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(54) ELECTRICAL POWER DISTRIBUTION OPTIMIZED LIQUID IMMERSION COOLING TANK WITH VARIABLE FLOW FOR HIGH DENSITY COMPUTER SERVER EQUIPMENT

(71) Applicant: **Tyco Fire & Security GmbH**, Neuhausen am Rheinfall (CH)

(72) Inventors: **Michael J Sweeney**, Seattle, WA (US); **Lewis Harris Bridges, III**, Chandler, AZ (US)

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(57) **ABSTRACT**

A liquid immersion cooling system includes a tank defining a tank interior configured to receive electronic components (e.g., servers) and a thermally conductive dielectric liquid to cool the electronic components. The liquid immersion cooling system also includes a power shelf external to the tank interior, where the power shelf includes a converter configured to receive an alternating current (AC) power supply and convert the AC power supply to a direct current (DC) power supply. The liquid immersion cooling system also includes a DC bus configured to route the DC power supply from the power shelf, into the tank interior, and to the electronic components.