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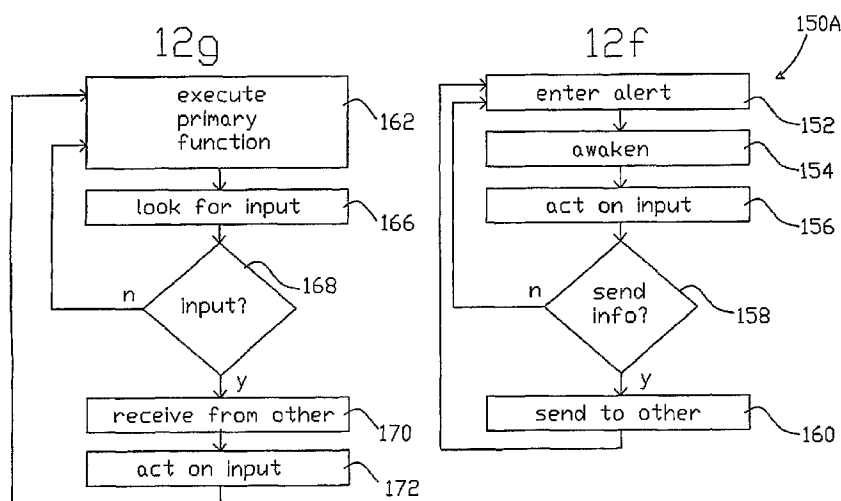
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[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR MONITORING INPUTS TO A COMPUTER



(57) Abstract: A computer array (10) has a plurality of computers (12). The computers (12) communicate with each other asynchronously, and the computers (12) themselves operate in a generally asynchronous manner internally. When one computer (12) attempts to communicate with another it goes to sleep until the other computer (12) is ready to complete the transaction, thereby saving power and reducing heat production. The sleeping computer (12) can be awaiting data or instructions (12). In the case of instructions, the sleeping computer (12) can be waiting to store the instructions or to immediately execute the instructions. In the later case, the instructions are placed in an instruction register (30a) when they are received and executed therefrom, without first placing the instructions first into memory. The instructions can include a micro-loop (100) which is capable of performing a series of operations repeatedly. In one application, the sleeping computer (12) is awakened by an input such that it commences an action that would otherwise have required an interrupt of an otherwise active computer.

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B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) U.S. : 712/034 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) Please See Continuation Sheet				
C. DOCUMENTS CONSIDERED TO BE RELEVANT				
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.		
X	US 5,390,304 (Leach et al) 14 February 1995, see entire document.	1-8, 12-28		
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Y		9-11		
Y	Hennessy, John L; Patterson, David A; Computer Architecture A Quantitative Approach, Third Edition, 2003, Morgan Kaufmann Publishers, pp 98.	9		
Y	US 2004/0003219 A1 (Uehara) 01 January 2004, see entire document.	10		
Y	US 5,752,259 (Tran) 12 May 1998, see entire document.	11		
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.				
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> * Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed </td> <td style="width: 50%; vertical-align: top;"> "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family </td> </tr> </table>			* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family
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Continuation of B. FIELDS SEARCHED Item 3:
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program,counter,register,address,memory,indirect,processor,coprocessor