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(57) Abstract :
Title: A Flow Field Design for Proton Exchange Membrane Fuel Cell The proposed disclosure provides a partially blocked serpentine flow field structure which was conceptualized and fabricated with rib and channel for a proton exchange membrane fuel cell. The flow field design comprises of a graphite , plurality of ribs, plurality of baffles and plurality of inlets and outlets. The flow field design improves the output performance of a proton exchange membrane fuel cell (PEMFC) and offer better water management inside the cell. The flow field design having a partial blockage with baffles aid in reducing pressure drop and minimizing gas crossover effect. The new flow field design incorporated in a proton exchange membrane fuel cell (PEMFC) stack is useful for commercial applications like public transportation and stationery power.

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