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(54) Title: METHOD AND APPARATUS FOR OPTIMIZING THERMAL MANAGEMENT SYSTEM PERFORMANCE USING FULL-CHIP THERMAL ANALYSIS OF SEMICONDUCTOR CHIP DESIGNS

(57) Abstract: A method and apparatus for optimizing cooling system performance using full-chip thermal analysis of semiconductor chip designs is provided (see fig 5 element 504, and 506). One embodiment of a novel method for optimizing the cooling of an electronic system incorporating at least one semiconductor chip includes receiving full-chip temperature data (see fig 5 element 504) for the semiconductor chip(s) and configuring the cooling system for dissipating heat from the electronic system in accordance with the full-chip temperature data (see fig 5 element 508, and 510).



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC: G06F 17/50(2006.01)

USPC: 716/4,5,6

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 716/4,5,6

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6389582 (Valainis et al.) 14 May 2002 (14.05.2002). Fig2, 5-9, column 3 line 54 to col 14 line 63.	1-35



Further documents are listed in the continuation of Box C.



See patent family annex.

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