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United States Patent [19]

Bernard

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[54] **PORTABLE APPARATUS FOR PROVIDING MULTIPLE INTEGRATED COMMUNICATION MEDIA**

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Related U.S. Application Data

[63] Continuation-in-part of Ser. No. 152,492, Nov. 15, 1993, abandoned.

[51] **Int. Cl.6** **G06F 3/00**; G06F 13/00
[52] **U.S. Cl.** **364/705.05**; 395/500
[58] **Field of Search** 364/705.05, 708.1, 364/705.05, 708.1; 395/500

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[57] **ABSTRACT**

The present invention relates to a communication device for a personal digital assistant (PDA). The PDA mounts within the communication device and the communication device connects electronically to a serial port on the PDA. Through this single serial port, the communication device provides the user of the PDA with access to multiple communication media, such as a telephone modem, a Global Positioning System engine, a packet radio and a cellular telephone. Data from the PDA is directed to a decoder that routes the data to the appropriate communication medium, while data from the communication media are multiplexed onto the single serial interface of the PDA. The communication device also provides a pass-thru serial interface that allows other external devices to communicate directly with the serial port of the PDA. In addition, the communication device can upload software to the PDA that facilitates communications between the PDA and the communication device, and allows the PDA to control the operation of the communication device.
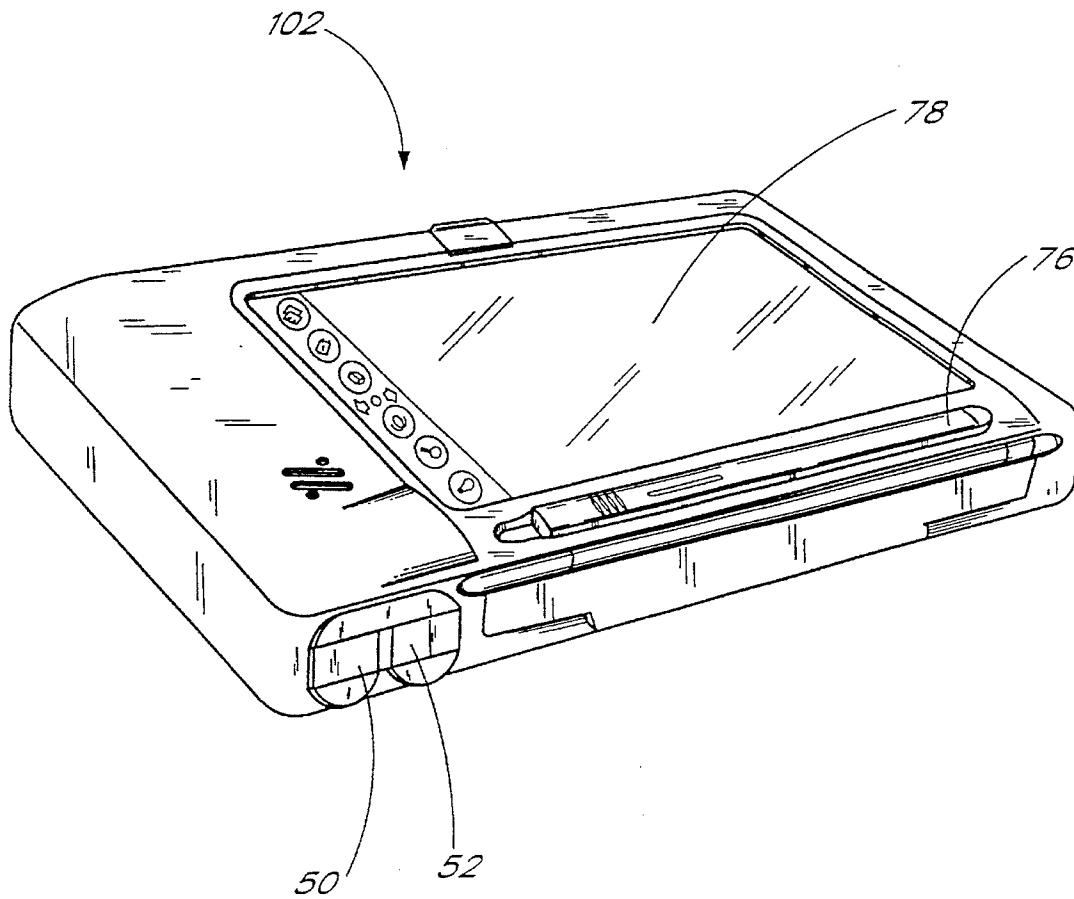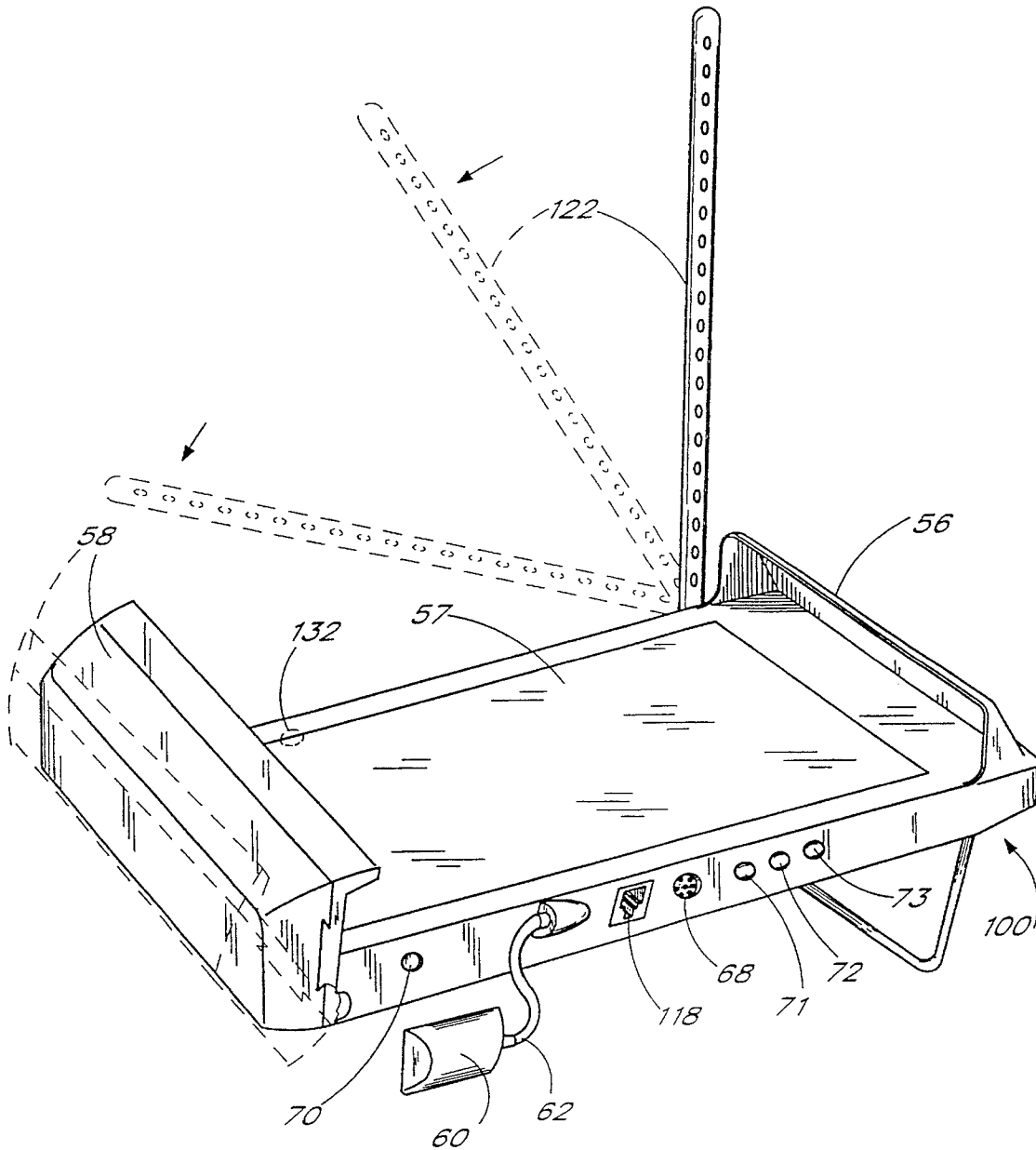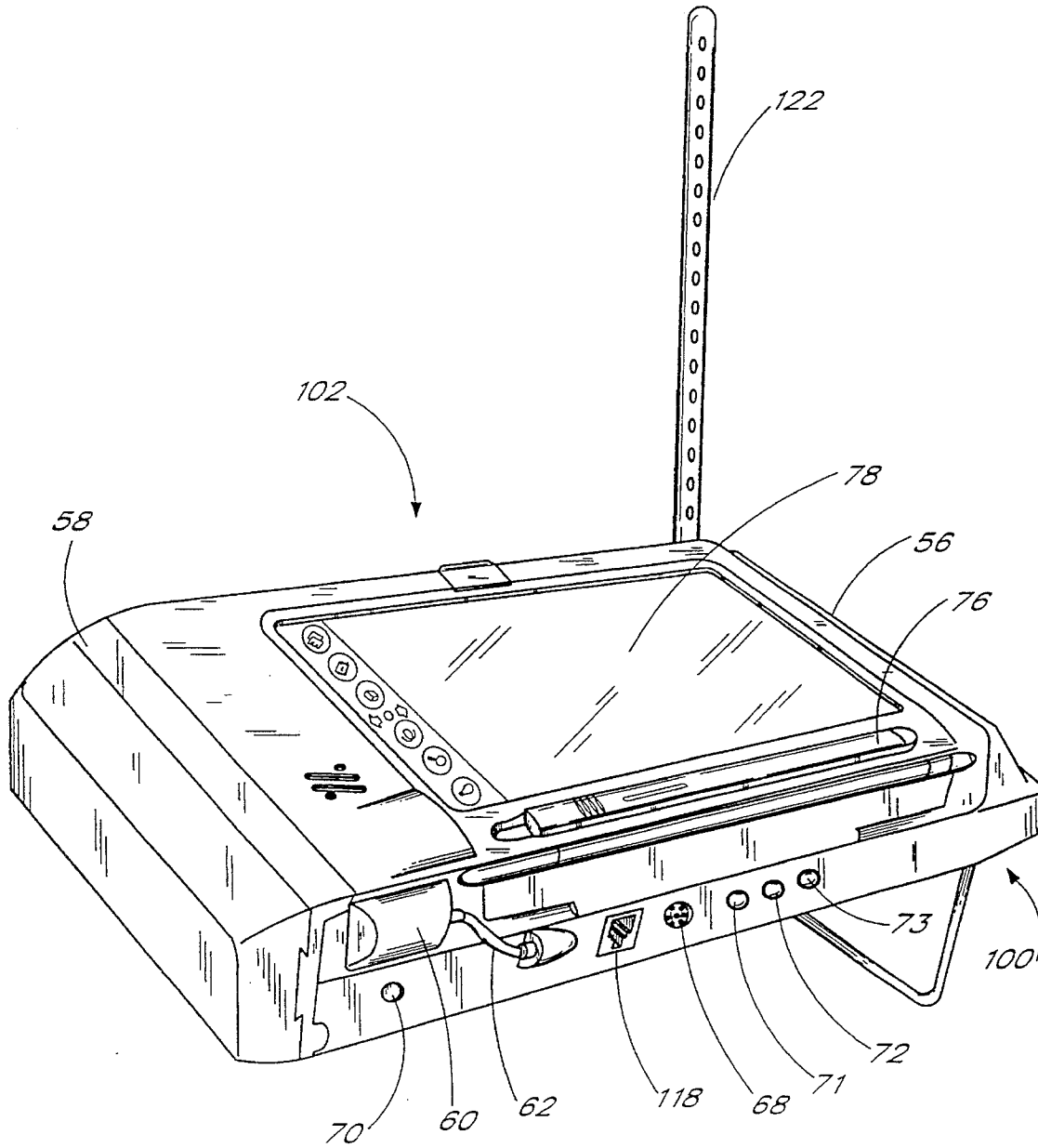
13 Claims, 19 Drawing Sheets
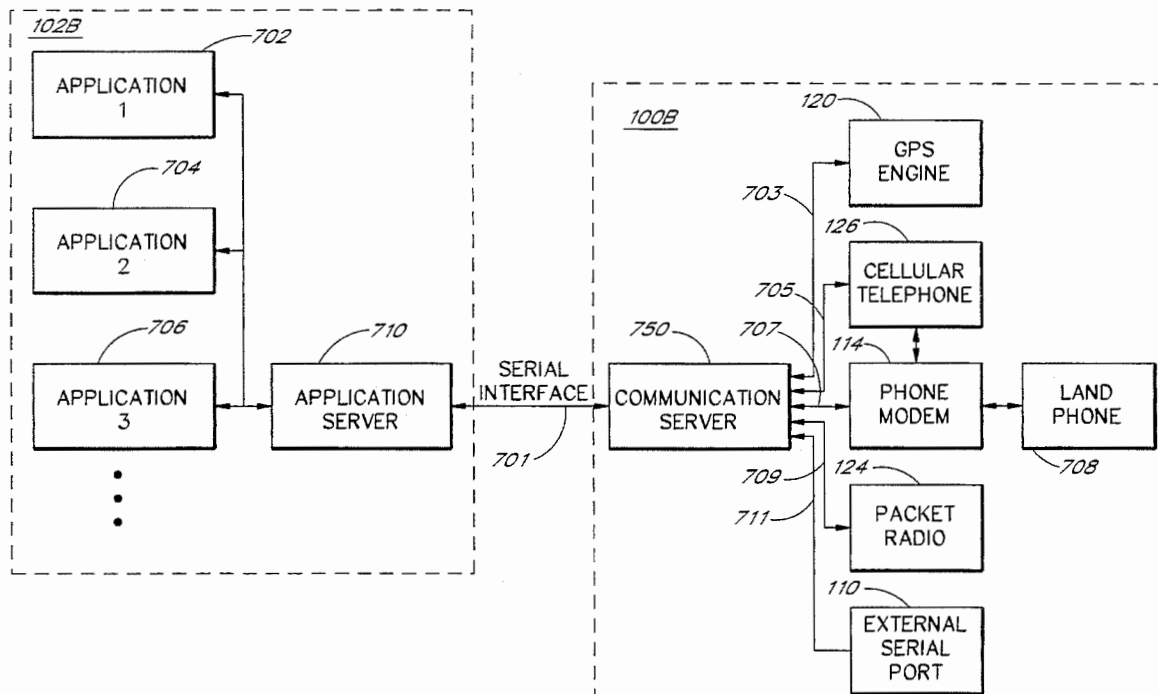
FIG. 1

