

[54] **COLOR GRAPHIC PROCESSOR FOR PERFORMING LOGICAL OPERATIONS**

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[58] **Field of Search** 364/521, 200 MS File, 364/900 MS File, 518; 340/747, 721; 358/160

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[57] **ABSTRACT**

A color graphic processor includes one or more processing elements responsive to pixel data provided by a frame buffer. The processing element stores pixels from the frame buffer in source and destination registers. The arithmetic logic unit (ALU) portion of the processing element includes a random access memory (RAM) addressed by the registers to produce a result pixel value which can be written back to the frame buffer. The RAM can implement a wide variety of pixel operations by loading the RAM with operation specific data.

13 Claims, 12 Drawing Sheets

