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(54) **POWER SUPPLY ASSEMBLY AND SWITCH ASSEMBLY**

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(57) **ABSTRACT**

A power supply assembly including a primary source connection, a secondary source connection, a load connection, a primary current supply route, a supply switch system, and a converter system. The supply switch system is electrically located in the primary current supply route, and adapted for disconnecting the primary source connection from the load connection, the supply switch system including a plurality of supply switch units connected in parallel, each of the supply switch units including a controllable semiconductor switch. The power supply assembly includes a series impedance system having at least one series impedance member, and adapted to provide a balancing voltage drop for each of the parallel connected supply switch units of the supply switch system, wherein the balancing voltage drop is in series with a corresponding supply switch unit.

