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Declarations under Rule 4.17:

— of inventorship (Rule 4.17(iv))

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— with international search report (Art. 21(3))

— before the expiration of the time limit for amending the
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(54) Title: BIOMARKERS FOR HYPERTENSIVE DISORDERS OF PREGNANCY

(57) Abstract: The application discloses new biomarkers for hypertensive disorders of pregnancy and particularly preeclampsia; methods for the diagnosis, prediction, prognosis and/or monitoring said disorders based on measuring said biomarkers; and kits and devices for measuring said biomarker and/or performing said methods.

INTERNATIONAL SEARCH REPORT

International application No
PCT/EP2011/055768

A. CLASSIFICATION OF SUBJECT MATTER
INV. G01N33/68
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)
G01N
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, BIOSIS, CHEM ABS Data, EMBASE, INSPEC, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2007/178605 A1 (MOR GUILLERMO G [US] ET AL MOR GIL G [US] ET AL) 2 August 2007 (2007-08-02) paragraphs [0011], [0 20], [119] examples 1-3; tables 2, 4 claims 1-58	1-26
X	WO 2009/097584 A1 (PROTEOGENIX INC [US]; NAGALLA SRINIVASA [US]; RASANEN JUHA [FI]; GRAVE) 6 August 2009 (2009-08-06) cited in the application the whole document ----- -/--	1-26

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	"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
"E" earlier document but published on or after the international filing date	"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
"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)	"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.
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search 5 July 2011	Date of mailing of the international search report 17/10/2011
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Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer Bayer, Martin
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INTERNATIONAL SEARCH REPORT

International application No
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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	LEWITT ET AL: "Regulation of insulin-like growth factor-binding protein-3 ternary complex formation in pregnancy", JOURNAL OF ENDOCRINOLOGY, vol. 159, no. 2, 1 November 1998 (1998-11-01), pages 265-274, XP055001958, ISSN: 0022-0795, DOI: 10.1677/joe.0.1590265 the whole document -----	1-26

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP2011/055768

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.:
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 all searchable 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.:

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.:

1-26(partially)

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:

1. claims: 1-26(partially)

Concerns methods and means related to ALS (insulin-like growth factor-binding protein complex acid labile chain) as a biomarker for hypertensive disorders of pregnancy and particularly preeclampsia.

2-32. claims: 1-26(partially)

Concern methods and means related to ADA12, ANGI, CAN1, CSF1 R, CRP, CSH, DAG1, DPEP2, DSG2, ECM1, ENPP2, FBLN1, FBN2, GP126, HGFL, ICAM3, KISS1, LCAP, LCAT, PGBM, PGRP2, PHLD, PRDX1, PRDX2, PTPRS, ROB04, S10A9, SAA4, TENX, TFF3, VGFR3 as a biomarker for hypertensive disorders of pregnancy and particularly preeclampsia.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/EP2011/055768

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2007178605	A1 02-08-2007	CA 2640695 A1	16-08-2007
		EP 1979750 A2	15-10-2008
		WO 2007092353 A2	16-08-2007

WO 2009097584	A1 06-08-2009	US 2010016173 A1	21-01-2010
