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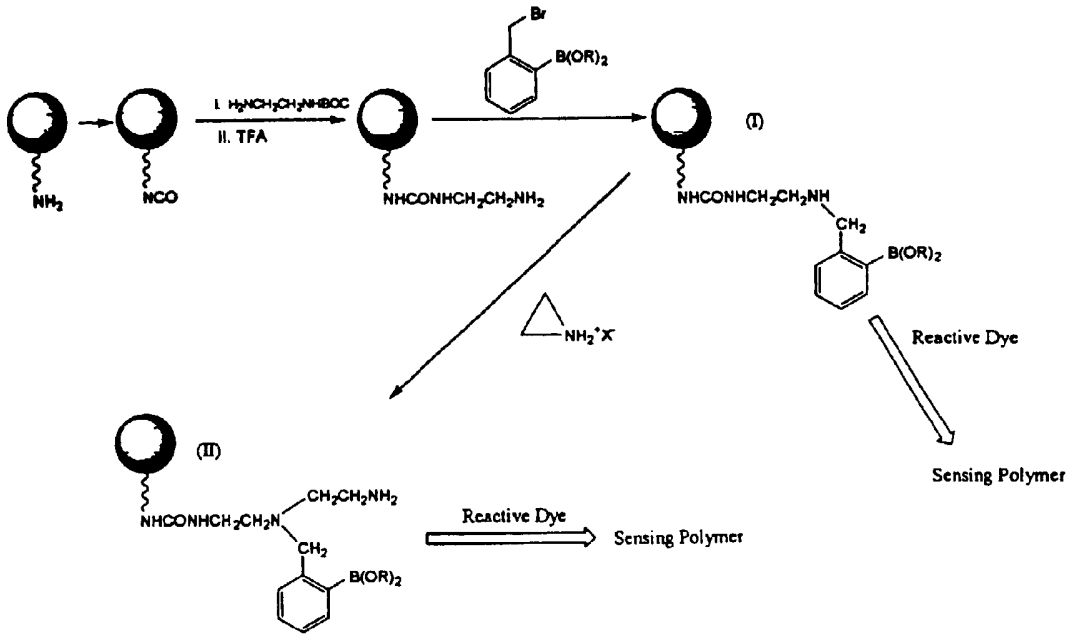
[Continued on next page]

(54) Title: POLYMERS FUNCTIONALIZED WITH FLUORESCENT BORONATE MOTIFS



(57) Abstract: Improved polymer matrices which incorporate fluorescent biosensor molecules as well as methods of making and using these polymer matrices are described. Such matrices can be used in fluorescent biosensors and biosensor systems, including those which are used in the detection of polyhydroxylated analytes such as glucose. The properties of the polymer matrices of the invention renders biosensors utilizing such matrices particularly well-suited for detecting and measuring in vivo glucose concentrations.

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INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 02/04355

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G01N33/66 C09K11/07 G01N33/58

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 C09K

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, BIOSIS, MEDLINE, CHEM ABS Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 98 22820 A (MINIMED INC ;LAWRENCE LIVERMORE NATIONAL LA (US)) 28 May 1998 (1998-05-28) the whole document	1-43
A	WO 97 19188 A (ANTWERP WILLIAM PETER VAN ;MINIMED INC (US); MASTROTOTARO JOHN JOS) 29 May 1997 (1997-05-29) claims; examples	1-7,10, 11,13,14
A	WO 91 04488 A (RUSSELL ANTHONY P) 4 April 1991 (1991-04-04) the whole document	1-43

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[X] Further documents are listed in the continuation of box C.

[X] Patent family members are listed in annex.

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"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
6 September 2002	19/09/2002

Name and mailing address of the ISA	Authorized officer
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	Döpfer, K-P

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	PATTERSON S ET AL: "Tuning the Affinity of a Synthetic Sialic Acid Receptor Using Combinatorial Chemistry" TETRAHEDRON LETTERS, ELSEVIER SCIENCE PUBLISHERS, AMSTERDAM, NL, vol. 39, no. 20, 14 May 1998 (1998-05-14), pages 3111-3114, XP004116206 ISSN: 0040-4039 the whole document ---	1-43
A	APPLETON B ET AL: "Detection of total sugar concentration using photoinduced electron transfer materials: development of operationally stable, reusable optical sensors" SENSORS AND ACTUATORS B, ELSEVIER SEQUOIA S.A., LAUSANNE, CH, vol. 65, no. 1-3, 30 June 2000 (2000-06-30), pages 302-304, XP004208664 ISSN: 0925-4005 the whole document ---	1-43
A	US 6 011 984 A (VAN ANTWERP WILLIAM PETER ET AL) 4 January 2000 (2000-01-04) cited in the application the whole document -----	1-43

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Information on patent family members

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