



US 20230231160A1

(19) **United States**

(12) **Patent Application Publication**  
**PUBRAT et al.**

(10) **Pub. No.: US 2023/0231160 A1**

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

(54) **THERMAL MANAGEMENT SYSTEM AND METHOD OF POSITIONING AND ADJUSTING COOLANT FLOW FOR STATIONARY VEHICLE FUEL CELL APPLICATIONS**

(60) Provisional application No. 63/229,809, filed on Aug. 5, 2021, provisional application No. 63/284,916, filed on Dec. 1, 2021.

**Publication Classification**

(71) Applicant: **HYDROGENICS CORPORATION**,  
Mississauga (CA)

(51) **Int. Cl.**  
**H01M 8/04007** (2006.01)  
**B60L 50/72** (2006.01)  
**B60L 58/33** (2006.01)  
**H01M 8/04313** (2006.01)

(72) Inventors: **David PUBRAT**, Burlington (CA);  
**Tomasz WAJDA**, Oshawa (CA);  
**Andrew HILL**, Scarborough (CA);  
**Predrag CECARIC**, Toronto (CA)

(52) **U.S. Cl.**  
CPC ..... **H01M 8/04067** (2013.01); **B60L 50/72**  
(2019.02); **B60L 58/33** (2019.02); **H01M**  
**8/04313** (2013.01); **H01M 2250/20** (2013.01)

(21) Appl. No.: **18/186,780**

(22) Filed: **Mar. 20, 2023**

**Related U.S. Application Data**

(63) Continuation of application No. 17/815,845, filed on Jul. 28, 2022, now Pat. No. 11,611,089.

(57) **ABSTRACT**

The present disclosure relates to a thermal management system and method of adjusting and/or reversing coolant flow of a fuel cell system during stationary applications.

