

عنوان مقاله:

Novel Auxiliary Power Unit Configuration Based On Fuel Cell Technology for Civil Aircraft Application

محل انتشار:

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خلاصه مقاله:

This paper proposes novel Fuel Cell Auxiliary Power Unit (FCAPU) for J150+ aircraft application. The primary version of APU in J150+ aircraft is a gas turbine Auxiliary Power Unit (APU) which is based on gas turbine jet engine but in the suggested FCAPU, the generated electrical power is achieved from chemical energy with higher efficiency. The Solid Oxide Fuel Cell (SOFC) technology is used to generate the electrical energy and MATLAB software is applied to simulate the SOFC performance in the J150+ aircraft. The simulation results show the FCAPU ability to generate the proper electrical energy with lower cost and higher reliability in comparison with the ordinary APU. Index Terms - Auxiliary Power Unit, Generator, Fuel Cell, Aircraft

کلمات کلیدی:

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/720537>

