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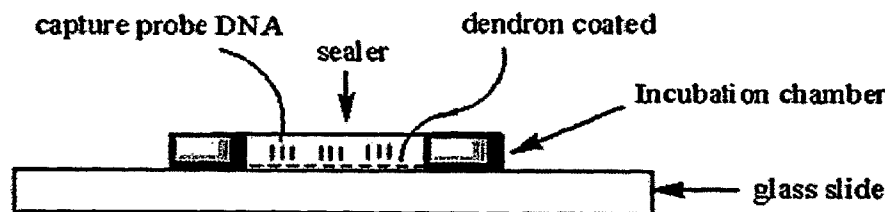
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(54) Title: ONE STEP DIAGNOSIS BY DNA CHIP



(57) Abstract: This invention relates to chips containing nucleic acid probes or primers and their use in methods to detect nucleic acid molecules. The invention includes DNA chips in contact with a thermocycler capable of automatically regulating the temperature, temperature cycle times, and number of temperature cycles of the chips to provide genetic diagnosis in one step.

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INTERNATIONAL SEARCH REPORT

International application No
PCT/US2006/049395

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	US 2005/037413 A1 (PARK JOON WON [KR] ET AL) 17 February 2005 (2005-02-17) cited in the application paragraphs [0006], [0102] - [0110], [0121] example 5 ----- -/--	16, 18, 20, 21, 23, 29, 30 1-15, 17, 19, 22, 24-28

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
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 - *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
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 - *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

Date of the actual completion of the international search 24 September 2007	Date of mailing of the international search report 02/10/2007
Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer Stan, Tincuta

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.
Y	WO 2004/079002 A1 (UNIV TSINGHUA [CN]; CAPITAL BIOCHIP COMPANY LTD [CN]; TAO SHENGE [CN];) 16 September 2004 (2004-09-16) page 4, line 18 - page 5, line 12 page 13, lines 9-25 page 14, lines 23-28 page 15, lines 17,18 page 20, lines 11-14 figure 1	1-30
Y	WO 2004/020667 A (PAMGENE B V [NL]; VAN BEUNINGEN MARINUS GERARDUS [NL]; KIEVITS TIM [NL]) 11 March 2004 (2004-03-11) page 2, line 27 - page 4, line 28 page 8, lines 12-27 page 9, lines 21-25 page 17, lines 5-27 page 19, lines 14-32 page 21, lines 7-23	1-30
Y	TRAU D ET AL: "Genotyping on a complementary metal oxide semiconductor silicon polymerase chain reaction chip with integrated DNA microarray" ANALYTICAL CHEMISTRY, AMERICAN CHEMICAL SOCIETY. COLUMBUS, US, vol. 74, no. 13, 1 July 2002 (2002-07-01), pages 3168-3173, XP002447849 ISSN: 0003-2700 the whole document figure 1	1-30
Y	WO 2005/075680 A (FUSO PHARMACEUTICAL IND [JP]; MATSUHISA AKIO; YAMAMOTO SEIJI; EDA SOUJ) 18 August 2005 (2005-08-18) figure 1 paragraphs [0013], [0020], [0045] & EP 1 721 991 A (FUSO PHARMACEUTICAL IND [JP]) 15 November 2006 (2006-11-15)	1-30
Y,P	WO 2006/000647 A (WALLAC OY [FI]; OLLIKKA PIA [FI]) 5 January 2006 (2006-01-05) the whole document figures 1,2	1-30
Y	WO 01/48242 A2 (MERGEN LTD [US]; HU QIANJIN [US]; PENG ZAOYUAN [US]; YU ZAILIN [US]) 5 July 2001 (2001-07-05) paragraphs [0016], [0017], [0042], [0047], [0084], [0088] figures 1,2	1-30
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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.
Y	WO 96/31622 A (ISIS INNOVATION [GB]; SOUTHERN EDWIN MELLOR [GB]; PRITCHARD CLARE ELIZ) 10 October 1996 (1996-10-10) page 6, line 25 - page 7, line 14 figures 1,2,5 -----	1-30

INTERNATIONAL SEARCH REPORT

International application No.

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Box No. 1 Nucleotide and/or amino acid sequence(s) (Continuation of item 1.b of the first sheet)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, the international search was carried out on the basis of:
 - a. type of material
 - a sequence listing
 - table(s) related to the sequence listing
 - b. format of material
 - on paper
 - in electronic form
 - c. time of filing/furnishing
 - contained in the international application as filed
 - filed together with the international application in electronic form
 - furnished subsequently to this Authority for the purpose of search
2. In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
3. Additional comments:

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2006/049395

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