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(19) **United States**(12) **Patent Application Publication** (10) **Pub. No.: US 2022/0361381 A1**  
(43) **Pub. Date: Nov. 10, 2022**(54) **LIQUID IMMERSION COOLING TANK  
WITH VARIABLE FLOW FOR HIGH  
DENSITY COMPUTER SERVER  
EQUIPMENT**(71) Applicant: **Tyco Fire & Security GmbH**,  
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Haider**, Edmonton (CA)(21) Appl. No.: **17/491,041**(22) Filed: **Sep. 30, 2021****Related U.S. Application Data**(60) Provisional application No. 63/185,321, filed on May  
6, 2021.**Publication Classification**(51) **Int. Cl.**  
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**7/20272** (2013.01); **H05K 7/20263** (2013.01)(57) **ABSTRACT**

An immersion cooling system includes an electronic component, a thermally conductive dielectric liquid, and a tank defining a tank interior configured to receive the electronic component and the thermally conductive dielectric liquid for cooling the electronic component. The immersion cooling system also includes a wall positioned external to the tank to coordinate with the tank to define an overflow gap extending between the tank and the wall. The overflow gap is configured to receive an overflow of the thermally conductive dielectric liquid from the tank interior.

