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- (71) Applicant (for all designated States except US): CAMBRIDGE UNIVERSITY TECHNICAL SERVICES LIMITED [GB/GB]; The Old Schools, Trinity Lane, Cambridge CB2 1TS (GB).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): FRAY, Derek, John [GB/GB]; 2 Woodlands Road, Great Shelford, Cambridge CB2 5LS (GB). KOTZEVA, Vega, Petrova [GB/GB]; Wolfson College, Barton Road, Cambridge CB3 9BB (GB).
- (74) Agent: REDDIE & GROSE; 16 Theobalds Road, London WC1X 8PL (GB).

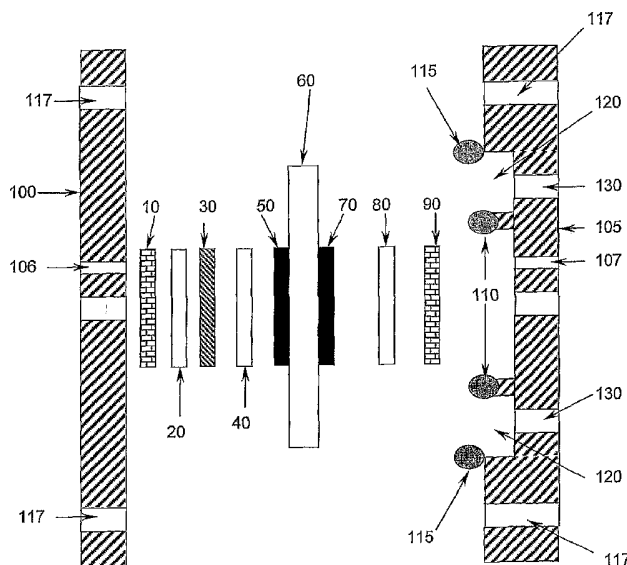
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[Continued on next page]

(54) Title: OXYGEN GENERATION APPARATUS AND METHOD



(57) **Abstract:** An oxygen generator for an oxygen-generation apparatus has a proton-conducting membrane (60), a cathode (50) contacting a first side, or cathodic side, of the membrane, an anode (70) contacting a second side, or anodic side, of the membrane, and a source of water for supply to the membrane. In use, an electrolysis voltage applied between the cathode and the anode causes electrolysis of the water to generate oxygen gas at the anode. Atmospheric oxygen, i.e. oxygen in the air, is substantially prevented from coming into contact with the cathode. For an acidic proton-conducting membrane this substantially prevents the formation of hydrogen peroxide at the cathode.

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**INTERNATIONAL SEARCH REPORT**

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**A. CLASSIFICATION OF SUBJECT MATTER**  
INV. C25B1/10 C25B15/08

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)  
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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 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 Y	US 6 368 740 B1 (DRISTY MARK E) 9 April 2002 (2002-04-09) column 3, line 26 - line 57; figure 2	1-6, 17, 18 7-11, 15, 16, 19, 20
X Y	CA 1 198 710 A1 (MAJESTY IN RIGHT OF CANADA AS REPRESENTED BY ATOMIC ENERGY) 31 December 1985 (1985-12-31) the whole document	12-14, 21, 22, 26-31 7-11, 15, 16, 19, 20
X	US 5 916 505 A (CISAR ET AL) 29 June 1999 (1999-06-29) column 4, line 35 - line 64 example 5	23-25

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*P* document published prior to the international filing date but later than the priority date claimed	

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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.
A	US 2004/146759 A1 (HECKER KARL-HEINZ ET AL) 29 July 2004 (2004-07-29) paragraphs [0007], [0008], [0019] - [0025]  -----	1-31

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Information on patent family members

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