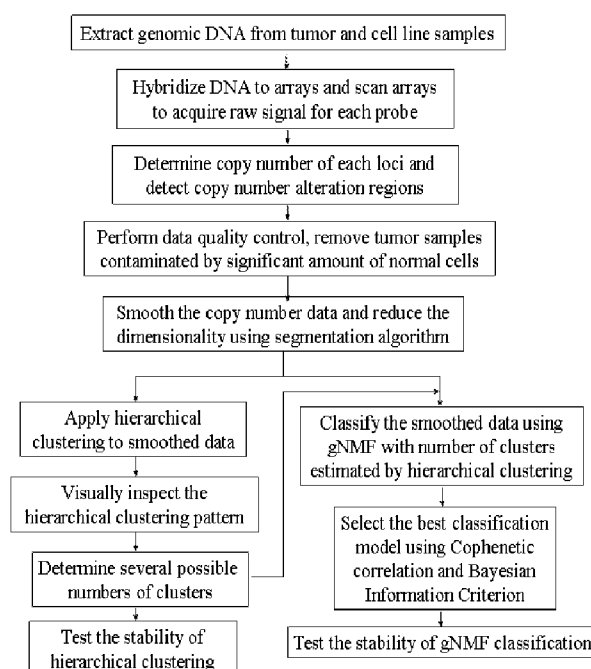
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[Continued on next page]

(54) Title: METHODS FOR ASSEMBLING PANELS OF CANCER CELL LINES FOR USE IN TESTING THE EFFICACY OF ONE OR MORE PHARMACEUTICAL COMPOSITIONS

FIGURE 1



(57) Abstract: The present invention relates to algorithms for use in defining genomic subgroups of tumors and cancer cell lines. The present invention also relates to methods for assembling panels of tumors and cancer cell lines according to genomic subgroups for use in testing the efficacy of one or more pharmaceutical compounds in the treatment of subjects suffering from at least one cancer.



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INTERNATIONAL SEARCH REPORT

International application No

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A. CLASSIFICATION OF SUBJECT MATTER

INV. G06F19/00

ADD.

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)

C12N C07D G01N G06F

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

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

EPO-Internal, WPI Data, INSPEC, BIOSIS

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	PASCUAL-MONTANO ALBERTO ET AL: "bioNMF: a versatile tool for non-negative matrix factorization in biology" BMC BIOINFORMATICS, BIOMED CENTRAL, LONDON, GB LNKD- DOI:10.1186/1471-2105-7-366, vol. 7, no. 1, 28 July 2006 (2006-07-28), page 366, XP021013884 ISSN: 1471-2105 page 367, right-hand column, line 1 - page 372, right-hand column, line 2 ----- -/--	1-8

☒ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

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International application No

PCT/US2009/062421

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	KIM HYUNSOO ET AL: "Sparse non-negative matrix factorizations via alternating non-negativity-constrained least squares for microarray data analysis" BIOINFORMATICS (OXFORD), vol. 23, no. 12, June 2007 (2007-06), pages 1495-1502, XP002596514 ISSN: 1367-4803 the whole document	1-8
A	MYLLYKANGAS SAMUEL ET AL: "Classification of human cancers based on DNA copy number amplification modeling" BMC MEDICAL GENOMICS, BIOMED CENTRAL LTD, LONDON UK, vol. 1, no. 1, 14 May 2008 (2008-05-14), page 15, XP021040898 ISSN: 1755-8794 page 16, right-hand column, line 29 - page 19, left-hand column, line 42	1-8
A	WANG GUOLI ET AL: "LS-NMF: A modified non-negative matrix factorization algorithm utilizing uncertainty estimates" BMC BIOINFORMATICS, BIOMED CENTRAL, LONDON, GB LNKD- DOI:10.1186/1471-2105-7-175, vol. 7, no. 1, 28 March 2006 (2006-03-28), page 175, XP021013680 ISSN: 1471-2105 the whole document	1-8
A	DEVARAJAN KARTHIK: "Nonnegative matrix factorization: an analytical and interpretive tool in computational biology." PLOS COMPUTATIONAL BIOLOGY 2008 LNKD- PUBMED:18654623, vol. 4, no. 7, 1 July 2008 (2008-07-01), page E1000029, XP002596515 ISSN: 1553-7358 the whole document	1-8
A	GAO YUAN ET AL: "Improving molecular cancer class discovery through sparse non-negative matrix factorization." BIOINFORMATICS (OXFORD, ENGLAND) 1 NOV 2005 LNKD- PUBMED:16244221, vol. 21, no. 21, 1 November 2005 (2005-11-01), pages 3970-3975, XP002596516 ISSN: 1367-4803 page 3971, left-hand column, line 18 - page 3972, left-hand column, line 20	1-8

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PCT/US2009/062421

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	XUESONG LU ET AL: "Predicting features of breast cancer with gene expression patterns" BREAST CANCER RESEARCH AND TREATMENT, KLUWER ACADEMIC PUBLISHERS, BO, vol. 108, no. 2, 22 May 2007 (2007-05-22), pages 191-201, XP019570466 ISSN: 1573-7217 page 193, left-hand column, line 22 - page 195, left-hand column, line 4 -----	1-8