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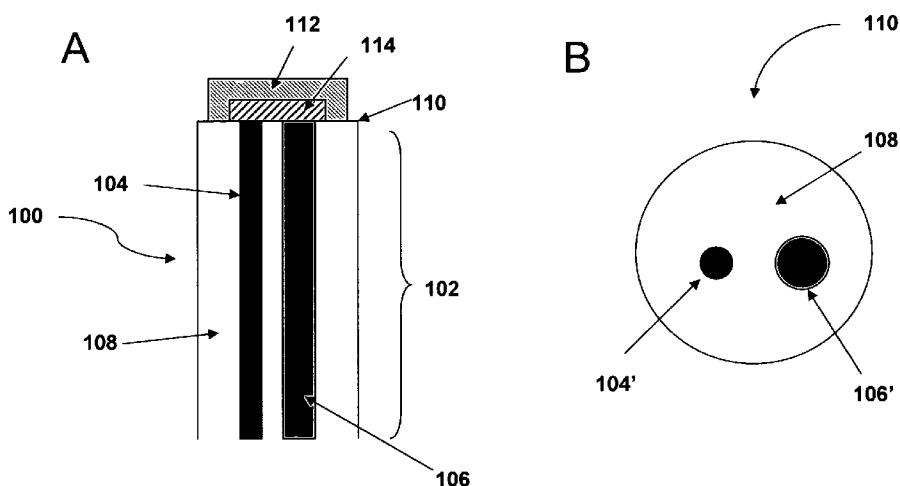
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(54) **Title:** NITRIC OXIDE MICROSENSORS VIA FLUOROSILANE-BASED XEROGEL MEMBRANES



(57) **Abstract:** The presently disclosed subject matter relates to sensors for measuring an amount of a gaseous species in a sample. The sensors comprise a gas permeable polysiloxane network membrane, comprising both alkyl and fluorinated alkyl groups. In some embodiments, the polysiloxane network can be formed from the co-condensation of a mixture of an alkylalkoxysilane and a fluorosilane. The presently disclosed subject matter also relates to methods of making the sensors, methods of selectively measuring an amount of a gaseous species, such as nitric oxide, in a sample, and to compositions comprising the polysiloxane networks.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER IPC(8) - B32B 17/06; G01F 1/64 (2008.04) USPC - 428/429; 205/781 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) USPC - 428/429; 205/781 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched USPC - 428/429, 421, 447; 205/781, 784.5; 204/425, 426 Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) PubWEST(USPT,PGPB,EPAB,JPAB); Google Patent; Google Search Terms Used: polysiloxane network gas permeable silane mixture detector biological sample platinum silver electrode oxygen sensor gaseous species measure fluorosilane alkylalkoxysilane "polysiloxane network"		
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 5,964,794 A (BOLZ et al.) 12 October 1999 (12.10.1999); entire document, especially col 8, ln 4-16,	54, 55 ----- 1-53, 56-69
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