



(12) **United States Patent**
Eriksen

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(54) **COOLING SYSTEM FOR A COMPUTER SYSTEM**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

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(51) **Int. Cl.**
F28F 7/00 (2006.01)
G06F 1/20 (2006.01)
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CPC G06F 1/206; G06F 1/20; G06F 2200/201; H05K 7/20154; H05K 7/20263; H05K 7/20272; F28D 15/00; F28F 2250/08
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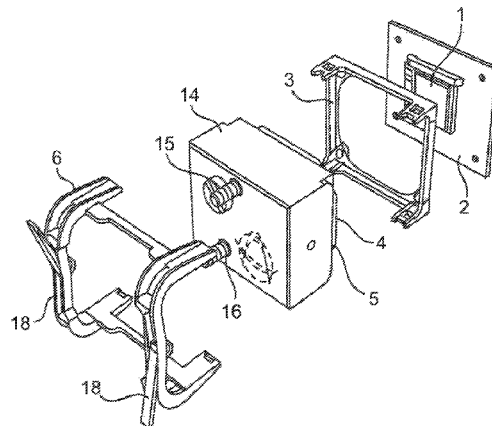
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(57) **ABSTRACT**

A cooling system for a computer system comprises at least one unit such as a central processing unit (CPU) generating thermal energy and a reservoir having an amount of cooling liquid, said cooling liquid intended for accumulating and transferring of thermal energy dissipated from the processing unit to the cooling liquid. The cooling system has a heat exchanging interface for providing thermal contact between the processing unit and the cooling liquid for dissipating heat from the processing unit to the cooling liquid. Different embodiments of the heat exchanging system as well as means for establishing and controlling a flow of cooling liquid and a cooling strategy constitutes the invention of the cooling system.

19 Claims, 9 Drawing Sheets



Related U.S. Application Data

continuation of application No. 13/942,922, filed on Jul. 16, 2013, which is a continuation of application No. 13/547,240, filed on Jul. 12, 2012, which is a continuation of application No. 12/826,768, filed on Jun. 30, 2010, now Pat. No. 8,240,362, which is a division of application No. 10/578,578, filed as application No. PCT/DK2004/000775 on Nov. 8, 2004, now Pat. No. 7,971,632.

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(58) **Field of Classification Search**

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See application file for complete search history.

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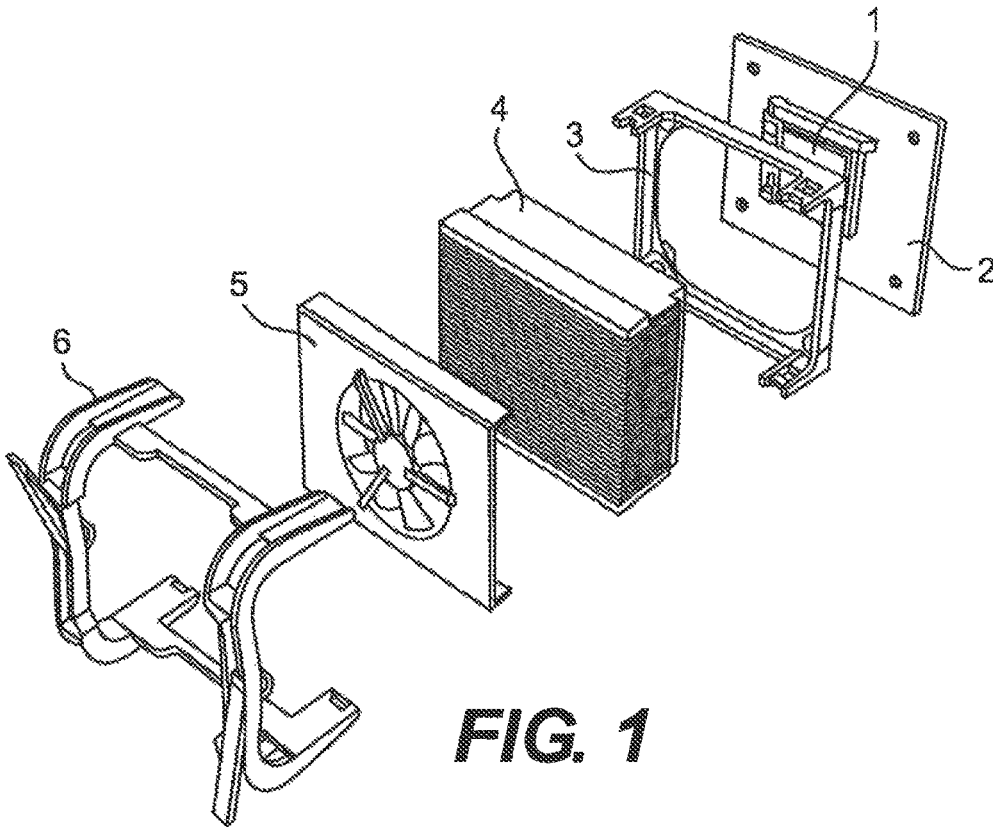


