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**United States Patent** [19]  
**Narayanaswami et al.**

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[45] **Date of Patent:** **May 26, 1998**

[54] **METHOD AND APPARATUS FOR  
MANAGING MULTIPROCESSOR  
GRAPHICAL WORKLOAD DISTRIBUTION**

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[21] Appl. No.: **629,500**

[22] Filed: **Jan. 30, 1996**

**Related U.S. Application Data**

[63] Continuation of Ser. No. 286,711, Jul. 21, 1994.

[51] **Int. Cl.<sup>6</sup>** ..... **G06F 15/80**

[52] **U.S. Cl.** ..... **345/505; 395/675**

[58] **Field of Search** ..... 395/126-133,  
395/501, 502, 505, 507, 515, 675; 345/24,  
27, 28, 133, 185, 189, 203, 505, 501, 502,  
507, 515

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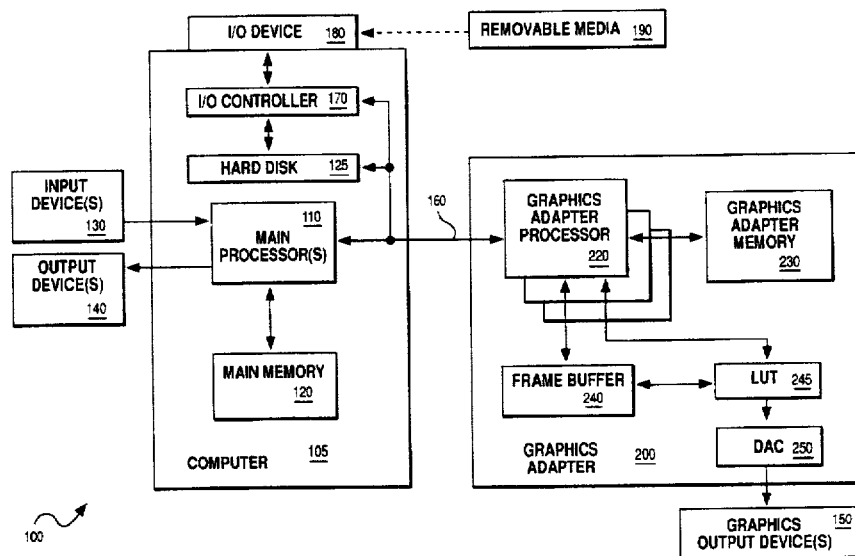
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[57] **ABSTRACT**

An apparatus for utilizing multiple processors to render graphical objects for display including apparatus for storing in memory a list of pixel locations assigned to each of the processors, apparatus for scan converting each received graphical object into pixels, and each processor including apparatus for rendering graphical object pixels at pixel locations assigned to the processor. In addition, a method of utilizing multiple processors to render graphical objects for display including the steps of storing in memory a list of pixel locations assigned to each of the processors, scan converting each received graphical object into pixels, and each processor rendering graphical object pixels at pixel locations assigned to the processor.

