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(54) **Grafik-Prozessor für ein hochauflösendes Video-Anzeige-System.**

(57) A processing system is provided that includes an external device connected to a processor. The external device has the capability of responding to external device commands wherein each of these external device commands is performed within at least one fixed time period. The processor provides these external device commands and further includes the means for executing instructions that not only specify the external device commands but also specify at least one internal command to be performed internally by the processor simultaneously with the performance of the external commands by the external device. In the disclosed embodiment, a graphics display system is provided that includes a system processor, a graphics processor, a graphics memory and a display device. The graphics processor receives instructions from the system processor.

These instructions specify commands to be executed in both the graphics processor and in the graphics memory. The commands executed in the graphics memory are executed within a fixed time period. The commands executed by the graphics processor are also executed within this fixed time period simultaneously with the execution of the commands in the graphics memory. The graphics processor further includes control circuitry for controlling the execution of the graphics processor commands. The control circuitry is connected to several registers in the graphics processor which receive instructions from the system processor. These system processor instructions specify commands from both the graphics memory and the graphics processor. The control circuitry provides for the execution of these instructions in these registers in a serial loop fashion.

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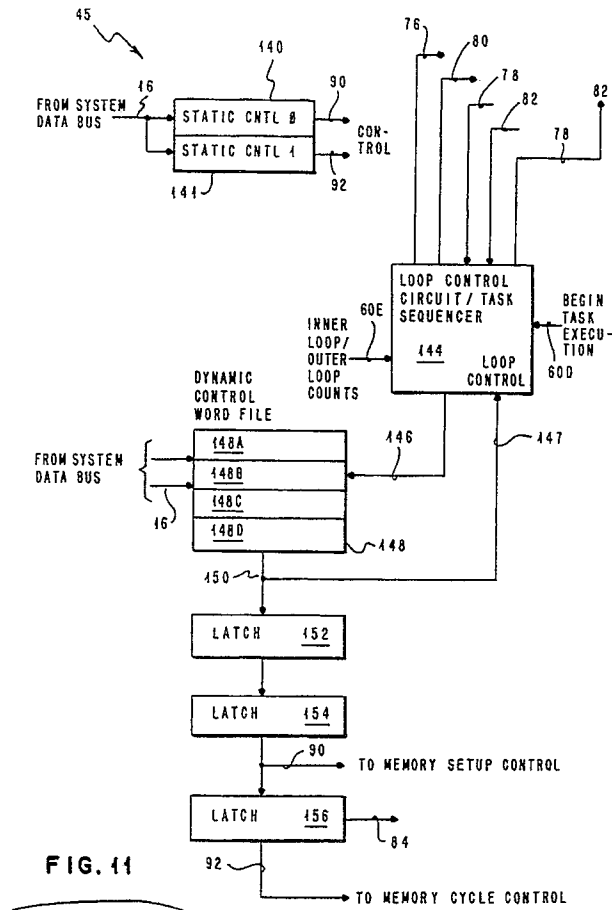


FIG. 11



EUROPEAN SEARCH REPORT

EP 88 10 1084

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
X	EP-A-0 028 437 (FREDERICK ELECTRONICS) * abstract ** page 7, line 1 - page 9, line 6; figures 1-4 ** page 20, line 9 - page 20, line 36 * - - -	1-4	G 09 G 1/16
X	EP-A-0 182 454 (TEXAS INSTRUMENTS) * abstract; figures 1, 2 ** page 5, line 1 - page 7, line 20; figures 1, 2 ** page 10, line 1 - page 17, line 9 * - - -	1-6	
X	EP-A-0 133 903 (HITACHI) * abstract ** page 4, line 25 - page 12, line 11; figures 3-5 * - - -	1-6	
X	EP-A-0 131 417 (BURROUGHS) * abstract; figure 3 ** page 21, line 4 - page 23, line 27 * - - -	1-5	
A	EP-A-0 030 981 (FUJITSU) * abstract; figures 1, 2 ** page 4, line 1 - page 8, line 2 * - - -	1-4	
A	EP-A-0 148 578 (MOTOROLA) * abstract; figure 1 ** page 2, lines 5 - 34 ** page 8, lines 30 - 35 * - - -	1-6	
A	PATENT ABSTRACTS OF JAPAN vol. 6, no. 203 (P-148) 14 October 1982, & JP-A-57 109084 (FUJITSU) 7 July 1987, * the whole document * - - - - -	4,8	TECHNICAL FIELDS SEARCHED (Int. Cl.5) G 09 G G 06 F
The present search report has been drawn up for all claims			
Place of search Berlin		Date of completion of search 30 April 91	Examiner SAAM C A
<div>CATEGORY OF CITED DOCUMENTS</div> <div>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention</div> <div>E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- & : member of the same patent family, corresponding document</div>			