

Title (en)

PASSIVE DEVICE WITH CAPILLARY PUMPED FLUIDIC MICRO LOOP

Title (de)

PASSIVE VORRICHTUNG MIT KAPILLARFÖRDERUNG IN EINEM FLÜSSIGKEITS-MIKROKREISLAUF

Title (fr)

DISPOSITIF PASSIF A MICRO BOUCLE FLUIDE A POMPAGE CAPILLAIRE

Publication

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Application

EP 08826899 A 20080711

Priority

- FR 2008051313 W 20080711
- FR 0705770 A 20070808

Abstract (en)

[origin: WO2009019377A1] Each loop (1) of the device includes an evaporator (2) and a condenser (3) connected by an outer tube (6) in a portion of which extends a thermally insulating sleeve (9) having one end (9b) that can lead into the condenser (3) and another end (9a) that surrounds a first portion (8a) of a microporous mass (8) provided in the outer tube (6) and pumping by capillarity a liquid-phase heat-carrier fluid flowing in the insulating sleeve (9) of the condenser (3) towards the evaporator (2), while the gaseous-phase fluid flows from a vapour-collecting central duct (25) in a second portion (8b) of the mass (8) of the evaporator (2) towards the condenser (3) in a duct (11) inside said outer tube (6). The invention can be used for the thermal energy transfer from an electronic component or circuit defining a heat source (4) in relation with the evaporator (2) to a cold source (5) in relation with the condenser (3).

IPC 8 full level

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CPC (source: EP US)

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Cited by

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