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(54) Title: METHOD OF PROGNOSED RECURRENCE OF PROSTATE CANCER

(57) Abstract: A method for prognosing recurrence of prostate cancer (PCa) in a subject following prostatectomy using the out-
comes of selected single nucleotide polymorphisms (SNPs) and clinical variables. A method for genotyping PCa associated genetic
variations comprising use of a DNA micorarray. A microarray for use in the described methods.



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INTERNATIONAL SEARCH REPORT

International application No
PCT/IB2007/002364

A. CLASSIFICATION OF SUBJECT MATTER
INV. C12Q1/68

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)
C12Q

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, EMBASE, BIOSIS, CHEM ABS Data, MEDLINE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2005/032065 A1 (AFAR DANIEL E H [US] ET AL) 10 February 2005 (2005-02-10) see whole doc. esp. claims -----	1-108
X	US 2006/110759 A1 (PARIS PAMELA L [US] ET AL) 25 May 2006 (2006-05-25). see whole doc. esp. claims -----	1-108
X	CARLO IAVARONE ET AL.,: "PAGE4 is a cytoplasmic protein that is expressed in normal prostate and in prostate cancer" MOL. CANCER THERAPEUTICS, vol. 1, March 2002 (2002-03), pages 329-335, XP002469357 see whole doc. esp. abstract and discussion ----- -/--	1-108

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 document 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 another 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.
 - *Z* document member of the same patent family

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INTERNATIONAL SEARCH REPORT

International application No

PCT/IB2007/002364

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	NARITRA S. ET AL.,: "association of lipoprotein lipase gene polymorphism with risk of prostate cancer in japanese population" INT. J. CANCER, vol. 112, 2004, pages 872-876, XP002469358 see whole doc. esp. Tables and discussion -----	1-108
X	BOVA G S ET AL: "Homozygous deletion and frequent allelic loss of cchromosome 8p22 loci in human prostate cancer" CANCER RESEARCH, AMERICAN ASSOCIATION FOR CANCER RESEARCH, BALTIMORE, MD, US, vol. 53, 1 September 1993 (1993-09-01), pages 3869-3873, XP002084748 ISSN: 0008-5472 the whole document -----	1-108
X	SATO K ET AL: "CLINICAL SIGNIFICANCE OF ALTERATIONS OF CHROMOSOME 8 IN HIGH-GRADE, ADVANCED, NONMETASTATIC PROSTATE CARCINOMA" JOURNAL OF THE NATIONAL CANCER INSTITUTE, US DEPT. OF HEALTH, EDUCATION AND WELFARE, PUBLIC HEALTH, US, vol. 91, no. 18, 15 September 1999 (1999-09-15), pages 1574-1580, XP009000373 ISSN: 0027-8874 the whole document -----	1-108
X	CHANG BAO-LI ET AL.,: "polymorphisms in the CYP1A1 gene are associated with prostate cancer risk" INT. J. CANCER, vol. 106, 2003, pages 375-378, XP002483802 the whole document -----	1-108
X	ACEVEDO C. ET AL.,: "positive correlation between single or combined genotypes of cyp1a1 and gstm1 in relation to prostate cancer in chilean people" THE PROSTATE, vol. 57, 2003, pages 111-117, XP002483803 the whole document -----	1-108
X	ATKAS D. ET AL.,: "CYP1a1 and GSTM1 polymorphic genotypes in patients with prostate cancer in a turkish population" CANCER GENETICS AND CYTOGENETICS, vol. 154, 2004, pages 81-85, XP002483804 the whole document -----	1-108

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INTERNATIONAL SEARCH REPORT

International application No

PCT/IB2007/002364

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	VAN DERLENDE: "LEPTIN GENE POLYMORPHISMS AND THEIR PHENOTYPIC ASSOCIATIONS" VITAMINS AND HORMONES, ACADEMIC PRESS, NEW YORK, NY, US, vol. 71, 1 January 2005 (2005-01-01), pages 373-404, XP008072991 ISSN: 0083-6729 see whole doc. esp.386	1-108

INTERNATIONAL SEARCH REPORT

International application No.
PCT/IB2007/002364

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:

Although claims 18,82 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. Claims Nos.:
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:
3. Claims Nos.:
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:

see additional sheet

1. As all required additional search fees were timely paid by the applicant, this international search report covers allsearchable claims.
2. As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
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.:

1-108 (part)
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.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

Invention 1: claims 1-108 (part)

Probes, primers, microarrays and method for prognosing prostate cancer recurrence following prostatectomy using polymorphism rs328 of lipoprotein lipase (snp 24 in table 18)

Inventions 2-90: Claims 1-108 (part.)

Probes, primers, microarrays and method for prognosing prostate cancer recurrence following prostatectomy using polymorphism listed in Table 18, Table 1A, Table 1B and Tables 3 to 7, for each polymorphism or combination separately. The tables have been identified to comprise at least 90 different genes (SNPs)

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/IB2007/002364

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2005032065 A1	10-02-2005	US 2007099197 A1	03-05-2007
US 2006110759 A1	25-05-2006	US 2007207478 A1	06-09-2007