[54] **DOCUMENT-DRIVEN SCANNING INPUT DEVICE COMMUNICATING WITH A COMPUTER**

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[21] Appl. No.: **988,404**

[22] Filed: **Dec. 9, 1992**

Related U.S. Application Data

[63] Continuation-in-part of Ser. No. 922,169, Jul. 29, 1992.

[51] **Int. Cl.^{6}** **H04N 1/00**; G05B 13/02
[52] **U.S. Cl.** **358/400**; 358/448; 358/498; 364/181; 345/902
[58] **Field of Search** 358/400, 402, 358/426, 439, 401, 444, 494, 496, 498, 448; 364/181, 238.3, 241.2, 242.1, 927.99; 345/902

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Attorney, Agent, or Firm—Thomas A. Gallagher

[57] **ABSTRACT**

An integral input/computer component combination is disclosed wherein a input device may share a single data port on the host computer with a Fax modem and be mounted to a monitor, printer, keyboard etc. so as to have a small footprint. A pair of UARTS coupled to a a microprocessor in the input device implements a passthrough connection from the port of the input device coupled to the data port of the host to a data port of the input device coupled to the Fax modem whenever the input device using scanning technology is not in use. A relay makes the same passthrough connection whenever power is turned off to the input device. In one zero footprint embodiment, the input device input device has snap-in projections which are pushed into slots formed in the computer component housing to lock the input device into place. In another embodiment, the input device and computer component are mounted together by specially adapted brackets to adjust for differences in housing dimensions between the input device and the computer component. In some embodiments, the input device and computer component share a common element such as a paper tray. In other embodiments, the input device is completely enclosed by the computer component housing. In any of these embodiments, the input device and computer component can have separate power and data lines, or, alternatively, can share power and data lines such as by having the input device derive its power from the power supply of the computer component and time division multiplexing of the data cable of said computer component. In the preferred embodiment, the software of the input device can recognize special symbols placed on the document which represents commands the user desires to give to the host computer to control its operations to process the scanned image. In the preferred embodiment, these symbols are placed on the document with different stickers, which may be different for each command or which may be universal and contain boxes the user can darken to indicate the desired command and the parameters needed by the host carry out that command. In other embodiments, the symbols may be drawn or preprinted on the document to be scanned or printed on the document by software which stores different graphic image symbols and which can print them on the document using a laser printer etc.
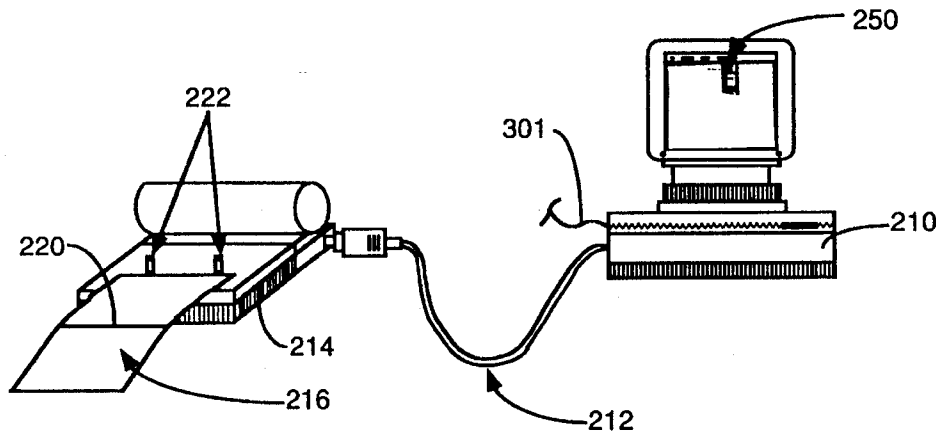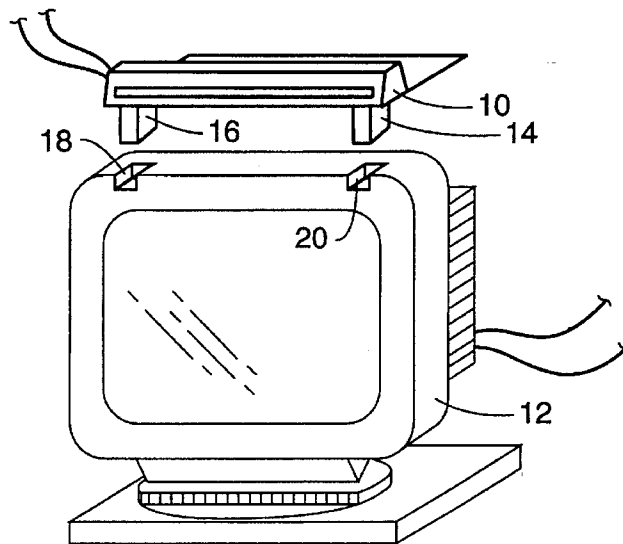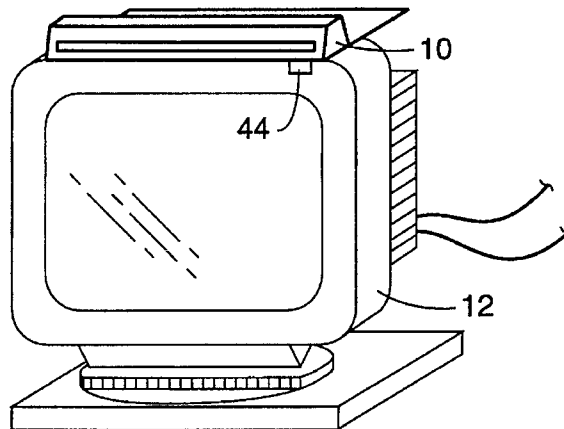
50 Claims, 15 Drawing Sheets

