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United States Patent [19]

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Cullen et al.

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[54] **COMPUTER USER INTERFACE FOR MANIPULATING IMAGE FRAGMENTS USING DRAG, DROP AND MERGE OPERATIONS**

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5,611,033 3/1997 Pillelout et al. 395/135

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[21] Appl. No.: **446,196**

[22] Filed: **May 19, 1995**

[51] Int. Cl.⁶ **G06F 3/00**

[52] U.S. Cl. **395/339; 395/135; 358/450**

[58] Field of Search 395/155, 157, 395/159, 161, 135, 339, 133, 138; 358/450

[57] ABSTRACT

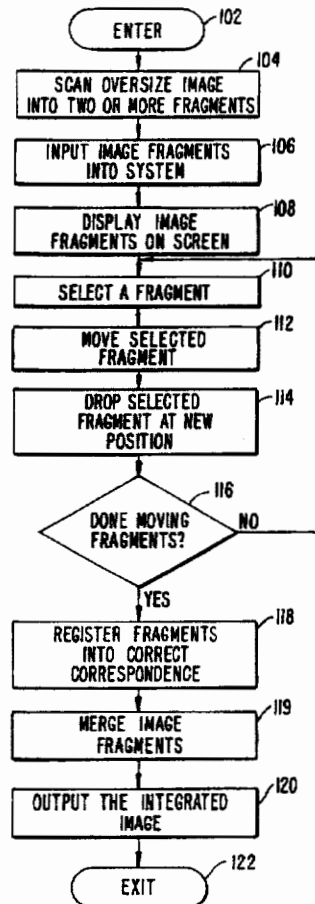
A system for manipulating image fragments so that image processing devices such as copiers, fax machines and scanners may efficiently process oversize images. The system provides a user interface so that when an oversize image is scanned in multiple parts to produce multiple image fragments the user can manipulate the image fragments by performing drag, drop and merge operations on the image fragments. Embodiments of the invention include the use of a touch screen or mouse to allow the user to perform the operations. Other operations are selectable such as rotating an image fragment, zooming in or out on portions of the displayed fragments, merging the fragments into an integrated image and storing or printing the image fragments.

[56] References Cited

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17 Claims, 10 Drawing Sheets