FIG. 1

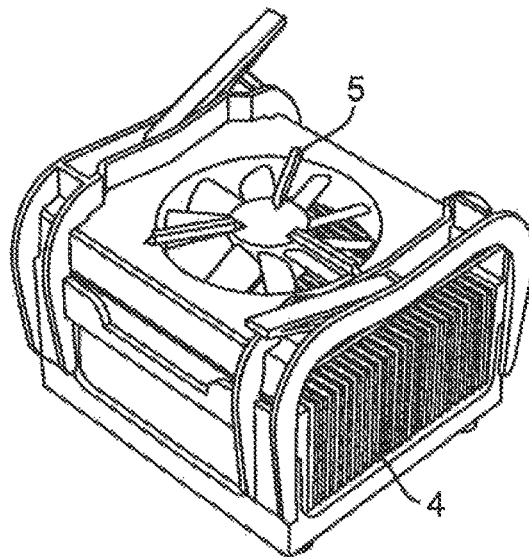


FIG. 2

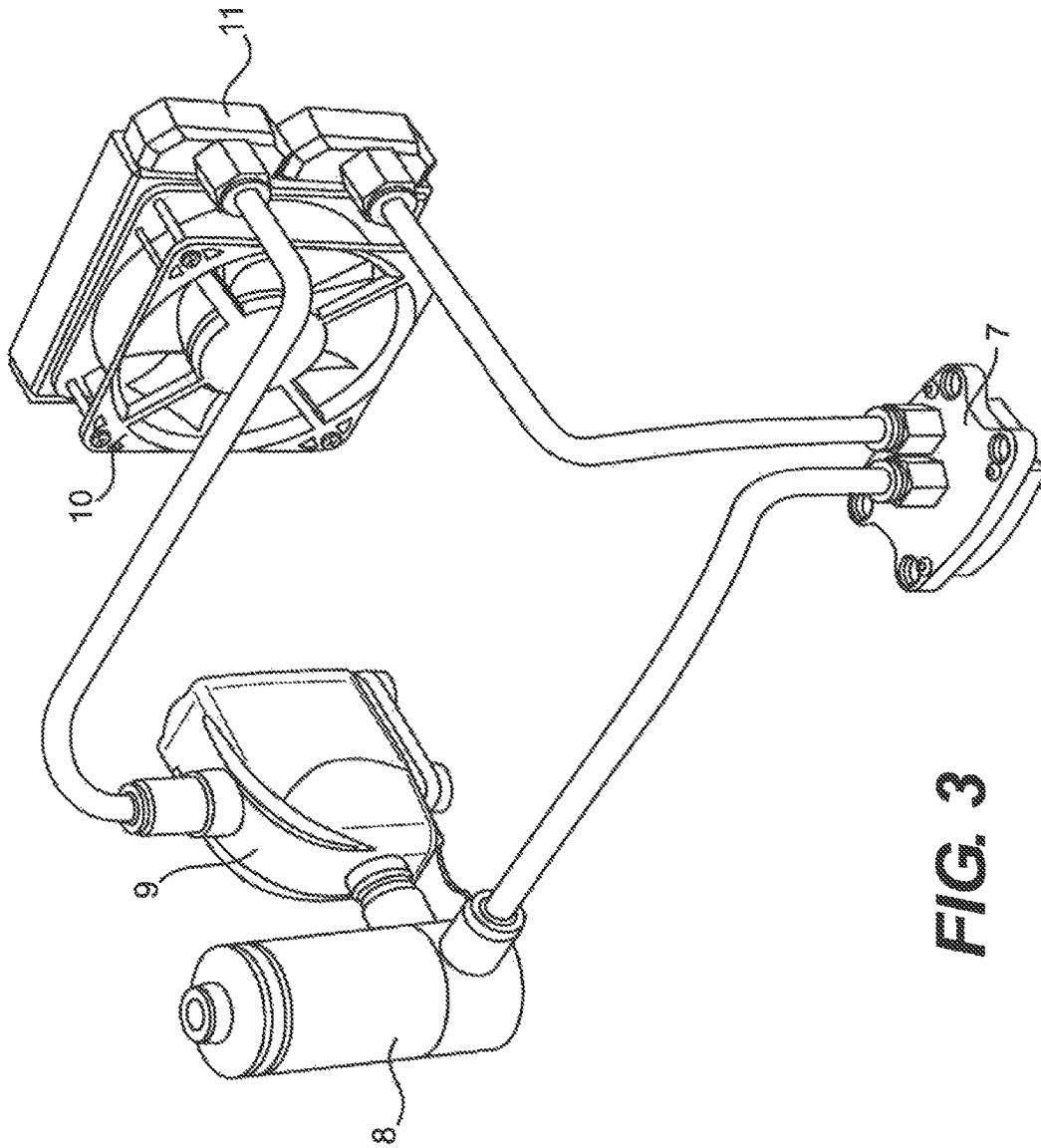


FIG. 3

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