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(19) **United States**(12) **Patent Application Publication****Wang et al.**(10) **Pub. No.: US 2022/0361304 A1**(43) **Pub. Date: Nov. 10, 2022**(54) **POWER CONVERTER HAVING CAPACITORS FOR DATA TRANSMISSION***H02M 1/44* (2006.01)*H02M 1/32* (2006.01)(71) Applicant: **Tridonic GmbH & Co KG**, Dornbirn (AT)(52) **U.S. Cl.**CPC *H05B 45/3725* (2020.01); *H02M 3/33569*(2013.01); *H02M 1/44* (2013.01); *H02M 1/32*

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ABSTRACT(73) Assignee: **Tridonic GmbH & Co KG**, Dornbirn (AT)(21) Appl. No.: **17/760,543**(22) PCT Filed: **Sep. 16, 2019**(86) PCT No.: **PCT/CN2019/105993**

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A power converter with secondary side regulation (SSR) for driving one or more output loads having capacitors (preferably Y-capacitors) for feedback and data transmission is disclosed. The power converter includes a transformer with primary and secondary windings, a primary circuit, a secondary circuit comprising a secondary controller, and a data transmission circuit comprising a plurality of capacitors. The primary circuit comprises one or more switching means and a primary controller. The secondary circuit is isolated from the primary circuit by the transformer and connected to the output loads and the secondary winding. The data transmission circuit connects the secondary circuit to the primary circuit for transmitting a feedback signal through to become a primary side feedback signal. The capacitors comprises one or more first capacitors on a feedback path and one or more second capacitors on a ground path.