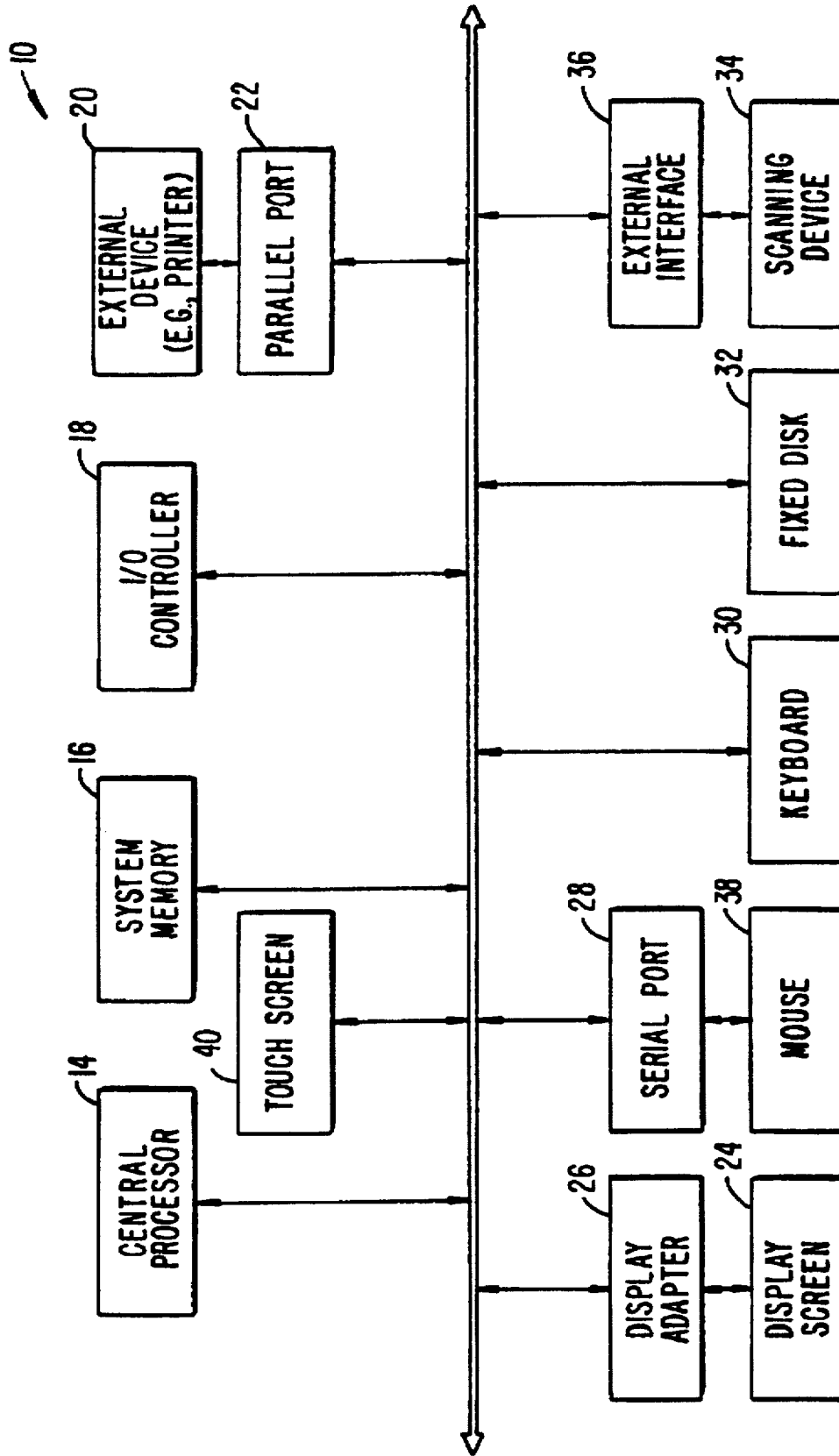


FIG. 1.

