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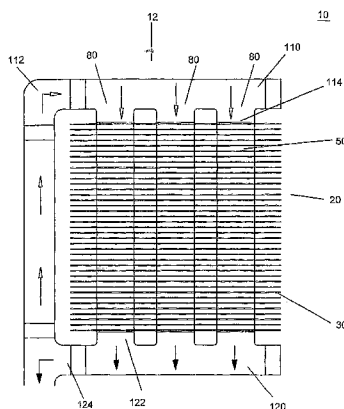
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(54) Title: **BLADE-THRU CONDENSER AND HEAT DISSIPATION SYSTEM THEREOF**



(57) **Abstract:** A condenser includes a condenser core, input and output manifolds connected therewith. The condenser core has a blade-thru structure, which is formed by a plurality of layers of thin metal blades stacked on top of another by joint interfaces or joined by spacer rings between two adjacent blades. Each layer of the blades includes condensation chamber(s), wherein the floor of the chamber is monolithic with the rest of the blade. The blades are so aligned that the condensation chamber(s) of each blade are on top of the condensation chamber(s) of the blade immediate underneath, thereby forming phase exchange column(s). Each condensation chamber has one or more apertures on the floor thereof, permitting vapor and condensate to pass therethrough and causing vibration of the chamber floor. Further disclosed is a heat dissipation system utilizing the blade-thru condenser, as well as a computer system utilizing the heat dissipation system.

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INTERNATIONAL SEARCH REPORT

International application No.

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - F02G 3/00 (2007.01)

USPC - 60/39.76

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)

IPC(8) - F02G 3/00, F02G 1/00, F02C 5/00(2007.01)

USPC - 60/39.76, 417/407

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)

PatBase

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6,351,938 B1 (KERREBROCK) 05 March 2002 (05.03.2002) entire document	1-35
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Y		36-38
Y	US 6,166,907 A (CHIEN) 26 December 2000 (26.12.2000) Figure 3 and column 1, lines 12-16	36-38

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