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(54) Title: COMPUTING MACHINE HAVING IMPROVED COMPUTING ARCHITECTURE AND RELATED SYSTEM AND METHOD

(57) Abstract: A computing machine includes a first buffer and a processor coupled to the buffer. The processor executes an application, a first data-transfer object, and a second data-transfer object, publishes data under the control of the application, loads the published data into the buffer under the control of the first data-transfer object, and retrieves the published data from the buffer under the control of the second data-transfer object. Alternatively, the processor retrieves data and loads the retrieved data into the buffer under the control of the first data-transfer object, unloads the data from the buffer under the control of the second data-transfer object, and processes the unloaded data under the control of the application. Where the computing machine is a peer-vector machine that includes a hardwired pipeline accelerator coupled to the processor, the buffer and data-transfer objects facilitate the transfer of data between the application and the accelerator.



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A. CLASSIFICATION OF SUBJECT MATTER IPC 7 G06F9/46				
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B. FIELDS SEARCHED				
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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.		
A	EP 0 694 847 A (IBM) 31 January 1996 (1996-01-31) column 1, line 1 - column 5, line 50 -----	1-61		
A	US 4 956 771 A (NEUSTAEDTER TARL) 11 September 1990 (1990-09-11) abstract column 1, line 12 - column 3, line 14 -----	1-61		
<input type="checkbox"/> Further documents are listed in the continuation of box C.				
<input checked="" type="checkbox"/> Patent family members are listed in annex.				
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A document defining the general state of the art which is not considered to be of particular relevance *E* earlier document but 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. *Z* document member of the same patent family			
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Information on patent family members

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