REPLACEMENT SHEET
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SORTING SEQUENTIAL DATA PRIOR TO DISTRIBUTION OVER PARALLEL PROCESSORS IN RANDOM ACCESS MANNER

ABSTRACT

A data processing system comprises a plurality of processing elements being operative to process data and being coupled in parallel to a bus via a control means that governs data communication. The control means comprises a plurality of buffer means, and each respective one of the buffer means includes a respective plurality of parallel buffer segments. The control means is operative to selectively connect a single one of the buffer segments in respective ones of the buffer means to respective ones of the processing elements. This effectively permits distributing of the data in an arbitrary manner over the elements by sorting data in advance in the segments according to destination. The system is highly suitable to handle video and graphics data in image synthesis.

FIGURE 1