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CHENG et al.(10) **Pub. No.: US 2022/0368296 A1**(43) **Pub. Date: Nov. 17, 2022**(54) **RECONFIGURABLE POWER AMPLIFIER
BASED ON PIN SWITCH AND DESIGN
METHOD THEREOF****Publication Classification**(51) **Int. Cl.****H03F 3/24** (2006.01)**H03F 1/56** (2006.01)**H03F 3/195** (2006.01)(52) **U.S. Cl.**CPC **H03F 3/245** (2013.01); **H03F 1/56**
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2200/451 (2013.01)(71) Applicants: **Hangzhou Dianzi University Fuyang
Electronic Information Research
Institute Co., Ltd.**, Hangzhou City
(CN); **Hangzhou Dianzi University**,
Hangzhou (CN)(72) Inventors: **Zhiquan CHENG**, Hangzhou City (CN);
Songye WANG, Hangzhou City (CN); **Ze**
QIN, Hangzhou City (CN); **Xiebin**
HUANG, Hangzhou City (CN); **Yelong**
JIAN, Hangzhou City (CN); **Guohua**
LIU, Hangzhou City (CN)(21) Appl. No.: **17/574,238**(22) Filed: **Jan. 12, 2022**(30) **Foreign Application Priority Data**

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ABSTRACT

The present disclosure provides a reconfigurable power amplifier (PA) based on a PIN switch and a design method thereof. The reconfigurable PA based on a PIN switch includes an input port, an input matching circuit, the PIN switch, a gate bias circuit, a transistor, a drain bias circuit, an output matching circuit and an output port, where the input matching network includes an input end connected to a power input end, and an output end connected to a gate of the transistor, the gate bias circuit is connected in parallel with the gate, the drain bias circuit is connected in parallel with a drain, the drain of the transistor is connected to an input end of the output matching circuit, and an output end of the output matching circuit serves as a power output.

