

Title (en)
EQUIPMENT COOLING

Title (de)
EINRICHTUNGSKÜHLUNG

Title (fr)
REFROIDISSEMENT DE MATÉRIEL

Publication
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Application
EP 09785464 A 20090810

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Abstract (en)
[origin: WO2010018398A2] Convection cooling channels are provided by means of an at least partially enclosed open cell metalfoam structure for removing heat from equipment. In particular, an electronic equipment box is provided having walls comprising sections of open cell aluminium foam, clad with aluminium, through which air or other types of coolant may pass to remove heat from heat- generating components mounted thereon. Other types of equipment, such as electric motors, may be surrounded by customised sections of open cell metal foam, appropriately clad, through which a coolant may be channelled. The foam cell size may be adjusted according to desired coolant flow rate and weight considerations. Convection cooling structures may be combined with latent heat storage bodies comprising similar open cell metal foam structures containing wax, operating in tandem with the present convection cooling structures in a heat management solution.

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