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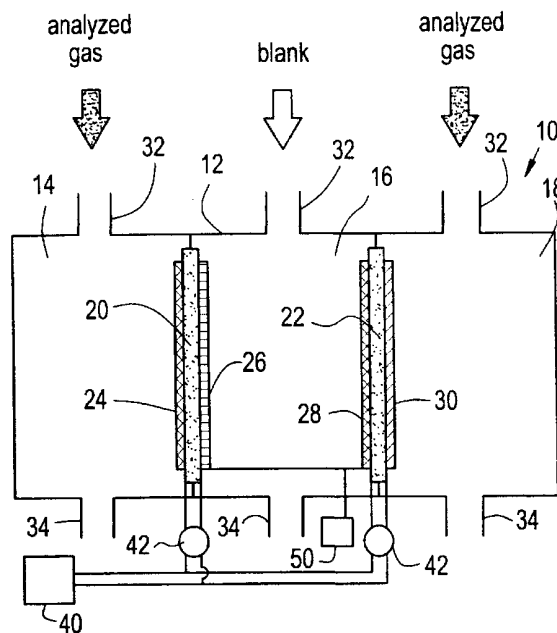
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(54) Title: METHOD AND APPARATUS FOR DETERMINING CHEMICAL PROPERTIES



(57) Abstract: A method and apparatus for determining chemical properties. The method is based on the sequential measurement of the variation of the oscillation frequency of a single sensing device when different chemically sensitive film materials are deposited on both sides of a resonator (20) such as a quartz crystal microbalance (QCM). Each of the sides of the resonator is sequentially exposed to an analyte while another side is exposed to a blank gas. In this way, the analyte-dependent signal from the resonator is generated only from a single film (24, 26, 28, 30). Measurements are further made by switching the analyte stream to expose the sensing film on another side of the resonator previously exposed to a blank.



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*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

# INTERNATIONAL SEARCH REPORT

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According to International Patent Classification (IPC) or to both national classification and IPC		
<b>B. FIELDS SEARCHED</b>		
Minimum documentation searched (classification system followed by classification symbols) IPC 7 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		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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Y	DE 32 20 854 A (MEDIZIN LABORTECHNIK VEB K) 3 March 1983 (1983-03-03) page 7, last paragraph -page 8; figures 1,2 ---	1, 10, 13, 16
A	WO 91 02975 A (UNIV WASHINGTON) 7 March 1991 (1991-03-07) abstract ---	12, 15
A	US 4 596 697 A (BALLATO ARTHUR) 24 June 1986 (1986-06-24) abstract; figure 1 ---	1
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<input checked="" type="checkbox"/> Further documents are listed in the continuation of box C. <span style="margin-left: 200px;"><input checked="" type="checkbox"/> Patent family members are listed in annex.</span>		
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*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. *&* document member of the same patent family	
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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, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer  <p style="text-align: center;">Duchatellier, M</p>	

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
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Information on patent family members

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