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- (54) Solid oxide fuel cell, solid oxide fuel cell assembly, solid oxide fuel cell module, and solid oxide fuel cell power generator
- (57) A shape and conductivity of a cylindrical porous metal substrate of low power collection losses are defined, and a solid oxide fuel cell of a high output or high start-up performance is provided by using the cylindrical porous metal substrate. In the solid oxide fuel cell of the invention, the cylindrical porous metal substrate which has a conductivity of 130 S/cm or more is used, and a power collecting section is connected to a position which does not exceed 100 cm from any place thereof. A first electrode, a solid electrolytic layer, and a second electrode are formed on a full periphery of the cylindrical porous metal substrate. Thus, it is possible to obtain a solid oxide fuel cell of easy cell formation and low power collection losses, i.e., high durability and a high output.

FIG. 1

