



US 20240179869A1

(19) **United States**

(12) **Patent Application Publication**
Pamidighantam et al.

(10) **Pub. No.: US 2024/0179869 A1**

(43) **Pub. Date: May 30, 2024**

(54) **HEXAGONAL HEATSINK SYSTEM**

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(21) Appl. No.: **18/525,385**

(22) Filed: **Nov. 30, 2023**

(30) **Foreign Application Priority Data**

Nov. 30, 2022 (SG) 10202260267V

Publication Classification

(51) **Int. Cl.**
H05K 7/20 (2006.01)

(52) **U.S. Cl.**

CPC **H05K 7/20209** (2013.01); **H05K 7/2039**
(2013.01)

(57)

ABSTRACT

The hexagonal heatsink system introduces a novel approach to efficient electronic device cooling. It includes heatsink devices, each with an electronic circuit board and heatsink elements for heat transfer, all attached via a hexagonal base plate with fins for enhanced cooling. Temperature sensors are placed near processors strategically to monitor temperature values. The system employs a feedback circuit that collects sensor data, calculates an effective temperature, and regulates a fan based on the comparison with a threshold temperature. It can control additional fan parameters, such as speed. This system offers an effective solution for maintaining optimal operating temperatures in electronic devices, particularly those with hexagonal base plates, improving overall device reliability and preventing overheating even in server racks.