**18 Claims, 6 Drawing Sheets**



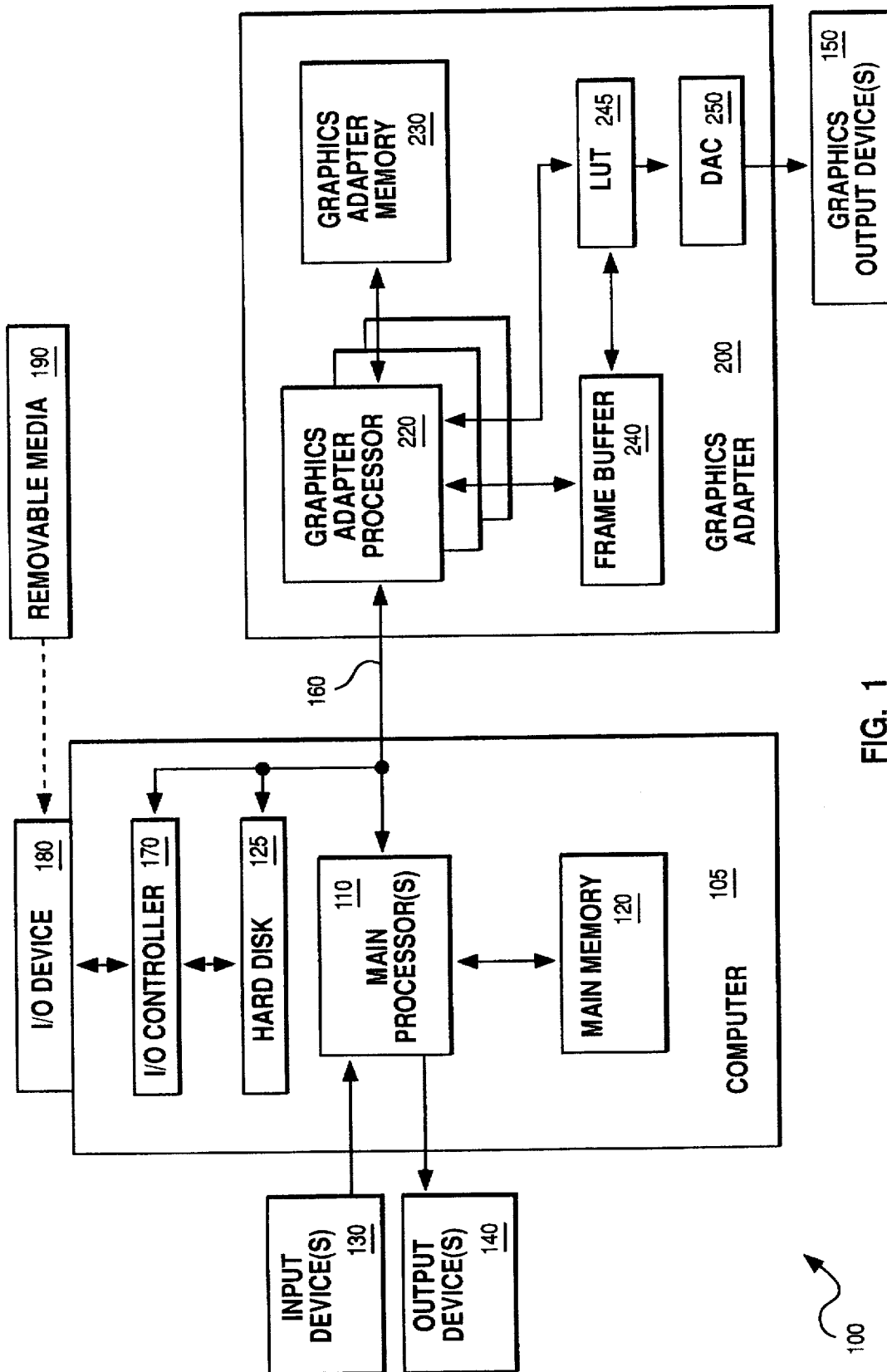


FIG. 1

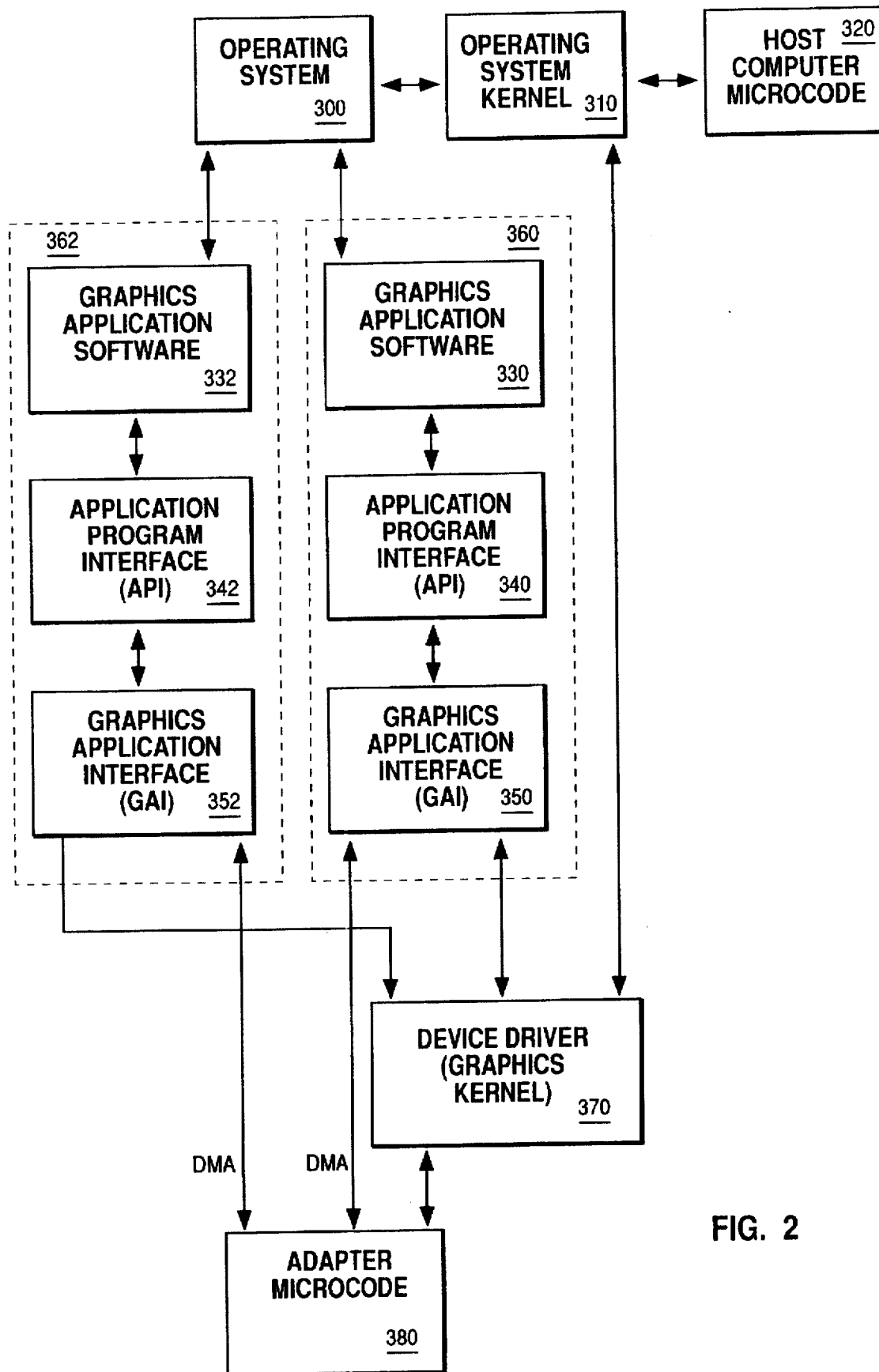


