(12) # EUROPEAN PATENT APPLICATION

(72) Inventor : **Guillemaud, Andre J.**
3819 Stovepipe Lane
Sugar Land, TX 77479 (US)
Inventor : **Balistreri, Anthony M.**
4944 Woodway, Apt. No. 23
Houston, TX 77056 (US)
Inventor : **Guttag, Karl M.**
4015 South Sandy Court
Missouri City, TX 77459 (US)
Inventor : **Simpson, Richard D.**
16 Pavenham Road
Carlton, Bedford (GB)

(74) Representative : **Nettleton, John Victor et al**
Abel & Imray Northumberland House 303-306
High Holborn
London, WC1V 7LH (GB)

(54) **Graphics display system including a video random access memory with a split serial register and a run counter.**

(57) A graphics system includes a random access memory (105) with a split serial register (109) having low and high halves of a plurality of storage elements, an access start point address register (137), and an arrangement (140, 142, 145) for stopping an access run at the end of a predetermined run length. Thus, there are specified both start and stop point addresses for a read data access operation from the split serial register in a graphics processing system. By using these start and stop point addresses, the operating speed of the graphics processing system is increased. The random access memory also includes a multiplexer (160) for coupling a column of storage cells from the memory array to storage elements of the split serial register (109). Data stored in either a low half or a high half of the addresses of the memory array may be selectively coupled through the multiplexer to either a low half or a high half of the split serial register. For a tile oriented graphics display operation, this arrangement increases the number of choices of where within the random access memory array to store specific bits of the tile data to be displayed. Data representing a tile can be mapped into a single row of the random access memory array.

Fig. 3

EP 0 474 366 A3

European Patent Office

EUROPEAN SEARCH REPORT

Application Number

EP   91 30 7222

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)
P,X	EP-A-0 398 511 (INTERNATIONAL BUSINESS MACHINES CORPORATION)	1,4,5,11	G09G1/16
P,A		2,3	
	* abstract; figures *		
	* column 3, line 12 - column 4, line 22 *		
	* column 5, line 15 - column 8, line 5 *		

A	US-A-4 825 411 (HISANORI HAMANO)	1	
	* abstract; figure 3 *		
	* column 2, line 54 - column 2, line 68 *		

			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			G09G
			G11C

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	14 SEPTEMBER 1992	VAN ROOST L.L.A.

EPO FORM 1503 03.82 (P0401)