

Title (en)

SYSTEM AND METHOD FOR COOLING A SERVER-BASED DATA CENTER

Title (de)

SYSTEM UND VERFAHREN ZUM KÜHLEN EINES SERVERBASIERTEN DATENZENTRUMS

Title (fr)

SYSTÈME ET MÉTHODE DE REFROIDISSEMENT D'UN CENTRE DE DONNÉES FONDÉ SUR UN SERVEUR GRÂCE À UN REFROIDISSEMENT AU DESSOUS DE LA TEMPÉRATURE AMBIANTE

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Application

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Abstract (en)

[origin: WO2007102978A1] According to one embodiment of the invention, a cooling system for heat- generating structures comprises a plurality of heat exchangers, a structure which directs flow of the fluid coolant substantially in the form of a liquid to each of the plurality of heat exchangers, and a structure which reduces a pressure of the fluid coolant to a pressure at which the fluid coolant has a boiling temperature less than a temperature of the heat- generating structures. Each of the plurality of heat exchangers is in thermal communication with at least one of the heat-generating structures and has an inlet and an outlet. Thermal energy from the heat-generating structure causes the fluid coolant substantially in the form of a liquid to boil and vaporize in each of the plurality of heat exchangers so that the fluid coolant absorbs thermal energy from the heat-generating structure as the fluid coolant changes state.

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