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[54] **MICROPROCESSOR SYSTEM CONTROLLER FOR MAIL PROCESSING SYSTEM APPLICATIONS**

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[57] **ABSTRACT**

The motor controller system controls the respective motors of a plurality of cooperative apparatus associated with a article processing system, the article processing system for performing a plurality of functions upon an article traversing the article processing system and comprises a motor driver board having a plurality of input channels and a plurality of respective output channels. The motors are in line communication with a respective one of the output channels of the motor driver board. A programmable microprocessor is in bus communication with the driver board's input channels. A plurality of sensors are respectively mounted to each of the apparatus and in bus communication with the programmable microprocessor, the sensors being strategically located on the apparatus to provide such information to the microprocessor as article size, position and velocity information and to provide apparatus operation information. The microprocessor is programmed such that a cycle is preformed at a desired frequency, each control cycle being divided into discreet time intervals during which respective time interval the microprocessor transmit motor control command information to the driver board for respective motors and during other of the time intervals the microprocessor reading information from the sensors.

18 Claims, 5 Drawing Sheets