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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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 Corporation**, Armonk, N.Y.

[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.⁶ **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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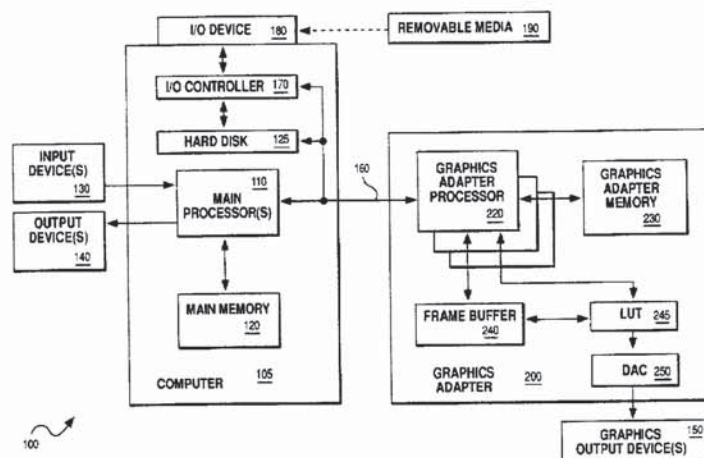
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Attorney, Agent, or Firm—Volel Emile; Alan L. Carlson;
 Andrew J. Dillon

