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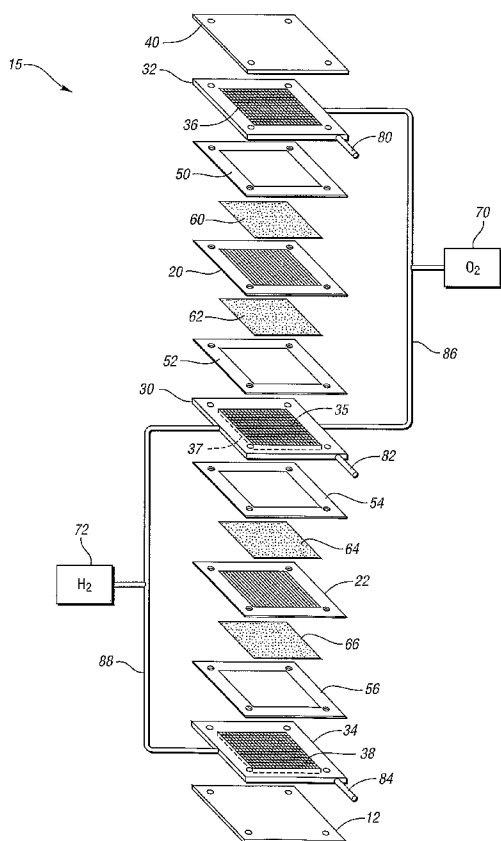
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[Continued on next page]

(54) Title: HYDROPHILIC, ELECTRICALLY CONDUCTIVE FLUID DISTRIBUTION PLATE FOR FUEL CELLS



(57) Abstract: In at least one embodiment, the present invention provides a hydrophilic electrically conductive fluid distribution plate and a method of making, and system for using, the hydrophilic electrically conductive fluid distribution plate. In at least one embodiment, the plate comprises a plate body defining a set of fluid flow channels configured to distribute flow of a fluid across at least one side of the plate, and a composite conductive coating having a water contact angle of less than 40° adhered to the plate body. In at least one embodiment, the composite coating comprises a polymeric conductive layer adhered to the plate body having an exterior surface, and a particulate carbon layer adhered to the exterior surface of the polymeric conductive layer.

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USPC - 429/12

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B. FIELDS SEARCHED

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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)

MicroPatent

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 2001/0004501 A (YI et al) 21 June 2001 (21.06.2001) entire document	1-2,5-9,16-18,20 ----- 3-4,10-15,19
Y	US 2002/0034672 A1 (SAITO et al) 21 March 2002 (21.03.2002) entire document	3-4,13-14,19
Y	US 5,707,433 A (KUGE et al) 13 January 1998 (12.01.1998) entire document	10-12
Y	US 6,794,078 B1 (TASHIRO et al) 21 September 2004 (21.09.2004) entire document	15

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