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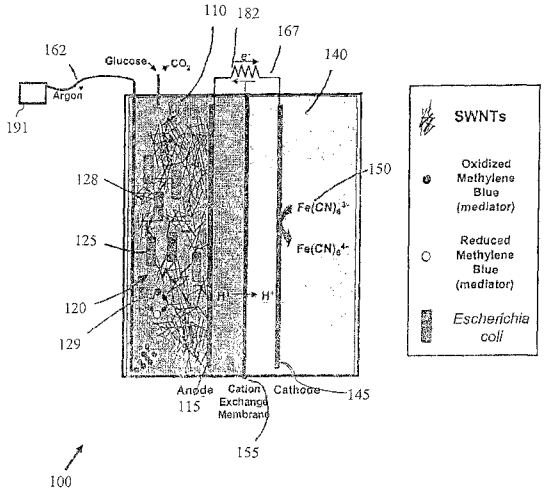
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(54) Title: ENHANCED ELECTRICAL CONTACT TO MICROBES IN MICROBIAL FUEL CELLS



(57) Abstract: A microbial fuel cell (100) includes an anode compartment (110) including an anode (115) and anolyte (120). The anolyte (120) comprises a plurality of *in-vivo*cells (125) mixed with a plurality of electrically conducting nano or micro-scale fibers (128), wherein at least a portion of the plurality of electrically conducting fibers (128) are in electrical contact with a surface of the anode (115). A cathode compartment (140) includes a cathode (145) and a catholyte (150). A cation-exchange membrane (155) is disposed between the anode compartment (110) and the cathode compartment (140).

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
INV. H01M8/16 H01M8/02

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)
H01M

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	ISAO KARUBE ET AL: "biochemical fuel cell utilizing immobilized cells of clostridium butyricum" BIOTECHNOLOGY AND BIOENGINEERING, [Online] vol. XIX, 1977, pages 1727-1733, XP002412446 Retrieved from the Internet: URL:http://www3.interscience.wiley.com/cgi-bin/jhome/71002188/?CRETRY=1&SRETRY=0> page 1, line 1 - page 2, line 20 -----	1-9
X	US 2004/101741 A1 (MINTEER SHELLEY D [US] ET AL) 27 May 2004 (2004-05-27) paragraphs [0001] - [0003] paragraphs [0054] - [0069] ----- -/--	1-9

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

[X] See patent family annex.

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Date of the actual completion of the international search	Date of mailing of the international search report
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Name and mailing address of the ISA/	Authorized officer
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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.
X	CAI C ET AL: "Direct electron transfer of glucose oxidase promoted by carbon nanotubes" ANALYTICAL BIOCHEMISTRY, ACADEMIC PRESS, NEW YORK, NY, US, vol. 332, no. 1, 1 September 2004 (2004-09-01), pages 75-83, XP004525467 ISSN: 0003-2697 abstract page 1, left-hand column, line 1 - page 2, right-hand column, line 12	1-9
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INTERNATIONAL SEARCH REPORT

Information on patent family members

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