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YANG et al.(10) **Pub. No.: US 2022/0352713 A1**(43) **Pub. Date: Nov. 3, 2022**(54) **REVERSE POWER CONNECTION
PREVENTING CIRCUIT, POWER
DISTRIBUTION APPARATUS, AND POWER
SUPPLY AND DISTRIBUTION SYSTEM****Publication Classification**(51) **Int. Cl.**
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Co., Ltd.**, Shenzhen (CN)(21) Appl. No.: **17/865,656**(22) Filed: **Jul. 15, 2022****Related U.S. Application Data**(63) Continuation of application No. PCT/CN2021/
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(57) **ABSTRACT**

A reverse power connection preventing circuit includes a diode and an actuation unit that are connected in series between a positive input terminal and a negative input terminal of a circuit breaker. A positive electrode of the diode points to the negative input terminal of the circuit breaker, and a negative electrode of the diode points to the positive input terminal of the circuit breaker. When a power supply is forward connected to the circuit breaker, the diode is cut off, there is no current on the actuation unit, and the reverse power connection preventing circuit is in a power-off state. When the power supply is reversely connected to the circuit breaker, the diode conducts, and the actuation unit is configured to prevent closing of the circuit breaker, and/or the actuation unit is configured to perform an alarm prompt, to perform an early warning.

