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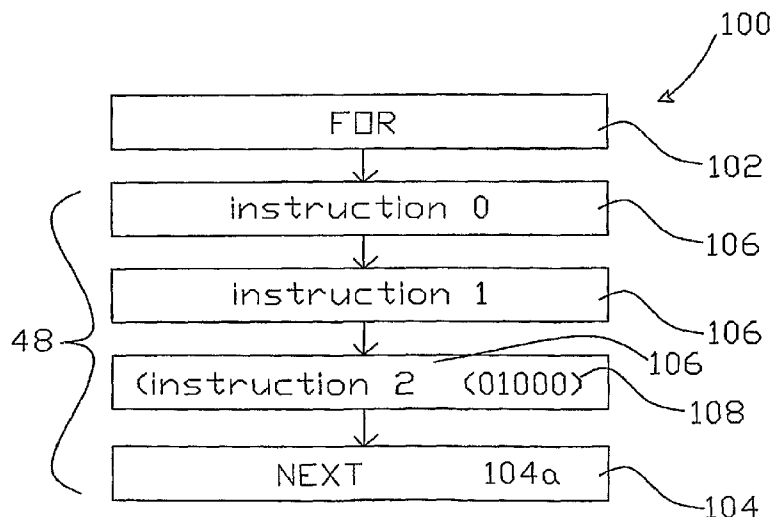
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[Continued on next page]

(54) Title: **MICROLOOP COMPUTER INSTRUCTIONS**



(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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## C DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
Y	US 5,752,259 A (TRAN) 12 May 1998 (12 05 1998)	1-24
Y	US 2004/0003219 A1 (UEHARA) 01 January 2004 (01 01 2004)	1-24
Y	W3Schools, "VBScript Looping Statements", July 2000 <a href="http://www.w3schools.com/vbscript/vbscript_looping.asp">http://www.w3schools.com/vbscript/vbscript_looping.asp</a>	3-24
Y	Official Notice (NO-OP instruction)	12

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