

US 20240237273A9

(19) United States

(12) Patent Application Publication CHEN et al.

(10) Pub. No.: US 2024/0237273 A9

(48) **Pub. Date: Jul. 11, 2024 CORRECTED PUBLICATION**

(54) SYSTEM AND METHOD FOR MANAGING COMPONENT POSITIONING AND ORIENTATION IN DATA PROCESSING SYSTEMS

- (71) Applicant: **Dell Products L.P.**, Round Rock, TX
- (72) Inventors: JULIAN YU-HAO CHEN, Austin, TX (US); SHUN-CHENG HSU, Zhubei (TW); HUNG-JEN CHEN, Taoyuan City (TW)
- (21) Appl. No.: 18/048,124
- (22) Filed: Oct. 20, 2022

Prior Publication Data

- (15) Correction of US 2024/0138101 A1 Apr. 25, 2024 See (22) Filed.
- (65) US 2024/0138101 A1 Apr. 25, 2024

Publication Classification

(51) Int. Cl. *H05K 7/20* (2006.01) *G06F 1/20* (2006.01)

(52) U.S. CI. CPC *H05K 7/20172* (2013.01); *G06F 1/20* (2013.01)

(57) ABSTRACT

Methods and systems for managing the operation of data processing systems are disclosed. A data processing system may include a computing device that may provide computer implemented services. To provide the computer implemented services, hardware components of the data processing system may need to operate in predetermined manners. To manage the operation of the hardware components, the data processing system may cool them when their temperatures fall outside of thermal operating ranges. To facilitate cooling, fans may be densely packed and arranged in a manner the occupies a majority of the space in a stack up. At least one side of the fans may be exposed and may not be covered.

