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Wilson et al.

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[54] **PERIPHERAL DATA ACQUISITION, MONITOR, AND ADAPTIVE CONTROL SYSTEM VIA PERSONAL COMPUTER**

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[73] Assignee: **Ansan Industries, Ltd.**, Rockford, Ill.

[21] Appl. No.: **927,168**

[22] Filed: **Aug. 5, 1992**

Related U.S. Application Data

[63] Continuation-in-part of Ser. No. 862,624, Apr. 1, 1992, which is a continuation-in-part of Ser. No. 832,716, Feb. 7, 1992, Pat. No. 5,220,522, which is a continuation of Ser. No. 350,115, May 9, 1989, Pat. No. 5,099,444.

[51] **Int. Cl.**[6] **G05B 11/01**; G06F 3/00

[52] **U.S. Cl.** **364/146**; 364/709.09; 340/825.06; 340/825.36; 345/168

[58] **Field of Search** 364/146, 709.09, 709.11, 364/188; 395/500; 340/706, 825.06, 825.54, 825.55, 825.36

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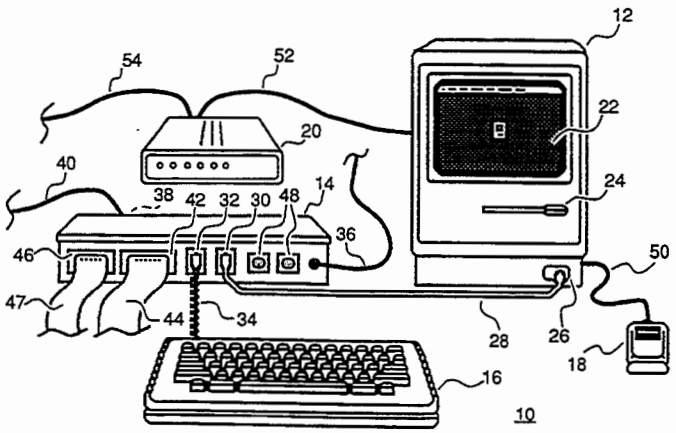
Attorney, Agent, or Firm—Welsh & Katz, Ltd.

[57] **ABSTRACT**

A peripheral data acquisition, monitor, and adaptive control system is disclosed in which a personal computer (PC) and one or more input/output (I/O) Bridge devices interface signals from electronically-controlled devices to the PC via the keyboard port, thus permitting data, such as measurement data, to be automatically and directly entered into application programs such that the PC can take action and control outputs based upon the measurement data. A software control program is also disclosed which allows the user to configure the system for orienting the user as to which devices are being controlled, reading digital and analog inputs, making decisions based upon the information using specific user-defined conditions, and setting digital outputs. The system is also adapted to interface with a wireless or AC power-line transmission media.

32 Claims, 36 Drawing Sheets



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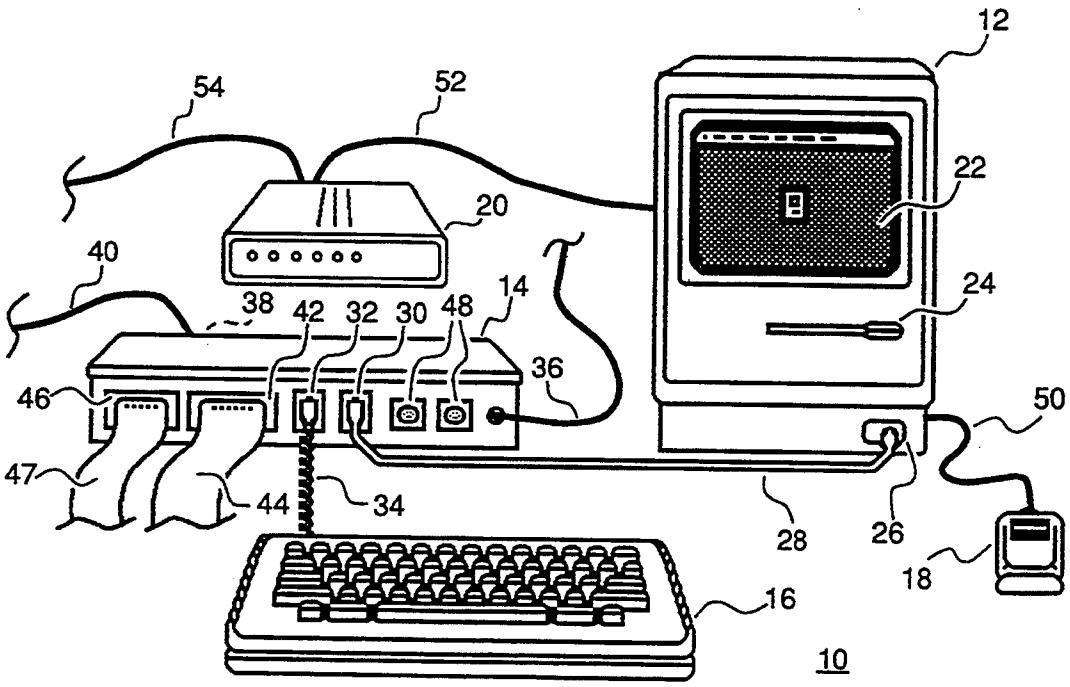

