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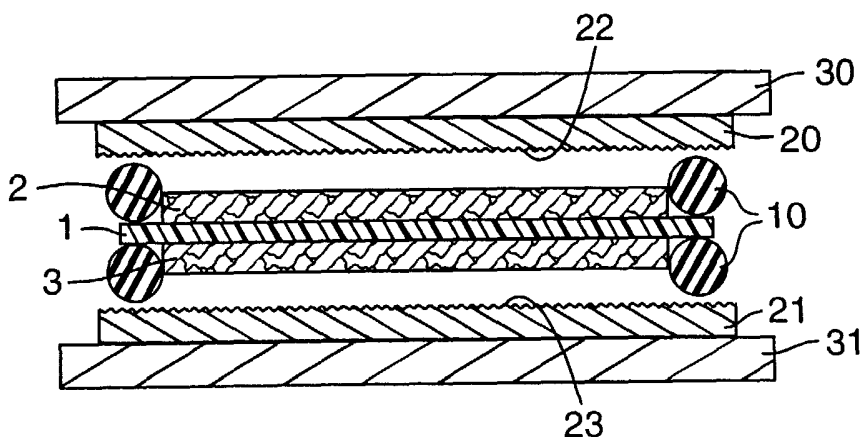
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Declarations under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG,

[Continued on next page]

(54) Title: MEMBRANE ELECTRODE ASSEMBLY WITH COMPRESSION CONTROL GASKET



(57) Abstract: A method is provided for making a gasketed fuel cell membrane electrode assembly (MEA) comprising the steps of: i) selecting a fluid transport layer sheet material; ii) selecting a target level of compression Ct% for use of said fluid transport layer sheet material in a fuel cell membrane electrode assembly; iii) measuring the pressure Pt for which the fluid transport layer sheet material achieves compression of Ct%; iv) positioning between the platens of a press a membrane electrode assembly comprising: a) a polymer electrolyte membrane; b) an anode catalyst material; c) a cathode catalyst material; d) an anode-side fluid transport layer comprising the selected fluid transport layer sheet material; and e) a cathode-side fluid transport layer comprising the selected fluid transport layer sheet material; v) depositing a gasket material in the outer edge portions of the anode and cathode faces of the polymer electrolyte membrane; vi) compressing the membrane electrode assembly to a pressing pressure Pp which is between 90% and 110% of Pt; and vii) substantially fixing the gasket material so as to form a gasketed fuel cell membrane electrode assembly. An MEA is provided comprising the layers listed above wherein the average thickness of each gasket Tg under its contact face is between 110% and 90% of {Tf x (100%-Ct%)}, where Tf is the average thickness of the respective same-side fluid transport layer.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

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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)

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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2002/034670 A1 (SUENAGA TOSHIHIKO ET AL) 21 March 2002 (2002-03-21) cited in the application paragraphs '0016!-'0019!, '0032! ----	1,2,7,8, 11-20
X	US 6 080 503 A (SCHMID OTTMAR ET AL) 27 June 2000 (2000-06-27) cited in the application figures 3A,3B,5A ----	11-22
X	US 5 264 299 A (WATSON PAUL R ET AL) 23 November 1993 (1993-11-23) cited in the application figures ----	11-22
A	US 4 721 555 A (GROSSHANDLER SANDOR) 26 January 1988 (1988-01-26) cited in the application -----	

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INTERNATIONAL SEARCH REPORT

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