FIG. 2

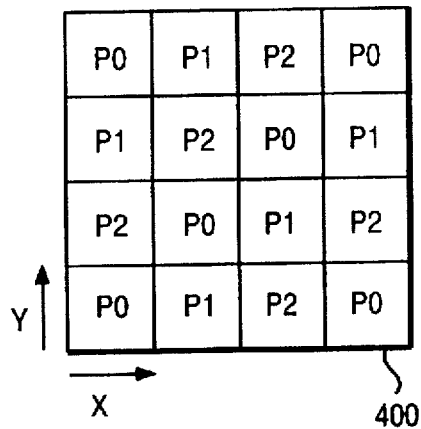


FIG. 3A

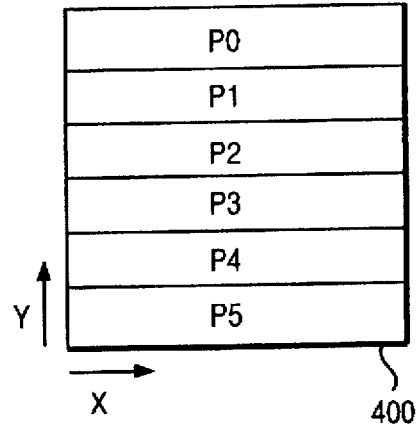


FIG. 3B

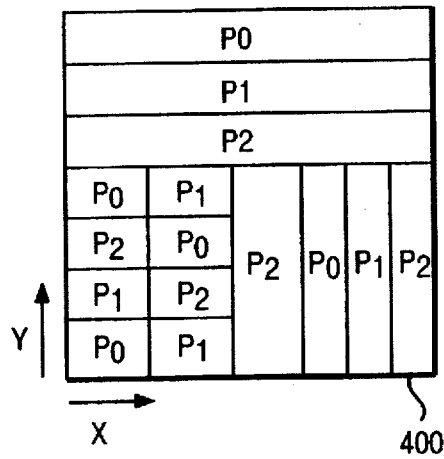


