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ning of each regular issue of the PCT Gazette.

(54) Title: METHODS OF WHOLE GENOME OR MICROARRAY EXPRESSION PROFILING USING NUCLEIC ACIDS

(57) Abstract: The present invention provides novel methods for analyzing gene expression levels from fresh or aged (more than one year old) formalin-fixed, paraffin-embedded tissue ("FFPET") samples that comprise pre-hybridizing a labeled nucleic acid sample prepared from the formalin-fixed, paraffin-embedded tissue sample with a first microarray, hybridizing the unbound labeled nucleic acid sample with a second microarray, and detecting the labeled nucleic acid sample bound to the second microarray. The pre-hybridization step results in an increase in the specific gene signals in subsequent hybridizations with high density gene expression arrays. The first microarray used for the pre-hybridization step can be either a new or used microarray. Importantly, from a cost-savings perspective, the inventors determined that when the first microarray used for the pre-hybridization step is a previously used microarray, the results of the subsequent hybridization on a second microarray are nearly identical to the results obtained when the pre-hybridization was carried out using a new or previously unused microarray.



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INTERNATIONAL SEARCH REPORT

International application No.

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - C12P 19/34 (2007.1)

USPC - 435/91.2, 435/91.1

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)

USPC: 435/91.2, 91.1, 89, 85, 41

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 practicable, search terms used)

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

Search Terms: prehybridizing, pre-hybridizing, prehybridization, microarray, paraffin, paraffin-embedded, expression profiling, tissue, purified, fragmented, RNA, cDNA. Amplified.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2003/0225528 A1 (BAKER et al.) 4 December 2003 (4.12.2003), entire document especially FIG. 1 and 2, and para [0267], [0315]-[0318], [0161] and [0324]	1-20
Y	US 2002/0120409 A1 (CAO et al.) 29 August 2002 (29.08.2002), para [0008] and [0034]	17-20
Y	US 2004/0175717 A1 (VAN ZYL) 9 September 2004 (9.09.2004), para [0069] and [0137]	1-20

 Further documents are listed in the continuation of Box C.

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