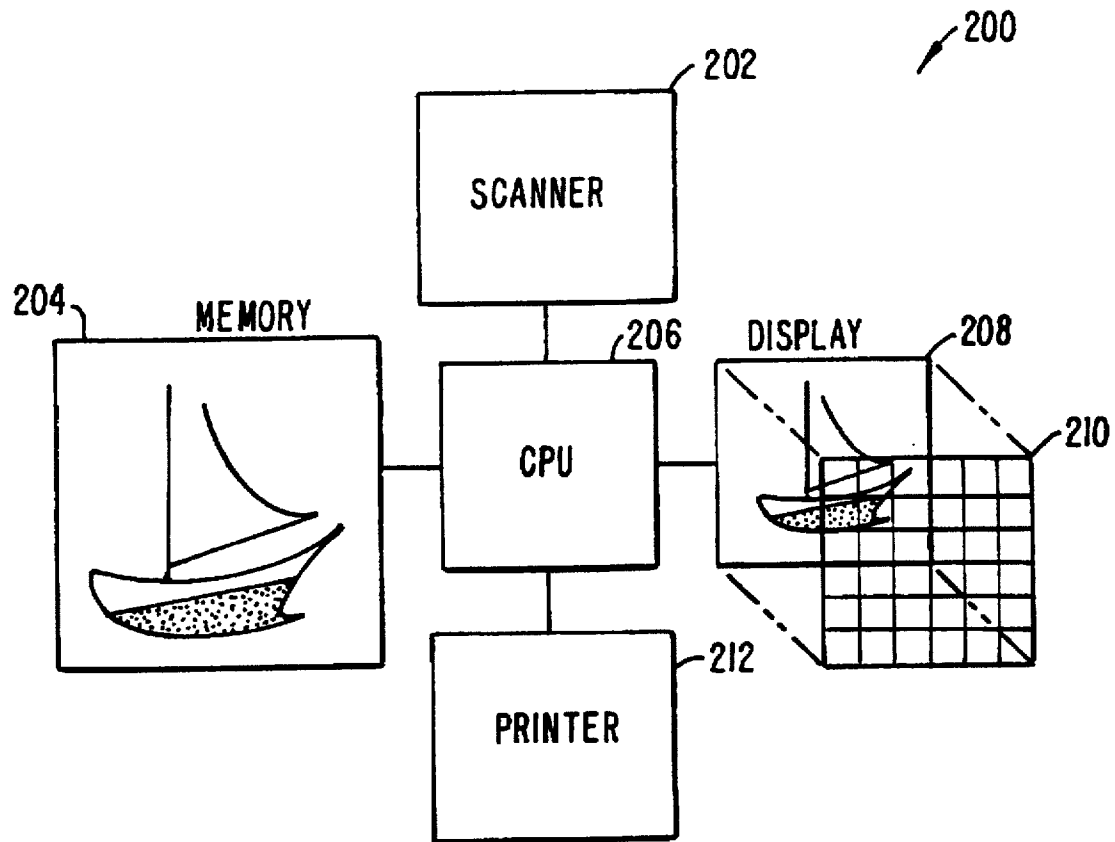


FIG. 2

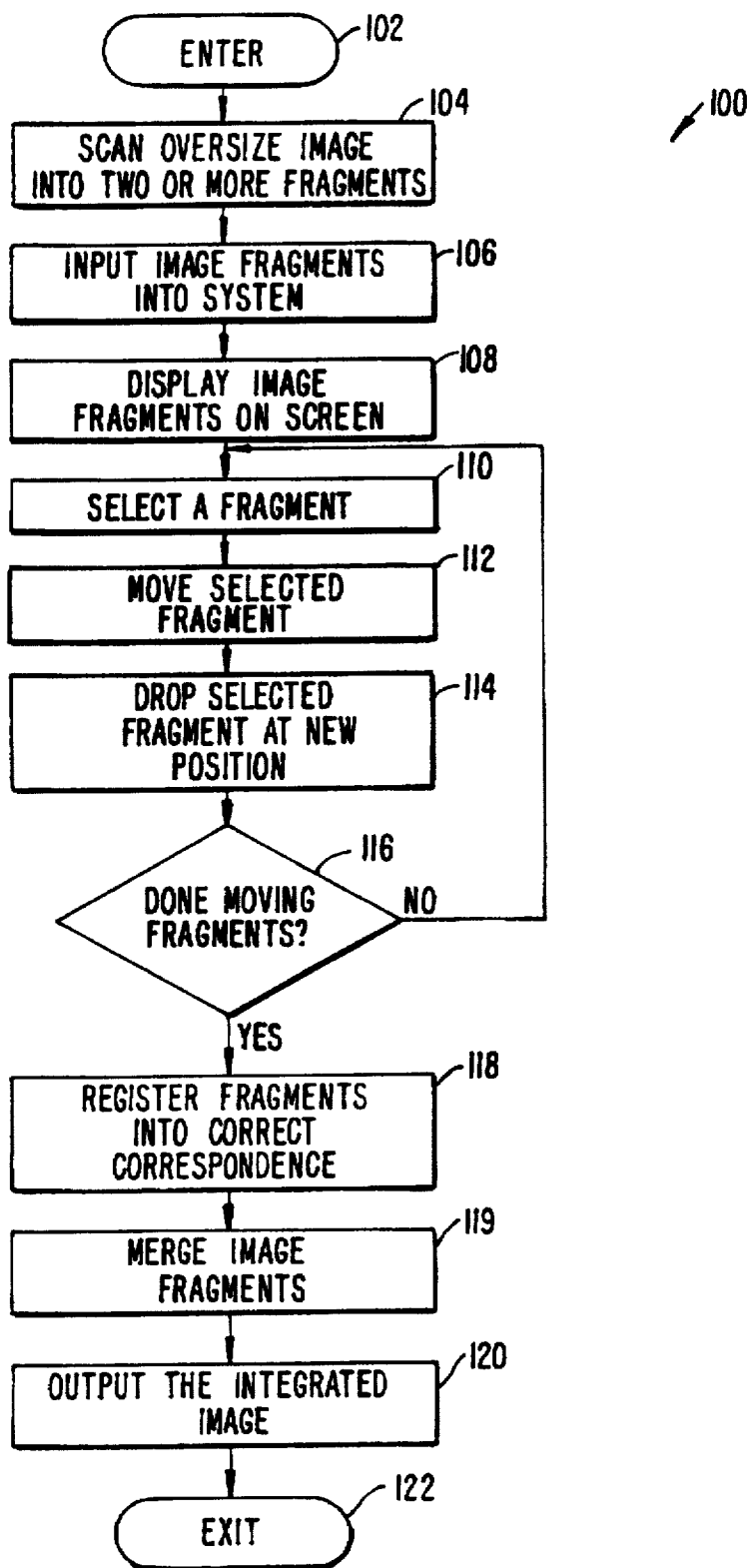


FIG. 3.

