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(54) **ELECTRICAL UNIT AND BACKUP POWER SYSTEM**

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(57) **ABSTRACT**

Disclosed is an electrical unit with a first port configured to be operatively connected to an AC-grid, a second port configured to be operatively connected to an AC-load, and a third port to be operatively connected to an AC-side of a first inverter. The electrical unit includes a first choke arranged between the third port and the second port. The electrical unit is configured to transfer electrical power provided by the first inverter from the third port via the first choke to the second port. The electrical unit is configured to provide grid-forming electrical power to the second port in case of disconnection from the AC-grid at the first port. Further disclosed is a backup power system and a method for operating a backup power system.