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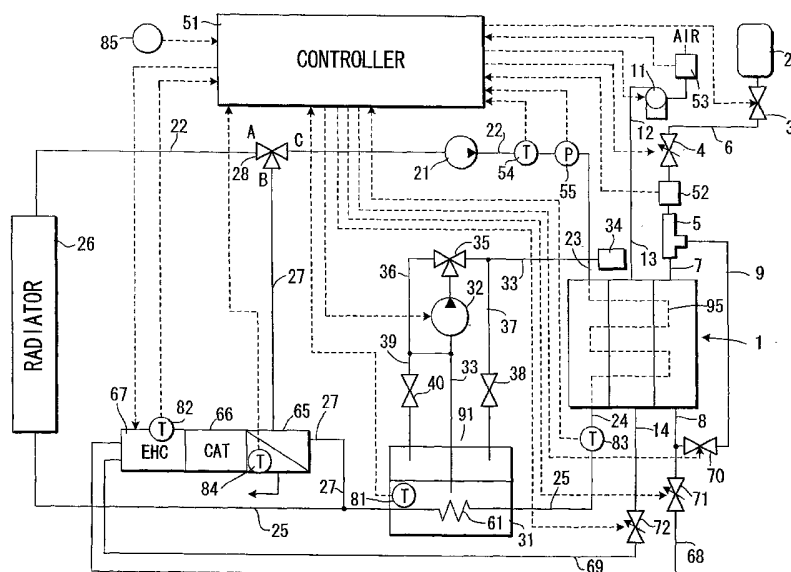
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ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.*

(54) Title: FUEL CELL SYSTEM



(57) Abstract: A fuel cell system has a fuel cell (1) performing power generation as a result of reactions in a supplied gases, a humidifying device (34) for humidifying the at least one supplied gas by using water from water tank (31), and a coolant temperature regulation device (21, 22, 25, 26, 27, 28, 51) for regulating the temperature of the coolant flowing within the fuel cell (1) in order to control the temperature of the fuel cell (1), and a defrosting device (61). The defrosting device (61) melts ice in the water tank (31) during a startup operation of the fuel cell system (1) by applying heat contained in the coolant to the ice. which Here, the coolant has an increased temperature as a result of heat exchange with waste heat produced during power generation inside the fuel cell (1).

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/JP 03/13054

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H01M8/04 H01M8/02 H01M8/04

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, PAJ, INSPEC, COMPENDEX

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category ° | Citation of document, with indication, where appropriate, of the relevant passages                                                                                                                        | Relevant to claim No. |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| A          | US 6 428 919 B1 (TAKAHASHI HIDEO ET AL)<br>6 August 2002 (2002-08-06)<br>column 1, line 50 - column 2, line 13<br>column 3, line 40 - column 4, line 53<br>column 7, line 30 - column 8, line 15<br>----- | 1-10                  |
| A          | US 6 432 568 B1 (BORUP RODNEY LYNN ET AL)<br>13 August 2002 (2002-08-13)<br>column 1, line 57 - column 2, line 13<br>column 3, line 5 - line 10<br>column 3, line 26 - column 4, line 28<br>-----<br>-/-- | 1-10                  |



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

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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. |
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| A          | PATENT ABSTRACTS OF JAPAN<br>vol. 2000, no. 14,<br>5 March 2001 (2001-03-05)<br>-& JP 2000 315514 A (NISSAN MOTOR CO LTD),<br>14 November 2000 (2000-11-14)<br>abstract<br>-----                                                    | 1-10                  |

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Information on patent family members

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