



US 20220352827A1

(19) **United States**(12) **Patent Application Publication**
Liu(10) **Pub. No.: US 2022/0352827 A1**(43) **Pub. Date: Nov. 3, 2022**(54) **POWER CONVERSION APPARATUS AND
SYNCHRONOUS RECTIFICATION
CONTROLLER THEREOF****Publication Classification**(51) **Int. Cl.**
H02M 3/335 (2006.01)(52) **U.S. Cl.**
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Corporation**, Hsinchu County (TW)(21) Appl. No.: **17/406,049**(22) Filed: **Aug. 18, 2021**(30) **Foreign Application Priority Data**

May 3, 2021 (TW) 110115947

(57) **ABSTRACT**

A power conversion apparatus and a synchronous rectification (SR) controller thereof are provided. An open-loop control circuit outputs a clamp voltage as a driving voltage when a drain voltage of a synchronous rectification transistor rises to a second voltage, so as to quickly pull down the driving voltage and maintain the driving voltage at a clamp voltage. Therefore, a second control circuit may quickly turn off the synchronous rectification transistor when the drain voltage is greater than a third voltage.

