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(54) **CERIUM-MODIFIED DOPED STRONTIUM TITANATE COMPOSITIONS FOR SOLID OXIDE FUEL CELL ANODES AND ELECTRODES FOR OTHER ELECTROCHEMICAL DEVICES**

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H01M 4/00 (2006.01)

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(58) **Field of Classification Search** 429/29, 429/30, 33, 41, 46, 107, 220
See application file for complete search history.

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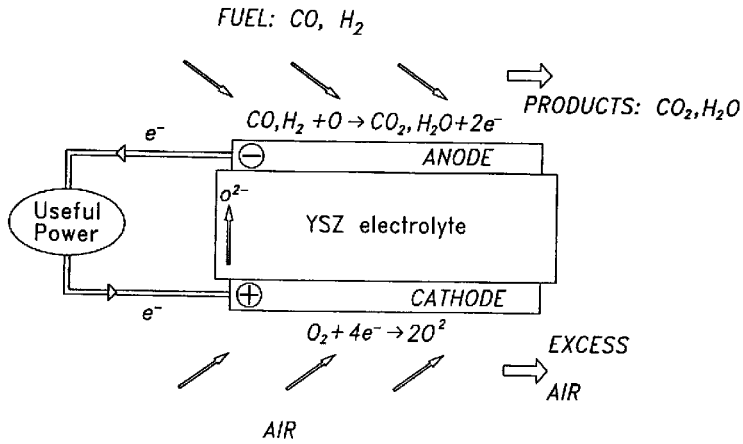
(57) **ABSTRACT**

The present invention provides novel compositions that find advantageous use in making electrodes for electrochemical cells and electrochemical devices such as solid oxide fuel cells, electrolyzers, sensors, pumps and the like, the compositions comprising cerium-modified doped strontium titanate. The invention also provides novel methods for making and using anode material compositions and solid oxide fuel cells and solid oxide fuel cell assemblies having anodes comprising the compositions.

20 Claims, 20 Drawing Sheets