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LI et al.(10) **Pub. No.: US 2023/0231218 A1**(43) **Pub. Date: Jul. 20, 2023**(54) **DC/DC CONVERSION CIRCUIT, POWER UNIT, CHARGING PILE, AND CHARGE-DISCHARGE HEATING METHOD**(71) Applicant: **CONTEMPORARY AMPEREX TECHNOLOGY CO., LIMITED**, Ningde City (CN)(72) Inventors: **Zhanliang LI**, Ningde City (CN); **Zhimin DAN**, Ningde City (CN); **Yu YAN**, Ningde City (CN); **Xiaojian HUANG**, Ningde City (CN); **Xiyang ZUO**, Ningde City (CN); **Yuanmiao ZHAO**, Ningde City (CN); **Xiao WANG**, Ningde City (CN)(73) Assignee: **CONTEMPORARY AMPEREX TECHNOLOGY CO., LIMITED**, Ningde City (CN)(21) Appl. No.: **17/896,107**(22) Filed: **Aug. 26, 2022****Related U.S. Application Data**

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(57)

ABSTRACT

Embodiments of this application provide a DC/DC conversion circuit, a power unit, a charging pile, and a charge-discharge heating method. The circuit includes: a first rectifier module, where an input end of the first rectifier module is connected to a power grid through an AC/DC conversion circuit; a transformer module, where an input end of the transformer module is connected to an output end of the first rectifier module; an energy storage module; and a second rectifier module, where an input end of the second rectifier module is configured to connect to an output end of the transformer module or the energy storage module, and an output end of the second rectifier module is configured to connect to a battery pack of an electric vehicle when the charging pile is charging the electric vehicle.

