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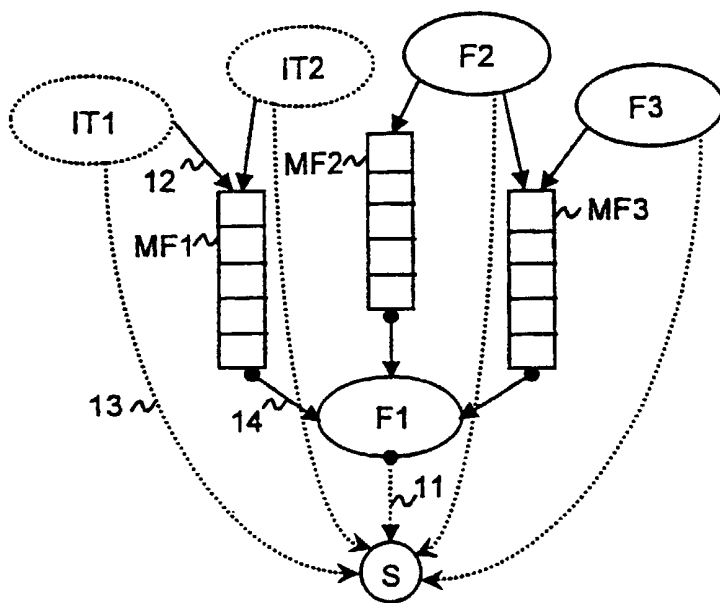
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(54) Title: MULTI-TASKING SOFTWARE ARCHITECTURE



(57) Abstract: The invention relates to a computer program product comprising semaphore means for stalling a first task until one of a predetermined set of events occurs. The computer program product comprises specific message files associated with said first task for receiving data to be processed by the first task. The occurrence of one of said set of predetermined events causes a piece of data to be written in one of the associated messages files. The computer program in accordance with the invention can be implemented by using any operating system having basic synchronization tools. Such synchronization tools include semaphore means for causing a task to be waiting for a unique event such as the release of the semaphore by another task. They also include blocking mechanisms for temporarily blocking "interruptions" coming from interruption handlers during data writing (message reception) in the message files associated with the first task.

The invention, in effect, provides an equivalent to the "select mechanism" but uses only very basic synchronization tools so as to be suitable for embedded systems.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER IPC 7 G06F9/52 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 7 G06F 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 practical, search terms used) IBM-TDB, INSPEC, WPI Data, EPO-Internal		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y A	US 5 313 638 A (OGLE DAVID M ET AL) 17 May 1994 (1994-05-17) abstract figures 3B,6A, column 1, line 53 -column 2, line 12 column 2, line 59 -column 3, line 15 ---	1-3,6-10 4,5
Y A	WO 97 24671 A (POWERTV INC) 10 July 1997 (1997-07-10) abstract page 4, line 1 -page 5, line 10 page 13, line 8 - line 17 page 21, line 1 - last line page 22, line 6 - line 13 --- -/--	1-3,6-10 4,5
<input checked="" type="checkbox"/> Further documents are listed in the continuation of box C. <input checked="" type="checkbox"/> Patent family members are listed in annex.		
° 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 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. *&* document member of the same patent family		
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Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016		Authorized officer Écolivet, S.

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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