

# The Research of Renewable Energy by Parallel Charging Systems

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## ABSTRACT

A renewable energy by parallel charging systems fed by photovoltaic module and wind turbine is presented in this thesis. In the input state, a dual DC/DC converter incorporated with the perturbation and observation method can draw the maximum power from the two renewable energy source simultaneously or individually and deliver it to the battery. In the output state, after full bridge inverter can transform energy into the alternating current from the battery. The center of whole system is a single chip, it is not only simplified circuit, but less expensive.

Keywords : DC/DC converter、Perturbation and Observation method、Full bridge inverter

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