ABSTRACT

A linear photovoltaic cell assembly comprises: a first inner electrode, which is a linear electrical conductor; a first functional photosensitive layer, which coats the first inner electrode; a second inner electrode, which is a linear electrical conductor; and a second functional photosensitive layer, which coats the second inner electrode; wherein the first functional photosensitive layer and the second functional photosensitive layer are arranged in parallel or twisted together and are electrically connected, and the first functional photosensitive layer and the second functional photosensitive layer have a photovoltaic effect and generate output voltages of opposite polarity. In the present invention, the positive and negative charges at one end of two cells of different polarity recombine via the outer electrodes and the connection electrode, while the other ends are respectively led out from their own inner electrodes to the external circuit, thereby providing the advantages of small resistance, low electric energy loss, and simple and robust connection.

FIG. 1