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(54) **POWER SUPPLY SYSTEM**

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(57) **ABSTRACT**

A power supply system with a large number of battery modules, wherein each battery module has a first electrical connection and a second electrical connection, via which the battery modules are connected in series in an interconnection branch of the power supply system. Each battery module also has an accumulator which can be connected via a bridge circuit of the battery module to the first electrical connection and the second electrical connection, and to a charging path via which the power supply system can be charged, and to a discharging path via which the power supply system can deliver electrical power to a connected consumer. The power supply system has a switching component to which the charging path, the discharging path and the interconnection branch are connected, and wherein the switching component can connect the charging path and/or the discharging path electrically conductively to the interconnection branch.