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[Continued on next page]

(54) Title: BIOMARKERS FOR THE DETECTION OF EARLY STAGE OVARIAN CANCER

Protocol workflow. Serum samples were run triplicate in a randomized fashion in 96 well plates, using robotic automation for sample preparation.

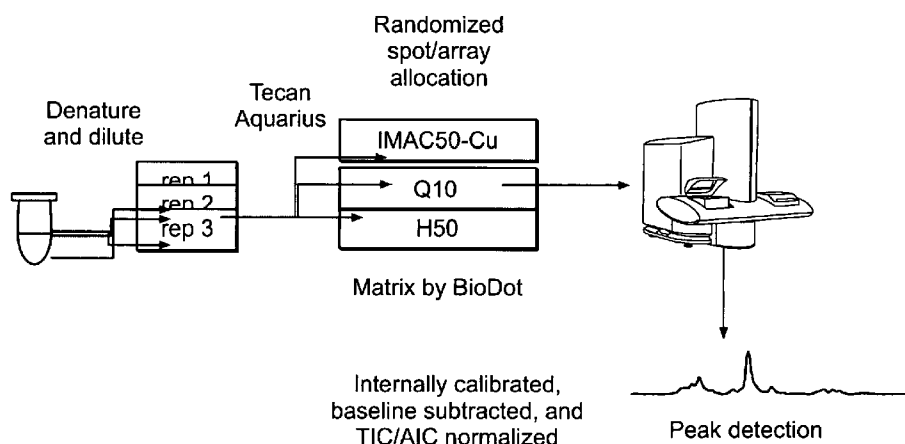


FIG. 1

(57) Abstract: The present invention provides methods and compositions for detecting early stage ovarian cancer in a patient. Also, methods for evaluating the ovarian cancer state of a patient are described herein. These methods involve the detection, analysis, and classification of biomarkers in biological samples.

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2008/012323**A. CLASSIFICATION OF SUBJECT MATTER***G01N 33/574(2006.01)i, G01N 33/68(2006.01)i, G01N 33/53(2006.01)i, G01N 33/48(2006.01)i, G01N 33/50(2006.01)i*

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: G01N 33/574, G01N 33/72, C12Q 1/68

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)

eKIPASS, WPI, USPTO, PAJ "ovarian cancer, biomarker, apolipoprotein A1, ApoA 1, transthyretin, TTR, inter-alpha (globulin) inhibitor H4 (plasma kallikrein-sensitive glycoprotein), ITIH4, transferrin, TFR, CA125, CTAPIII, SELDI, etc."

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 2006-099126 A2 (CIPHERGEN BIOSYSTEMS, INC. et al., US) 21 Sep. 2006 See the whole document.	1-10, 21-38
A	WO 2007-002264 A2 (THE JOHNS HOPKINS UNIVERSITY and CIPHERGEN BIOSYSTEMS, INC., US) 04 Jan. 2007 See the whole document.	1-10, 21-38
A	WO 2006-019906 A1 (THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, US) 23 Feb. 2006 See the whole document.	1-10, 21-38
A	US 2005-0059013 A1 (DANIEL W. CHAN et al., US) 17 Mar. 2005 See the whole document.	1-10, 21-38
P, A	WO 2008-048508 A2 (VERMILLION, INC., US) 24 Apr. 2008 See the whole document.	1-10, 21-38



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2008/012323

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2008/012323**Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)**

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claims Nos.: 11, 12, 14-16
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

Claims 11, 12, and 14-16 are unclear, because they refer to multiple dependent claims which are not comply with PCT Rule 6.4(a).
3. ☒ Claims Nos.: 13, 17-20
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☐ No protest accompanied the payment of additional search fees.