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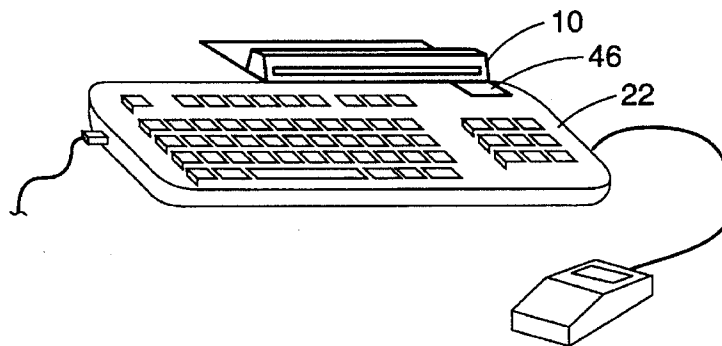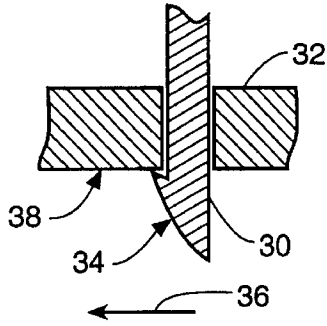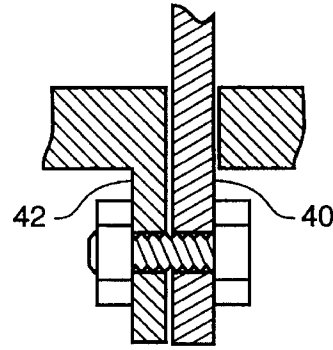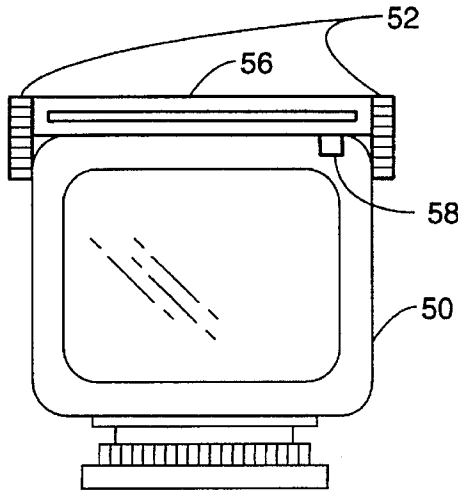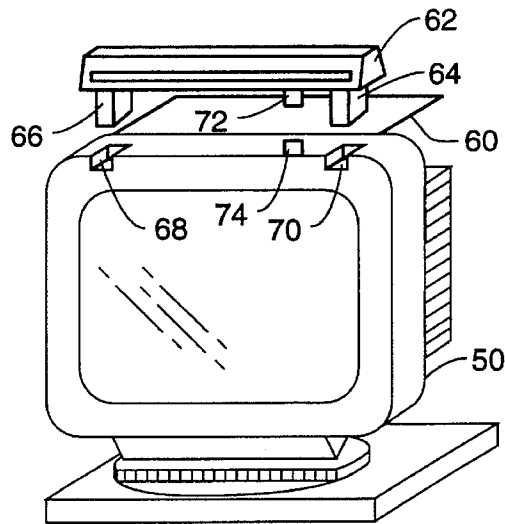|		
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FIG. 1

