US 20230231165A1

(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2023/0231165 A1**

SAKAUE et al. (43) **Pub. Date: Jul. 20, 2023**

(54) **METHOD FOR OPERATING FUEL CELL**

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(21) Appl. No.: **18/008,564**

(22) PCT Filed: **Jun. 1, 2021**

(86) PCT No.: **PCT/JP2021/020789**

§ 371 (c)(1),
(2) Date: **Dec. 6, 2022**

(30) **Foreign Application Priority Data**

Jun. 9, 2020 (JP) 2020-099761

Publication Classification

(51) **Int. Cl.**

H01M 8/04701	(2006.01)
H01M 4/90	(2006.01)
H01M 8/04746	(2006.01)
H01M 8/04828	(2006.01)
H01M 8/1023	(2006.01)
H01M 8/1004	(2006.01)

(52) **U.S. Cl.**

CPC ***H01M 8/04701*** (2013.01); ***H01M 4/9075*** (2013.01); ***H01M 8/04753*** (2013.01); ***H01M 8/04835*** (2013.01); ***H01M 8/1023*** (2013.01); ***H01M 8/1004*** (2013.01); *H01M 2300/0082* (2013.01); *H01M 2008/1095* (2013.01)

(57) **ABSTRACT**

The present invention provides a method of operating a fuel cell, which method enables a polymer electrolyte membrane to be humidified sufficiently under high-temperature conditions, and can obtain excellent power generation performance. The present invention is a method of operating a fuel cell including a membrane electrode assembly containing an electrolyte membrane, catalyst layers, and gas diffusion layers, the method including a step of setting the operating temperature of the fuel cell at 100° C. or more, wherein, in the step, the relative humidity of supply gas to be supplied to the fuel cell is 70% or more, and the back pressure of the supply gas is 330 kPa or more.