

**SUPPLEMENTARY
EUROPEAN SEARCH REPORT**

Application Number
EP 15 77 2587

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	WO 2009/125219 A2 (UNIV LEEDS [GB]; LEEDS TEACHING HOSPITALS NHS T [GB]; ORSI NICOLAS MIC) 15 October 2009 (2009-10-15) * Abstract; p. 1, l. 3-5; table 2. * -----	1-4,7, 10-12,14	INV. G01N33/53 A61K35/54 C12Q1/68
X	US 2007/178605 A1 (MOR GUILLERMO G [US] ET AL) 2 August 2007 (2007-08-02) * Abstract; table 3. * -----	1-4,7, 10-12,14	
			TECHNICAL FIELDS SEARCHED (IPC)
			G01N C12Q
The supplementary search report has been based on the last set of claims valid and available at the start of the search.			
Place of search Munich		Date of completion of the search 22 September 2017	Examiner López García, F
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			

CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing claims for which payment was due.

Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):

No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

All further search fees have been paid within the fixed time limit. The present (supplementary) European search report has been drawn up for all claims.

As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

Only part of the further search fees have been paid within the fixed time limit. The present (supplementary) European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
13, 15(completely); 14(partially)

None of the further search fees have been paid within the fixed time limit. The present (supplementary) European search report has been drawn up for those parts of the European patent application which relate to the first mentioned in the claims, namely claims:

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-4, 7, 10-12, 14(all partially)

An assay for stratifying a female subject with respect to likely outcome of embryo implantation, the outcome selected from pregnancy and no pregnancy, the assay comprising determining the concentrations of IL-8 from a fluid sample from the subject wherein the level or ratio of levels of the biomarker relative to a control provides an indication of the likelihood of a successful pregnancy.

2. claims: 1-4, 7, 10-12, 14(all partially)

An assay for stratifying a female subject with respect to likely outcome of embryo implantation, the outcome selected from pregnancy and no pregnancy, the assay comprising determining the concentrations of G-CSF from a fluid sample from the subject wherein the level or ratio of levels of the biomarker relative to a control provides an indication of the likelihood of a successful pregnancy.

3. claims: 5, 6, 8, 9(completely); 1, 2, 7, 10-12, 14(partially)

An assay for stratifying a female subject with respect to likely outcome of embryo implantation, the outcome selected from pregnancy and no pregnancy, the assay comprising determining the concentrations of VEGFA from a fluid sample from the subject wherein the level or ratio of levels of the biomarker relative to a control provides an indication of the likelihood of a successful pregnancy.

4. claims: 13, 15(completely); 14(partially)

A multiplex assay to stratify a female subject undergoing an assisted reproductive technology protocol with respect to the likelihood of pregnancy or no pregnancy and if pregnant, whether the pregnancy is a clinical or preclinical pregnancy, said assay comprising determining the levels of IL-8, G-CSF and VEGFA in uterine fluid from the subject, wherein a successful pregnancy is considered likely when levels of IL-8 and/or G-CSF are low; a successful pregnancy is considered less likely when levels of IL-8 and/or G-CSF are high; a successful pregnancy is considered more likely if levels of VEGFA are high; a successful pregnancy is considered less likely if levels of VEGFA are low; a clinical pregnancy is considered a likely outcome if levels of VEGFA are high; a preclinical pregnancy is considered more likely if levels of VEGFA are low and the use of knowledge of prior levels of IL-8, VEGFA and G-CSF to

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

provide a first knowledge base of training data to generate an algorithm which, upon input of a second knowledge base of data comprising levels of the same biomarkers from a patient with an unknown likelihood of success of pregnancy provides an index of probability that predicts the level of success or otherwise of achieving clinical pregnancy; optionally wherein one or more of a biomarker selected from CRP, IL-17, IL-6 and/or progesterone is also assayed.

5. claim: 16

Use of an antagonist of IL-8, an antagonist of G-CSF and/or VEGFA or a VEGFA agonist in the manufacture of a medicament to improve endometrial receptivity for an embryo leading to a successful clinical pregnancy.

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 15 77 2587

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

22-09-2017

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2009125219 A2	15-10-2009	NONE	

US 2007178605 A1	02-08-2007	CA 2640695 A1	16-08-2007
		EP 1979750 A2	15-10-2008
		US 2007178605 A1	02-08-2007
		WO 2007092353 A2	16-08-2007

专利名称(译)	辅助生殖技术成功的预后分析		
公开(公告)号	EP3126836A4	公开(公告)日	2017-11-08
申请号	EP2015772587	申请日	2015-04-01
[标]申请(专利权)人(译)	哈得逊INST医疗资源医疗资源交易王子亨利INST		
[标]发明人	SALAMONSEN LOIS EDGEELL TRACEY HANNAN NATALIE ROMBAUTS LUK		
发明人	SALAMONSEN, LOIS EDGEELL, TRACEY HANNAN, NATALIE ROMBAUTS, LUK		
IPC分类号	G01N33/53 A61K35/54 C12Q1/68		
CPC分类号	G01N33/689 C12Q1/6883 C12Q2600/118 C12Q2600/158 G01N2333/49 G01N2333/52 G01N2333/535 G01N2333/5421 G01N2800/368		
优先权	2014901190 2014-04-02 AU		
其他公开文献	EP3126836A1		
外部链接	Espacenet		

摘要(译)

本公开教导了一种测定法，用于确定胚胎成功植入导致怀孕的女性受试者的可能性。这里启用的是基于对妊娠结果的预后评估的改进的辅助再生技术方案。本文讲的是包含预后评估所需试剂的组合物。本文讲的是包括测定胚胎植入前采集的生物流体样品中生物标记物IL-8，G-CSF和/或VEGFA的水平的测定法。

DOCUMENTS CONSIDERED TO BE RELEVANT		Relevant to:	CLASSIFICATION OF THE APPLICATION (IPC)
X	WO 2009/125019 A2 (UNIV LEEDS [GB]; LEEDS TEACHING HOSPITALS NHS TRUST [GB]; ORSI NICOLAS [FR]) 15 October 2009 (2009-10-15) Abstract; p. 1, 3-5; table 2. *	1-4,7, 10-12,14	INT. G01N33/53 A61K35/54 C12Q1/68
X	US 2007/178605 A1 (MR GUILLERMO G [US] ET AL) 2 August 2007 (2007-08-02) * Abstract; table 3. *	1-4,7, 10-12,14	
<p>The supplementary search report has been based on the last date of publication available at the start of the search.</p>			
<p>4</p> <p>City of search: Munich Date of completion of the search: 22 September 2017 Examiner: López García, F</p>			
<p>CLASSIFICATION OF OTHER DOCUMENTS</p> <p>1. Number of documents containing the keywords. 2. Number of primary documents, EP, A, B, etc., or international publications. 3. Number of references. 4. Document cited for other reasons. 5. Number of the same patent family, corresponding documents. 6. Document.</p>			