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(11) EP 0 803 859 A3

(12) EUROPEAN PATENT APPLICATION

(88) Date of publication A3:  
04.03.1998 Bulletin 1998/10

(51) Int. Cl.<sup>6</sup>: G09G 5/36

(43) Date of publication A2:  
29.10.1997 Bulletin 1997/44

(21) Application number: 96118476.9

(22) Date of filing: 18.11.1996

(84) Designated Contracting States:  
DE FR GB

(30) Priority: 23.04.1996 US 636250

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(54) System and method for optimizing storage requirements for an N-way distribution channel

(57) In a texture mapping computer graphics system including a texture mapping chip (46) that stores a plurality of texels (S, T) and multiple frame buffer controller chips (50A-50E) that process the texels, an interface is provided between the texture mapping chip (46) and the frame buffer controller chip. The interface includes a texel array storage unit, coupled between the texture mapping chip (46) and the frame buffer controller chips (50A-50E), that temporarily stores a limited number of texels, each texel being destined for a particular frame buffer controller chip. A control unit (110), coupled to the texel array storage unit (90), controls shifting texels from the texture mapping chip (46) into locations within the texel array storage unit (90) and transferring texels from the texel array storage unit (90) into appropriate frame buffer controller chips (50A-50E). A plurality of address storage units (114A-114E), coupled to the control unit (90), store addresses of locations within the texel array storage unit (90) in which texels are stored. Each address storage unit (114A-114E) corresponds to a different frame buffer controller chip (50A-50E).

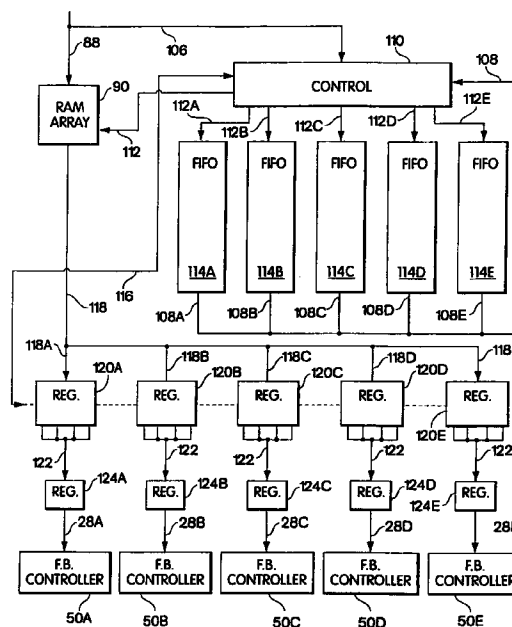


Fig. 7

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# EUROPEAN SEARCH REPORT

Application Number  
EP 96 11 8476

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.6)
Y	US 5 230 039 A (GROSSMANN ET AL.) * Abstract * * column 3, line 16 - column 6, line 58; figure 1 *	1,2,7	G09G5/36 G09G1/16
Y	WO 95 24682 A (SILICON GRAPHICS INC.) * Abstract * * page 14, line 5 - line 18; figure 2 *	1,2,7	
A	WO 94 11807 A (THE UNIVERSITY OF NORTH CAROLINA) * Abstract * * page 6, line 1 - page 12, line 31; figures 1-5 *	1,2,7	
A	EP 0 197 412 A (TEKTRONIX INC.) * Abstract * * column 3, line 18 - column 6, line 26; figures 1,2 *	5,9,10	
A	EP 0 447 227 A (HEWLETT-PACKARD CO.) * Abstract * * column 6, line 23 - column 8, line 58; figures 1-2B *	1,7	TECHNICAL FIELDS SEARCHED (Int.Cl.6) G09G G06T
E	EP 0 747 858 A (HEWLETT-PACKARD CO.) * Abstract * * column 2, line 42 - column 4, line 24; figures 1-3 * * column 7, line 5 - column 12, line 16 * * column 13, line 30 - column 14, line 29 *	1,7	
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 12 January 1998	Examiner Corsi, F
<p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons &amp; : member of the same patent family, corresponding document</p>			

EPO FORM 1503 03.82 (P4/C01)