[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



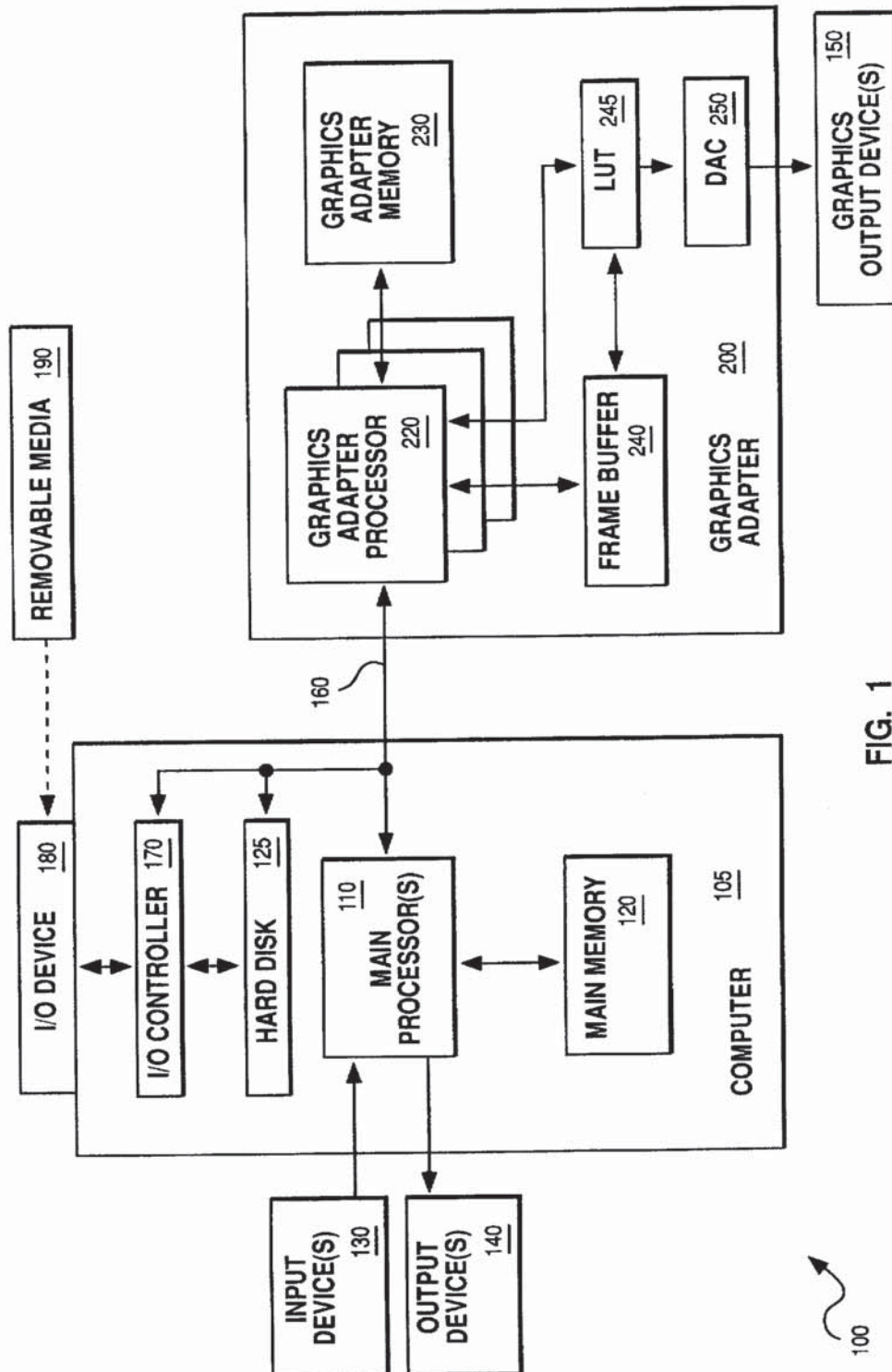


FIG. 1

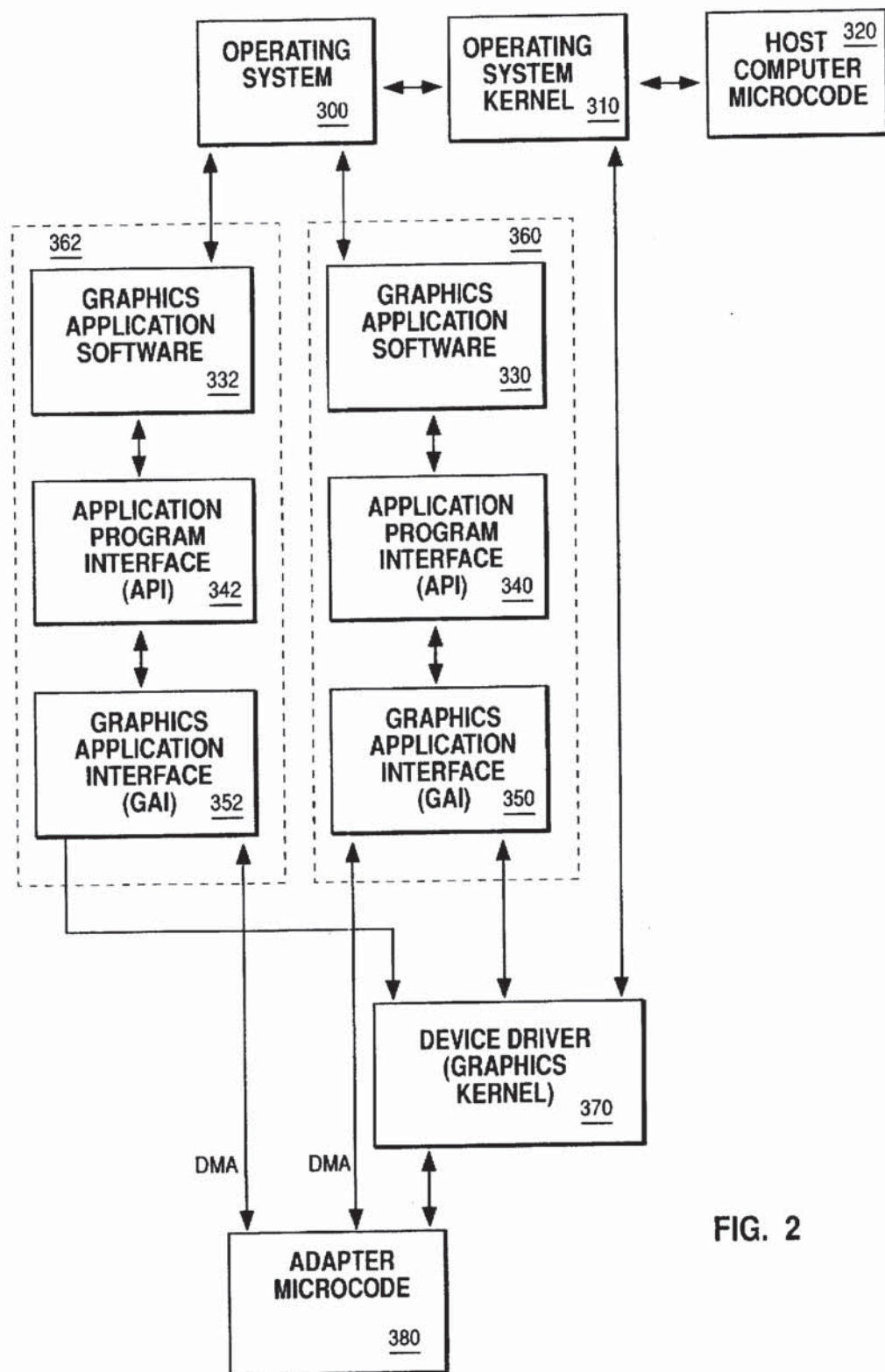


FIG. 2

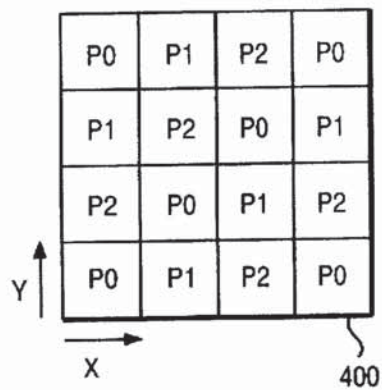


FIG. 3A

