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(54) Title: A CONTROL SYSTEM AND METHOD FOR CONTROLLING A MICRO-GRID

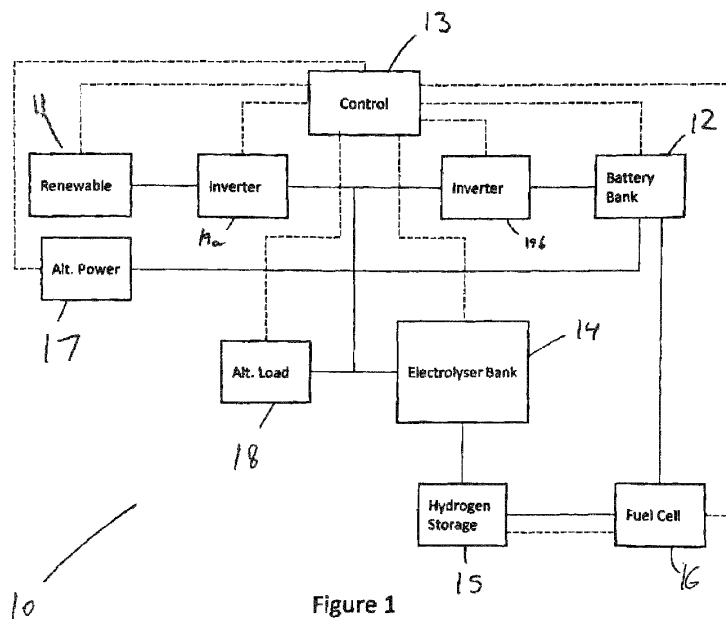


Figure 1

(57) Abstract: A control system for a micro-grid comprising a plurality of electrolyzers and one or more primary power sources, the control system being configured, under control of a processor, to: determine power available from the one or more primary power sources; and generate control signals configured to cause available power to be directed to one or more of said plurality of electrolyzers; wherein, the control system is configured to be communicably connectable to in-situ diagnostic means associated with each of the electrolyzers of said plurality of electrolyzers for measuring a respective performance parameter, the control system being configured, under control of said processor, to receive signals from said in-situ diagnostic means and determine therefrom at least one performance parameter associated with said plurality of electrolyzers.

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