

A multilayer PCB and a method for current density measurement in a fuel cell

The invention describes a multilayer Printed Circuit Board (PCB) for measuring current density distribution in a fuel cell.

The Technology

- The multilayer PCB includes a first layer with a plurality of segments of a current collector.
- The current collector is etched on a front side of the first layer to collect a current from a first bipolar plate of the fuel cell,
- Wherein each segment is extended to a rear side of the first layer.
- Further, the multilayer PCB includes a second layer with a plurality of resistive loops etched on a front side of the second layer and extended from the front side to a rear side of the second layer,
- wherein each the resistive loop receives the current from the rear side of the first layer.
- Furthermore, the multilayer PCB includes a third layer with a common plate etched on a rear side of the third layer.
- The common plate receives the current from each resistive loop through extensions of common plate on a front side of the third layer,
- Finally the common plate releases the current to a second bipolar plate of the fuel cell.

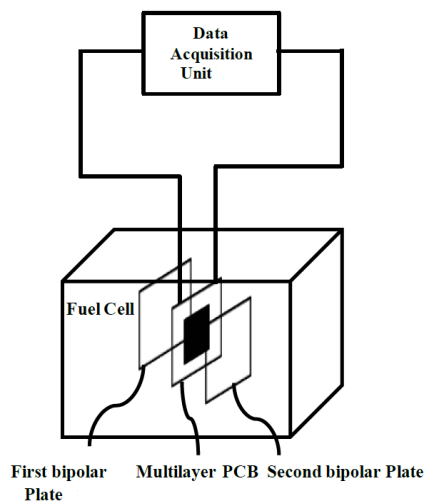


Fig – 1: Overview of fuel cell

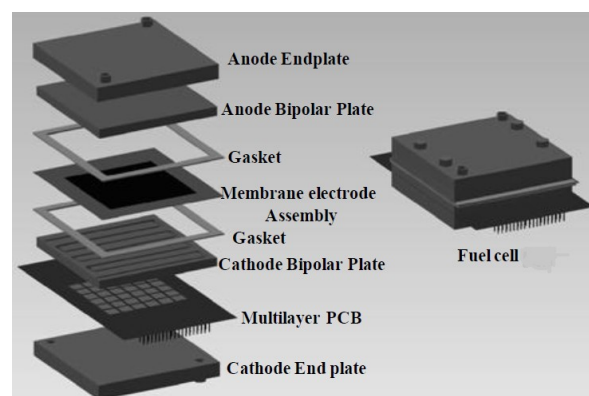


Fig – 2: Components of Fuel cell

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