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(54) **AUTOMATIC TRANSFER SWITCH AND  
POWER SUPPLY SYSTEM**

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**ABSTRACT**

The application discloses an automatic transfer switch and a power supply system. The automatic transfer switch includes: a first switch unit having a first end connected to a first device through a converter port, and a second end electrically connected to a power grid through a power grid port; a second switch unit having a first end connected to a second device through an electric vehicle port and a charging/discharging circuit unit, and a second end electrically connected to the second end of the first switch unit; a third switch unit, having a first end electrically connected to the power grid through the power grid port, and a second end electrically connected to a load through a load port; a sampling unit; and a control unit connected to the sampling unit.

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