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(54) **POWER SUPPLY INCLUDING MUTLIPLE CONNECTED INVERTERS**

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(57) **ABSTRACT**

A power supply includes a first inverter and a second inverter. The second inverter is connected in series with the first inverter in an open delta configuration. The first inverter is configured to be powered by a first battery and to output a first power signal having a first phase angle. The second inverter is in electrical communication with the first inverter and configured to be powered by a second battery and to output a second power signal having a second phase angle. The power supply also includes a controller configured to control a phase difference between the first phase angle and the second phase angle to control a magnitude of a combined output voltage of the first inverter and the second inverter.