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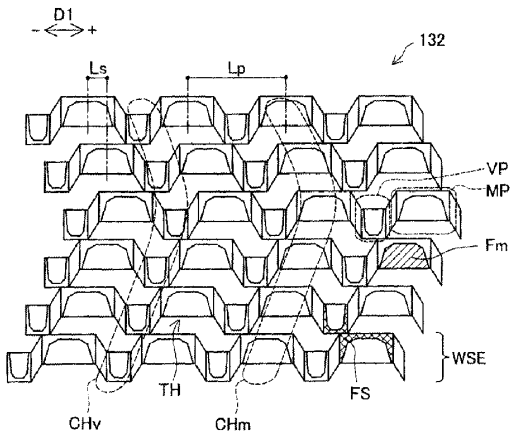
(54) **FUEL CELL**

(57) A fuel cell is configured to comprise a power generation layer including an electrolyte membrane, an anode and a cathode, separators and a gas flow path layer provided between the power generation layer and the separator. The gas flow path layer is structured by a plurality of corrugated elements. Each corrugated element has a corrugated cross section where first convexes that are convex toward the separator and second convexes that are convex toward the power generation layer are alternately arranged. The plurality of corrugated elements are arranged, such that a top surface of the first convex in one corrugated element and a bottom surface of the second convex in an adjacent corrugated element cooperatively form an integral surface, and a plurality of through holes are formed between the respective adjacent corrugated elements. The plurality of corrugated elements include a corrugated element having positions of the first convexes and the second convexes shifted in a positive side of the first direction from those of an adjacent corrugated element, and a corrugated element having positions of the first convexes and the second convexes shifted in a negative side of the first direction from those of an adjacent corrugated element. The volume of a first reaction gas flow path, which is formed along the positions of the second convexes on a separator-side of the gas flow path layer, is less than the volume of a second reaction gas flow path, which is formed along the positions of the first convexes on a power generation layer-side of the gas flow path layer.

Fig.4



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