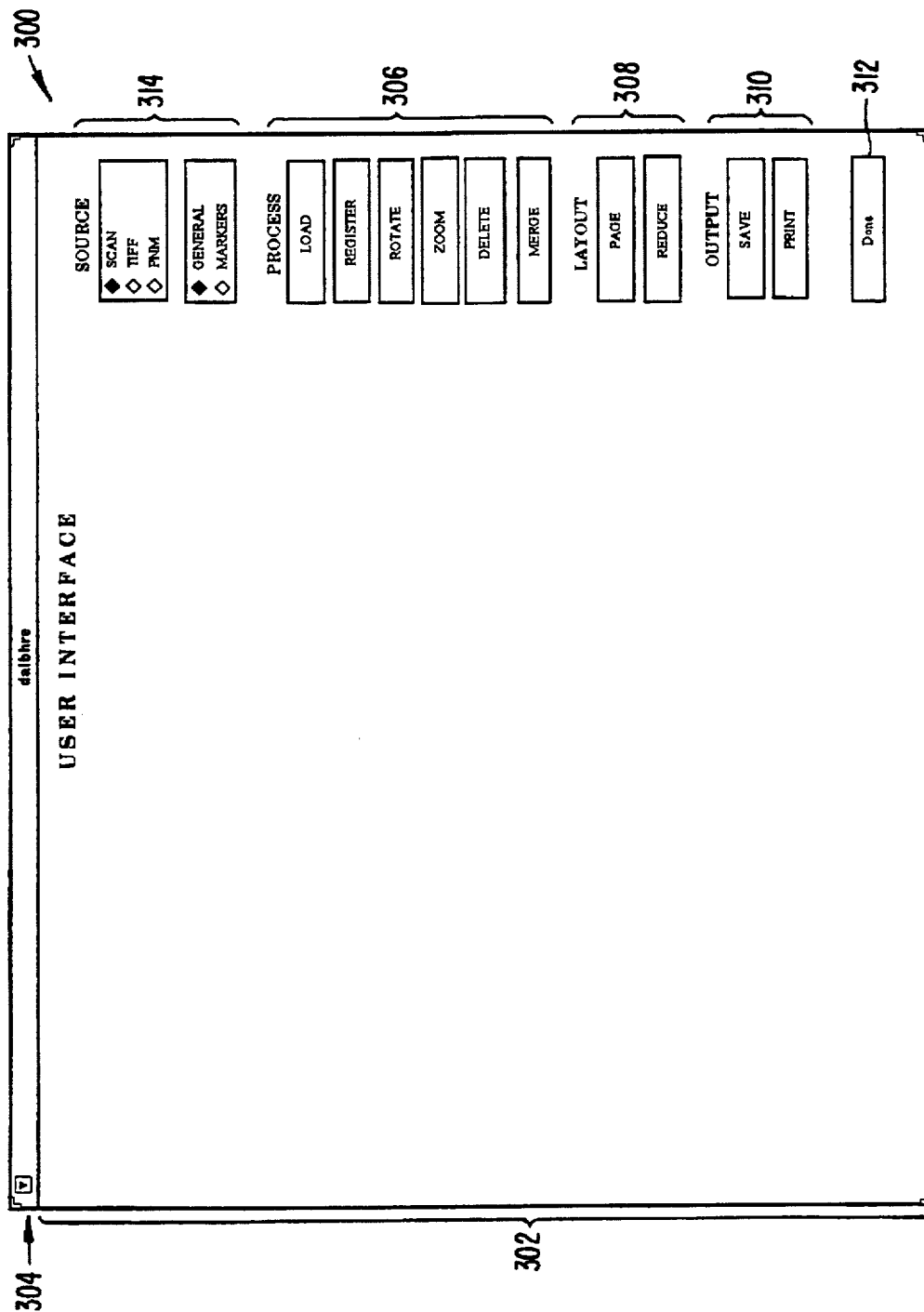


FIG. 4.

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