FIG. 1

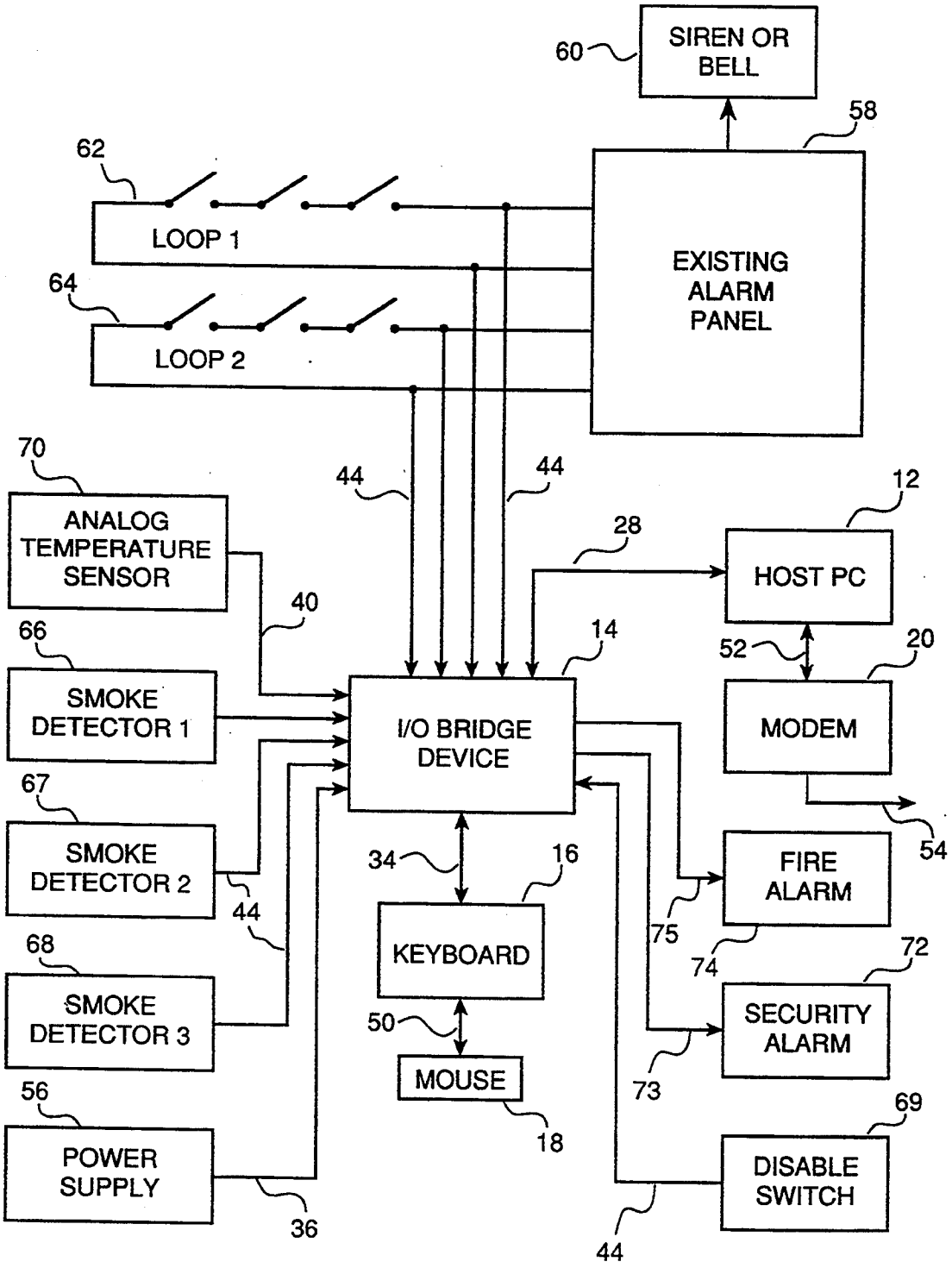

FIG. 2

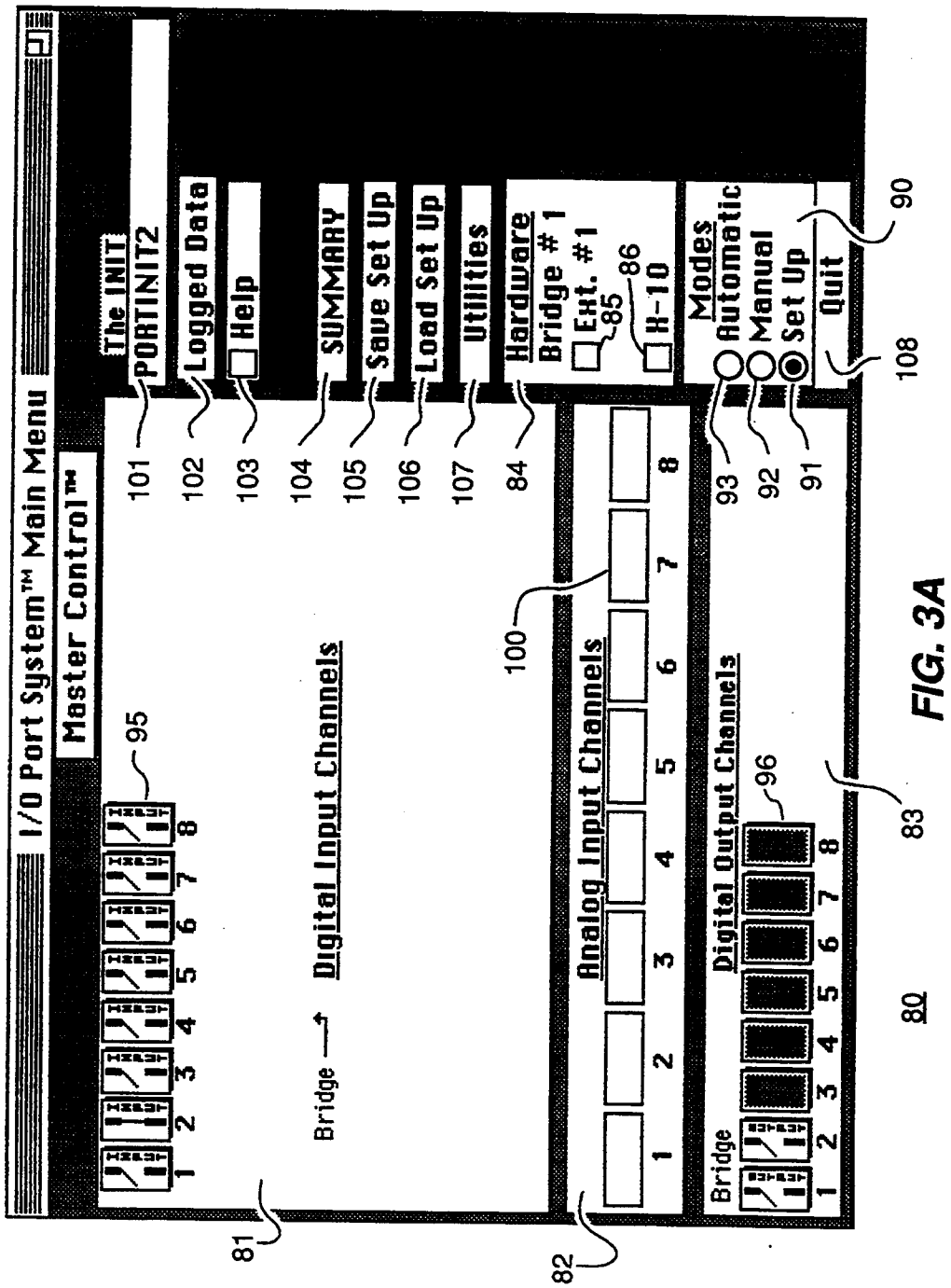

FIG. 3A

DOCKET ALARM

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