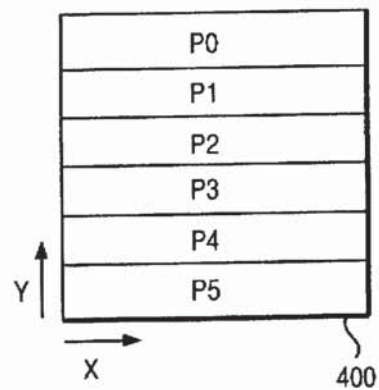


FIG. 3B

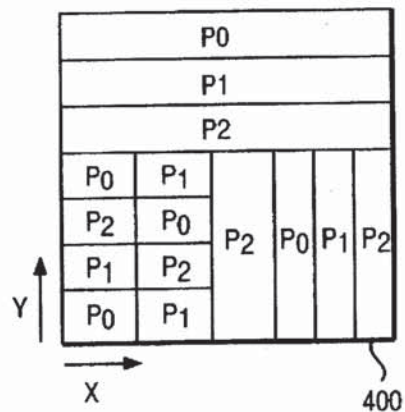


FIG. 3C

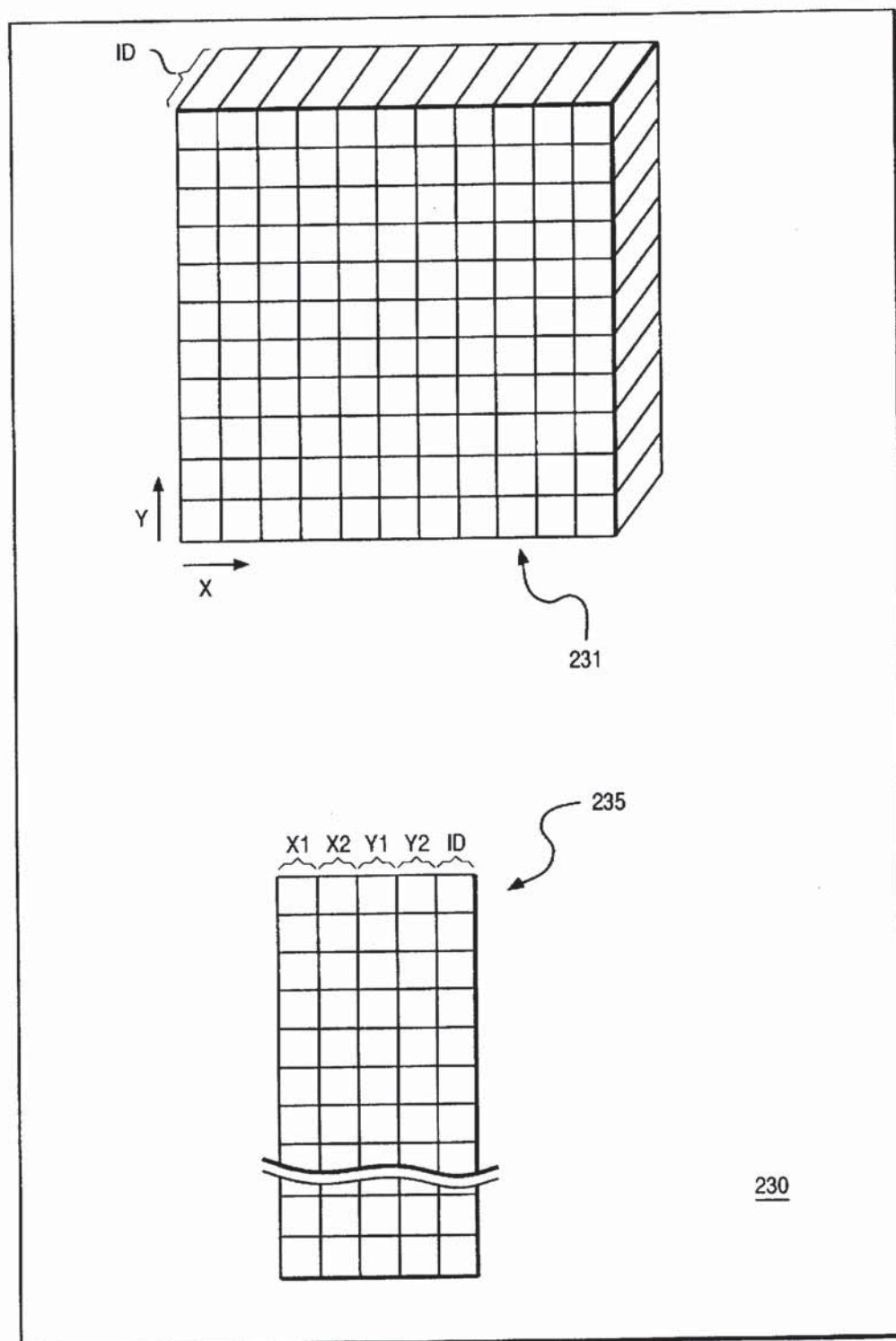


FIG. 4

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