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(54) **PHOTOVOLTAIC SYSTEM, RESONANT SWITCHED CAPACITOR CONVERTER, AND CONTROL METHOD**

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(57) **ABSTRACT**

This application discloses a photovoltaic system. The photovoltaic system includes a DC/DC converter, a resonant switched capacitor converter, an inverter, and a controller. An input terminal of the DC/DC converter is connected to a photovoltaic array. A first input terminal of the resonant switched capacitor converter is connected to a positive output terminal of the DC/DC converter, and a second input terminal of the resonant switched capacitor converter is connected to a negative output terminal of the DC/DC converter. A first output terminal of the resonant switched capacitor converter is connected to a neutral wire of the inverter, a second output terminal of the resonant switched capacitor converter is connected to a negative bus of the inverter, and the resonant switched capacitor converter includes at least the following two resonant switched capacitor circuits RSCCs connected in parallel: a first RSCC and a second RSCC.