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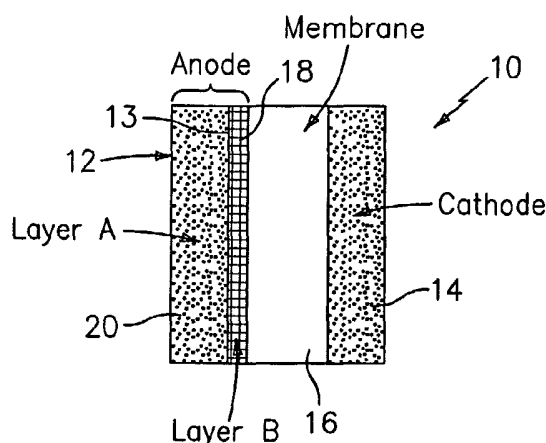
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- (71) Applicant (for all designated States except US): **UTC FUEL CELLS, L.L.C.** [US/US]; Mail Stop 601-03, 195 Governor's Highway, South Windor, CT 06074 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **CIPOLLINI, Ned, E.** [US/US]; 46 Neelans Road, Enfield, CT 06082 (US). **CONDIT, David, A.** [US/US]; 45 Rockledge Drive, Avon, CT 06001 (US). **HERTZBERG, Jared, B.** [US/US]; 506 Whitney Avenue, Apt. #12, New Haven, CT 06511 (US). **JARVI, Thomas, D.** [US/US]; 166 Kennedy Road, Manchester, CT 06040 (US). **LEISTRA, James, A.** [US/US]; 66 Seminary Road, Simsbury, CT 06082 (US). **PERRY, Michael, L.** [US/US]; 131 Bluff Point Road, South Glas-tonbury, CT 06073 (US).
- (74) Agent: **COURY, George, A.**; Suite 1201, 900 Chapel Street, New Haven, CT 06510 (US).
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(54) Title: MEMBRANE ELECTRODE ASSEMBLIES WITH HYDROGEN PEROXIDE DECOMPOSITION CATALYST



(57) Abstract: A membrane electrode assembly (10) includes an anode (12) including a hydrogen oxidation catalyst; a cathode (14); a membrane (16) disposed between the anode (12) and the cathode (14); and a peroxide decomposition catalyst positioned in at least one position selected from the group consisting of the anode (12), the cathode (14), a layer (18) between the anode (12) and the membrane (16) and a layer (60) between the cathode (14) and the membrane (16) wherein the peroxide decomposition catalyst has selectivity when exposed to hydrogen peroxide toward reactions which form benign products from the hydrogen peroxide. The peroxide decomposition catalyst can also be positioned within the membrane (16). Also disclosed is a power-generating fuel cell system including such a membrane electrode assembly (10), and a process for operating such a fuel cell system.



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.

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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 practicable, search terms used)		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6,335,112 B1 (ASUKABE et al) 01 January 2002 (01.12.2002), see col. 4, lines 1-col. 5, lines 9; Examples 2, 3 and 5.	1-11, 13-17, 20-39
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Y		12, 18, 19
P, X	US 2003/0008196 A1 (WESSEL et al) 09 January 2003 (09.01.2003), see paragraphs 0012 and 0027.	1-11, 16, 17, 20-39
X	JP 2001-118591 A (TOYOTA CENTRAL RES & DEV LAB INC) 27 April 2001 (27.04.2001), see abstract and paragraphs 0033-0035, 0043.	1-3, 8-11, 16, 17, 20-23, 26-28, 33-35
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P, A	US 2003/0059664 A1 (MENJAK et al) 27 March 2003 (27.03.2003).	1-39
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