FUEL CELL SYSTEM WITH INTERCONNECT

ABSTRACT

In some examples, a fuel cell comprising a first electrochemical cell including a first anode and a first cathode; a second electrochemical cell including a second anode and a second cathode; an interconnect configured to conduct a flow of electrons from the first anode to the second cathode; and a chemical barrier. The chemical barrier may be configured to prevent or reduce material migration between the interconnect and at least one component (e.g., an anode) in electrical communication with the interconnect, where the chemical barrier includes doped strontium titanate exhibiting a perovskite structure. The chemical barrier includes an A site, wherein the A site which is doped with one of La, Y, Ce, Pr, Nd, Sm, Gd, Dy, Ho and Er, and a B site which can be doped with one of Nb, Co, Cu, Mn, Ni, V, Fe, Ga, and Al.

FIG. 10