(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) EP 2 474 630 A3

(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
05.12.2012 Bulletin 2012/49

(43) Date of publication A2:
11.07.2012 Bulletin 2012/28

(21) Application number: **12163362.2**

(22) Date of filing: **22.12.2003**

(51) Int Cl.:
C12Q 1/68 *(2006.01)* ***C07K 14/47*** *(2006.01)*
C07K 14/705 *(2006.01)* ***C07K 16/18*** *(2006.01)*
C07K 16/28 *(2006.01)*

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

(30) Priority: **20.12.2002 US 434778 P**
30.04.2003 US 466412 P
10.03.2003 US 453135 P
23.09.2003 US 504955 P

(62) Document number(s) of the earlier application(s) in accordance with Art. 76 EPC:
03800092.3 / 1 583 771

(71) Applicant: **Celera Corporation**
Alameda, CA 94502 (US)

(72) Inventors:
- **Iakoubova, Olga**
  Alameda, CA 94502 (US)
- **Devlin, James**
  Alameda, CA 94502 (US)
- **Cargill, Michele**
  Alameda, CA 94502 (US)

(74) Representative: **Jones Day**
Rechtsanwälte, Attorneys-at-Law
Patentanwälte
Prinzregentenstraße 11
80538 München (DE)

(54) **Genetic polymorphisms associated with myocardial infarction, methods of detection and uses thereof**

(57) The present invention is based on the discovery of genetic polymorphisms that are associated with myocardial infarction. In particular, the present invention relates to nucleic acid molecules containing the polymorphisms, variant proteins encoded by such nucleic acid molecules, reagents for detecting the polymorphic nucleic acid molecules and proteins, and methods of using the nucleic acid and proteins as well as methods of using reagents for their detection.

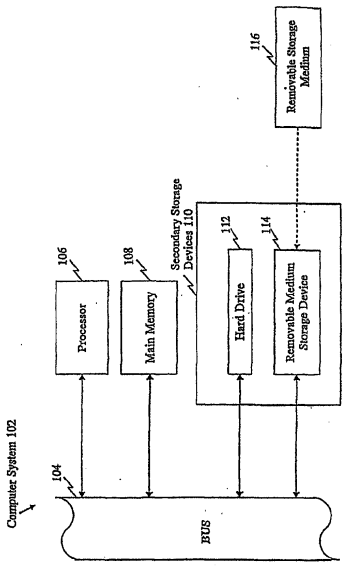

FIGURE 1

EP 2 474 630 A3

Europäisches Patentamt
European Patent Office
Office européen des brevets

EUROPEAN SEARCH REPORT

Application Number
EP 12 16 3362

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	EP 0 609 059 A2 (CLONIT SPA [IT] CLONIT S R L [IT]) 3 August 1994 (1994-08-03) * page 6, lines 5-9; claim 17; figures 1-2 * -----	1-22	INV. C12Q1/68 C07K14/47 C07K14/705 C07K16/18 C07K16/28
A	BÉATRICE NAL ET AL: "Wdr12, a Mouse Gene Encoding a Novel WD-Repeat Protein with a Notchless-like Amino-terminal Domain", GENOMICS, vol. 79, no. 1, 1 January 2002 (2002-01-01), pages 77-86, XP055041326, ISSN: 0888-7543, DOI: 10.1006/geno.2001.6682 * the whole document * -----	1-22	
T	DATABASE dbSNP [Online] 4 May 2006 (2006-05-04), XP002685389, retrieved from NCBI Database accession no. rs35212307 * the whole document * -----		TECHNICAL FIELDS SEARCHED (IPC) C12Q C07K
T	SEKAR KATHIRESAN ET AL: "Genome-wide association of early-onset myocardial infarction with single nucleotide polymorphisms and copy number variants", NATURE GENETICS, vol. 41, no. 3, 1 March 2009 (2009-03-01), pages 334-341, XP055041325, ISSN: 1061-4036, DOI: 10.1038/ng.327 * abstract * -----		

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	18 October 2012	Aguilera, Miguel

CATEGORY OF CITED DOCUMENTS

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

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

EPO FORM 1503 03.82 (P04C01)

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 12 16 3362

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.

18-10-2012

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0609059 A2	03-08-1994	AT 195152 T	15-08-2000
		DE 69425386 D1	07-09-2000
		EP 0609059 A2	03-08-1994
		JP 6277098 A	04-10-1994
		US 5554509 A	10-09-1996

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

专利名称(译)	与心肌梗塞相关的遗传多态性，检测方法及其用途		
公开(公告)号	EP2474630A3	公开(公告)日	2012-12-05
申请号	EP2012163362	申请日	2003-12-22
申请(专利权)人(译)	塞雷拉基因组公司		
当前申请(专利权)人(译)	塞雷拉基因组公司		
[标]发明人	IAKOUBOVA OLGA DEVLIN JAMES CARGILL MICHELE		
发明人	IAKOUBOVA, OLGA DEVLIN, JAMES CARGILL, MICHELE		
IPC分类号	C12Q1/68 C07K14/47 C07K14/705 C07K16/18 C07K16/28 A61B C07H21/00 C07H21/04 C12N15/12 C12P19/34 G01N33/53		
CPC分类号	C12Q1/6883 C12Q2600/156		
审查员(译)	AGUILERA，MIGUEL		
优先权	60/434778 2002-12-20 US 60/466412 2003-04-30 US 60/453135 2003-03-10 US 60/504955 2003-09-23 US		
其他公开文献	EP2474630B1 EP2474630A2		
外部链接	Espacenet		

摘要(译)

本发明基于与心肌梗塞相关的遗传多态性的发现。特别地，本发明涉及含有多态性的核酸分子，由这种核酸分子编码的变体蛋白，用于检测多态性核酸分子和蛋白质的试剂，以及使用该核酸和蛋白质的方法以及使用方法。用于检测的试剂。

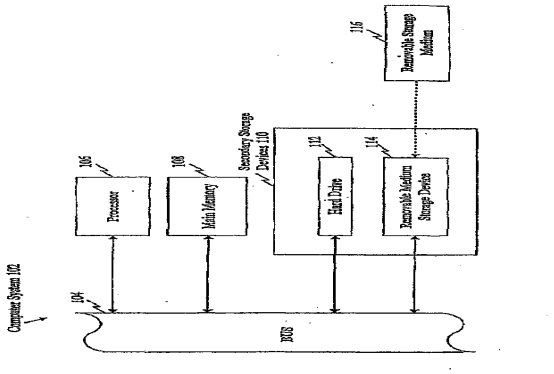

FIGURE 1