FIG. 2

FIG. 3

FIG. 4

FIG. 5

FIG. 6

FIG. 7

FIG. 8

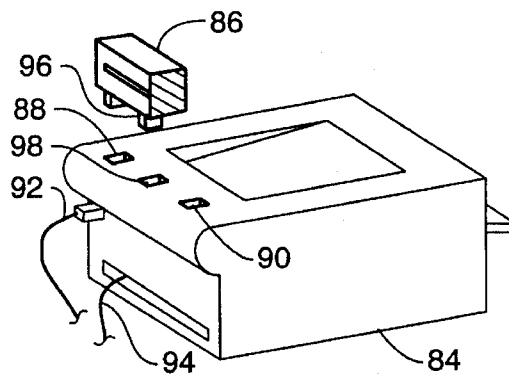FIG. 9

FIG. 10

FIG. 11A

DOCKET ALARM
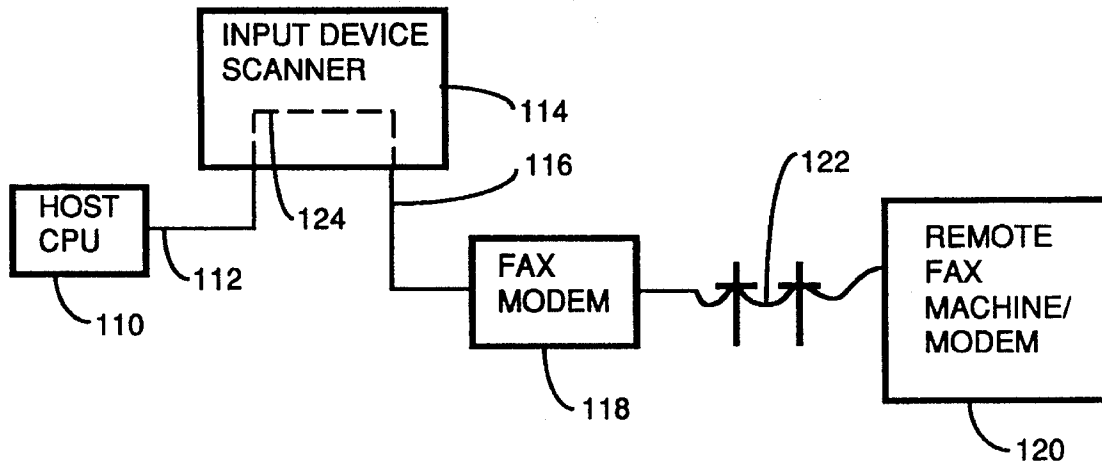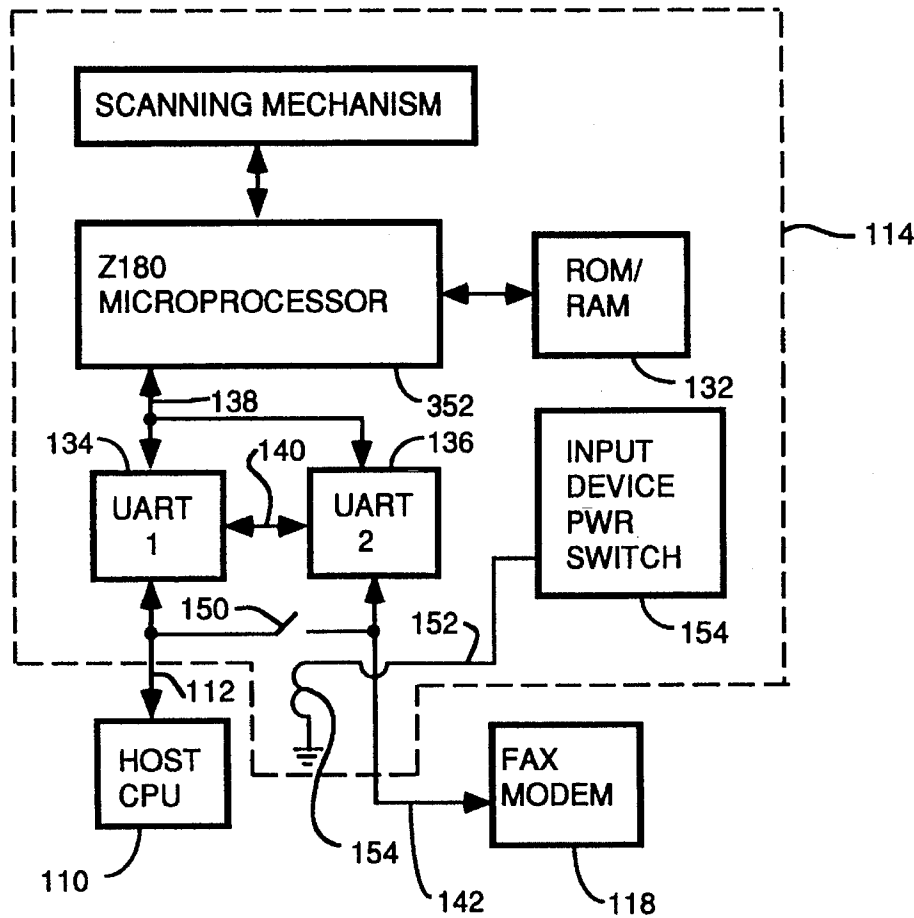
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