

Title (en)

IMPROVED COOLING DEVICES FOR DIFFERENT APPLICATIONS

Title (de)

VERBESSERTE KÜHLVORRICHTUNGEN FÜR VERSCHIEDENE ANWENDUNGEN

Title (fr)

DISPOSITIFS DE REFROIDISSEMENT PERFECTIONNES POUR APPLICATIONS DIVERSES

Publication

EP 1766682 A2 20070328 (FR)

Application

EP 05778868 A 20050623

Priority

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- FR 0413932 A 20041227

Abstract (en)

[origin: WO2006010822A2] The figure displays the diagram of a laminar flow water cooler (110) for a microprocessor comprising an integral radiator (112) provided with thin-walled and hollow fins which are produced by controlled compression of double convex bellows of a polymer or glass hot-blown blank. In order to form a closed circuit filled with water at the atmospheric pressure, the manifolds (113, 114, 115) of the radiator (112) are connected to the manifolds of an original component (114) formed by a mini heater (116) provided with a copper heating plate with internal grooved face and a mini pump (118) provided with a brushless electric motor devoid of a centrifugal turbine, wherein said mini heater and mini pump are disposed in a rigid small-sized moulded polymer hose. The total thermal resistance of said cooler can be equal to 0.15°/W that is of interest, in particular for high performance microprocessors for dissipating more than 200 W through the very hot central area of 1.5 cm²

IPC 8 full level

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CPC (source: EP US)

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C-Set (source: EP US)

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