FIG. 2

FIG. 3

FIG. 4

DOCKET ALARM
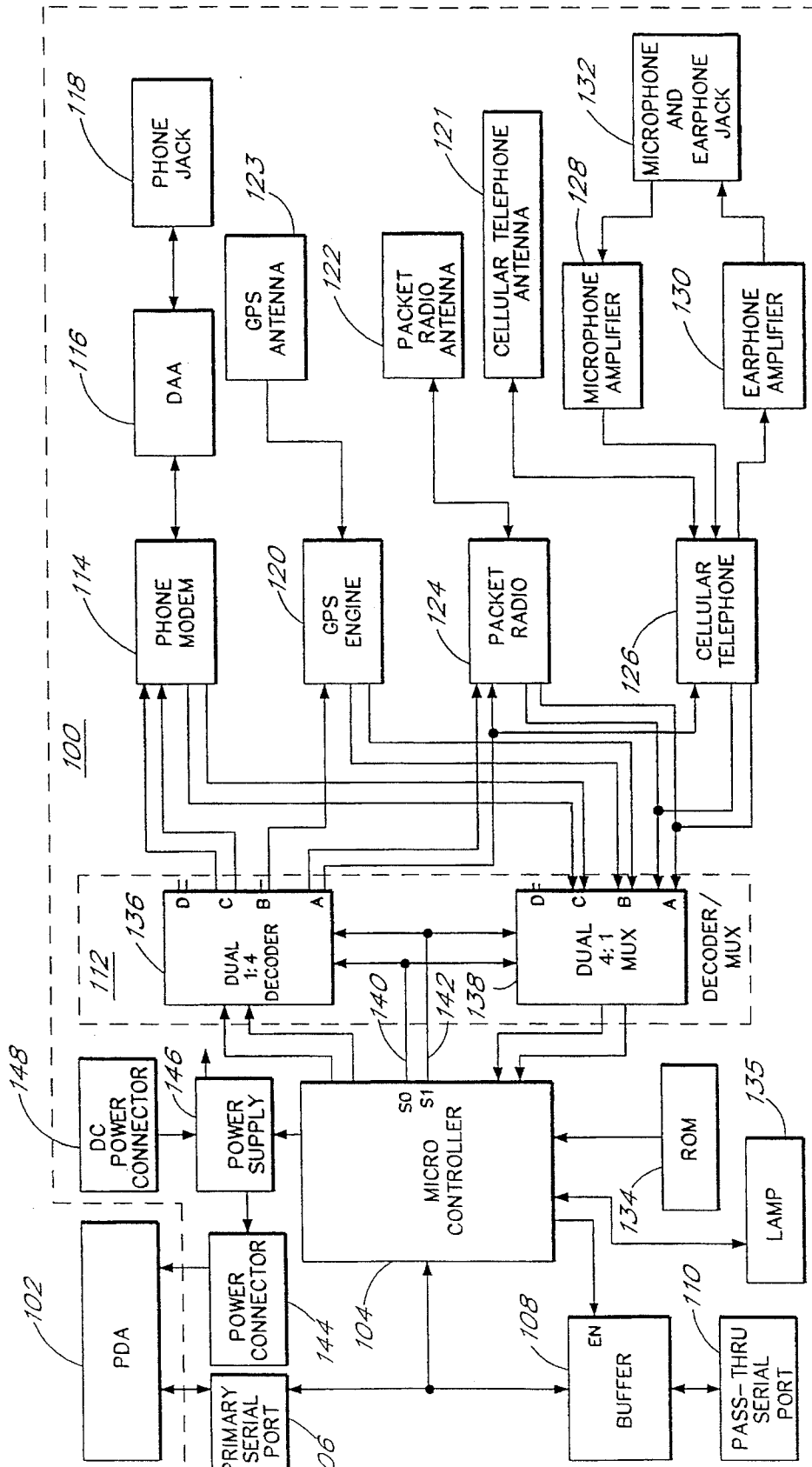
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