

# (19) United States

## (12) Patent Application Publication (10) Pub. No.: US 2022/0361373 A1 Elkins et al.

Nov. 10, 2022 (43) **Pub. Date:** 

#### (54) ELECTRONIC EQUIPMENT CABINETS WITH CONFIGURABLE AIR PLENUMS

- (71) Applicant: Vertiv Corporation, Columbus, OH
- Inventors: Jin Harrison Elkins, Auburn, AL (US); Adarsh Khandelwal, Pune (IN)
- Appl. No.: 17/735,530
- (22) Filed: May 3, 2022

### Related U.S. Application Data

- (60) Provisional application No. 63/183,921, filed on May 4, 2021.
- (30)Foreign Application Priority Data

#### **Publication Classification**

(51) Int. Cl. H05K 7/20 (2006.01)H05K 5/00 (2006.01)

### (52) U.S. Cl.

CPC ...... H05K 7/20572 (2013.01); H05K 5/0004 (2013.01); H05K 7/20172 (2013.01); H05K 7/**20145** (2013.01)

#### (57)ABSTRACT

An electronics equipment cabinet includes one or more cabinet walls defining an interior enclosure space for housing electronic equipment and an air management box coupled to an interior surface of one of the one or more cabinet walls. The air management box includes a wall and a plurality of plates detachably coupled to the wall. The plates include a first plate having one or more perforations defining a first perforation pattern and a second plate having one or more perforations defining a second perforation pattern to control the direction and/or volume of airflow to the electronic equipment in the interior enclosure space or from the electronic equipment in the interior enclosure space to the air management box. The first perforation pattern is different than the second perforation pattern. Other example electronics equipment cabinets, electronics equipment cabinet kits, and methods of controlling airflow in electronic equipment cabinets are also disclosed.

