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(54) **METHOD AND APPARATUS FOR ACOUSTIC NOISE REDUCTION IN A COMPUTER SYSTEM HAVING A VENTED COVER**

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(58) **Field of Classification Search** 361/695, 361/721; 454/184
See application file for complete search history.

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(57) **ABSTRACT**

A vented cover includes a pair of cross-flow ventilation ducts each including an acoustic noise reduction lining. The ducts are "cross-flow" in that they cross and bypass one another. The cover is affixed to an enclosure containing components of a computer system and abuts against a panel of the enclosure having an airflow aperture. An air moving device (AMD) passes air through the enclosure from the ducts if the cover is an intake cover, and/or into the ducts if the cover is an exhaust cover. The ducts increase the air path length, and the acoustic absorbing surface, thereby increasing acoustic attenuation. Airflow resistance is reduced by reducing surfaces perpendicular and close to the area where air enters and by reducing sharp turns in the ducts. The cover has a relatively thin depth because the ducts cross and bypass each other in a very space efficient manner.

20 Claims, 9 Drawing Sheets