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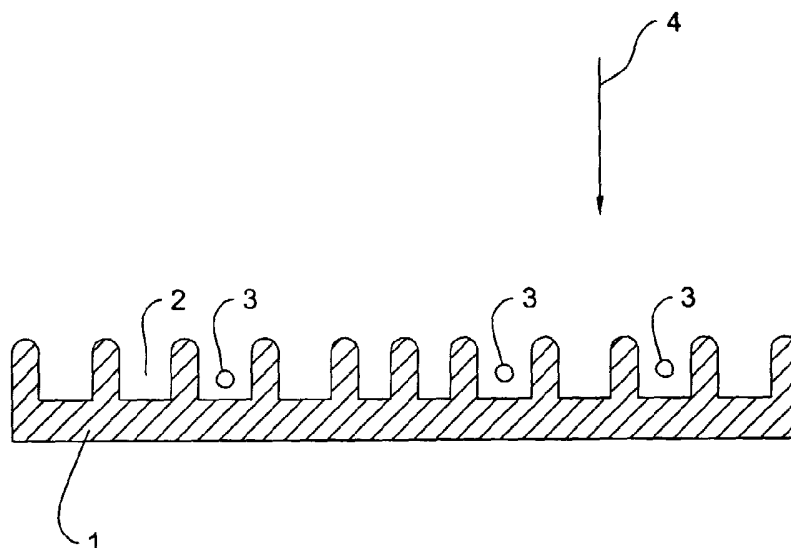
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(54) Title: COMPACT SENSOR USING MICROCAVITY STRUCTURES



(57) Abstract: A compact sensor for detection of chemical and/or biological compounds in low concentration. The sensor comprises electro-magnetic microcavities. The agent to be detected passes the microcavities, is adsorbed and/or absorbed by the microcavities, and modifies the electromagnetic field inside the microcavities. After the agent has been adsorbed and/or absorbed, a probe beam is applied to the microcavities. The change of electromagnetic field is detected by the detector, and the frequency of the probe beam at which the resonance is observed, is indicative of a particular agent being present. A method for detecting chemical and/or biological compounds using the sensor.



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A. CLASSIFICATION OF SUBJECT MATTER IPC 7 G01N21/55 G01N21/77 G01N33/543 G01N33/487		
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) 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) INSPEC, EPO-Internal, COMPENDEX, FSTA, PAJ, WPI Data		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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Y	column 3, line 14 - line 16 column 3, line 35 - line 52 column 3, line 62 - line 64 figures 6,7 --- -/--	9,14,19, 20,25, 26,35, 41,50, 51,56,57
<input checked="" type="checkbox"/> Further documents are listed in the continuation of box C. <input checked="" type="checkbox"/> Patent family members are listed in 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 *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 Verdoofd, E

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
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