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(54) **Title:** INTEGRATED BUILDING BASED AIR HANDLER FOR SERVER FARM COOLING SYSTEM

(57) **Abstract:** An air handler building structure is disclosed, which includes a floor, a plurality of lateral walls, a roof, and one or more openings located either on the roof or on at least one of the lateral walls. The lateral walls include a lower and an upper lateral walls opposing to each other having different respective heights determined in accordance with a ratio. The roof has a pitch consistent with the ratio associated with the lower and upper lateral walls. The shape of the building structure allows air within the building structure to rise via natural convection. In addition, a first dimension along a first direction defined between the lower and upper lateral walls relative to a second dimension along a second direction perpendicular to the first direction is such that the building structure provides access to outside natural air via one or more openings on the lower lateral wall.

