Title (en)

THERMAL CONTROL DEVICE WITH NETWORK OF INTERCONNECTED CAPILLARY HEAT PIPES

Title (de)

THERMISCHE REGULIERUNGSVORRICHTUNG MIT VERNETZTEN KAPILLARWÄRMEROHREN

Title (fr)

DISPOSITIF DE RÉGULATION THERMIQUE À RÉSEAU DE CALODUCS CAPILLAIRES INTERCONNECTÉS

Publication

EP 2344827 A1 20110720 (FR)

Application

EP 09768164 A 20091109

Priority

- FR 2009052156 W 20091109
- FR 0857643 A 20081112

Abstract (en)

[origin: WO2010055253A1] The thermal control device comprises at least one network (30) of capillary heat pipes (31), in which each heat pipe (31) comprises a tube enclosing an essentially annular longitudinal capillary structure, for the circulation of a two-phase heat-transfer fluid in the liquid phase, and surrounding a central channel for the circulation of said two-phase fluid in the vapour phase. The tubes of at least two heat pipes (31) of the network (30) intersect and are interconnected in such a way that at each intersection of heat pipes (31) forming a node (36, 37, 38) of the network (30), an exchange of fluid in the liquid phase can take place by capillary action between the capillary structures of said two or more heat pipes (31), and such that, simultaneously, an exchange of fluid in the vapour phase can take place by free circulation between the central channels of said two or more heat pipes (31).

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

See references of WO 2010055253A1

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Designated extension state (EPC)

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