FIG. 3C

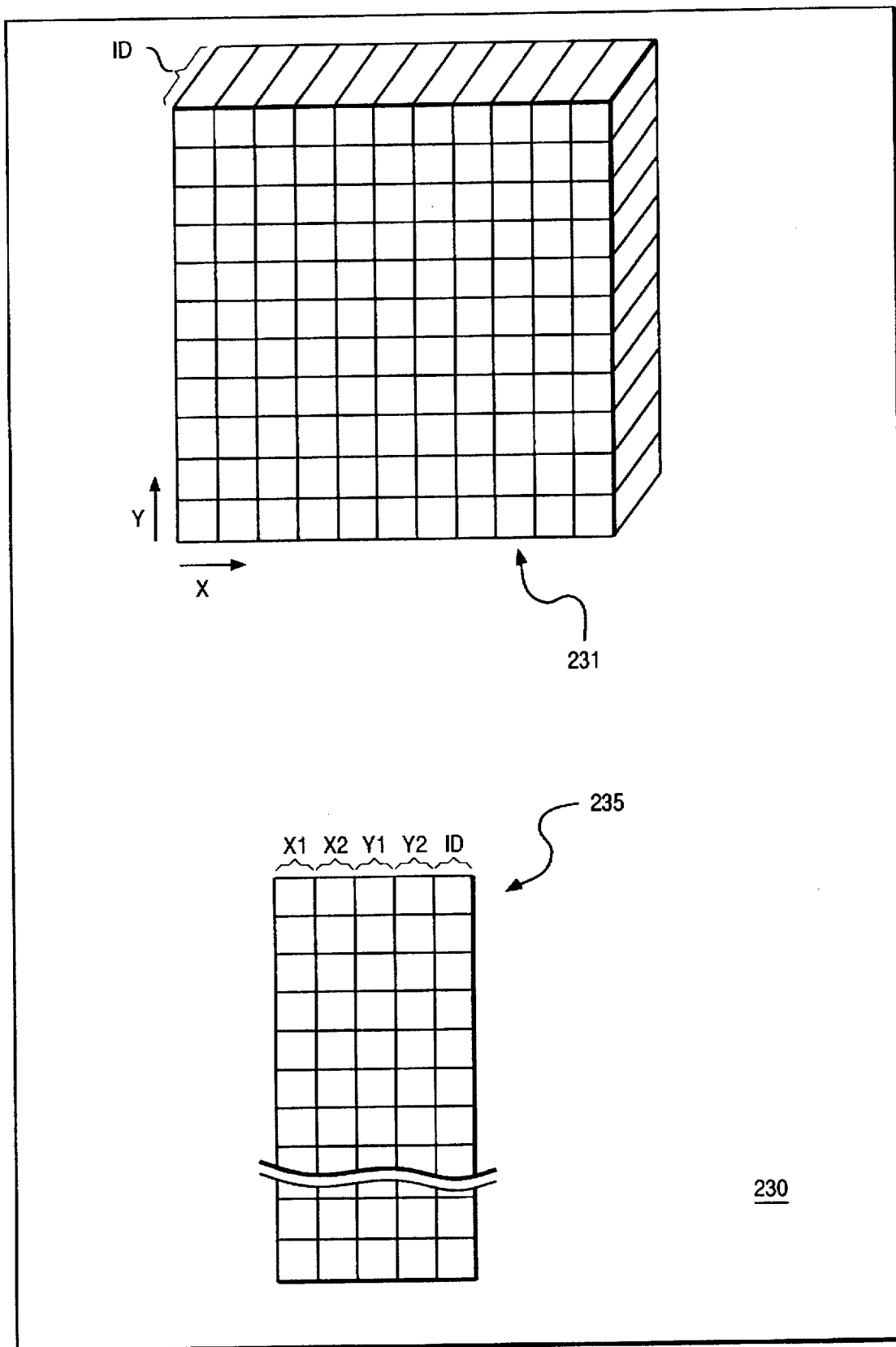


FIG. 4

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