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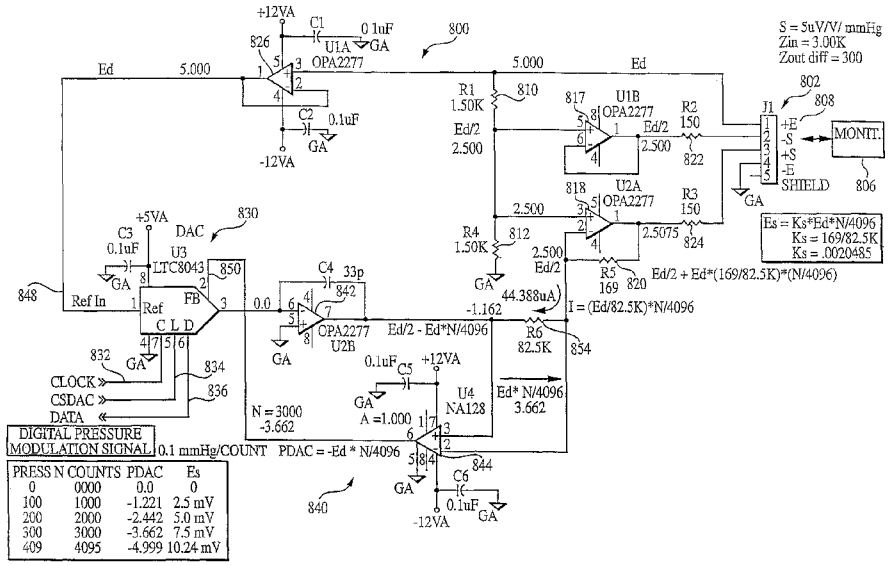
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(54) Title: APPARATUS AND METHOD FOR INTERFACING TIME-VARIANT SIGNALS



(57) **Abstract:** An improvement apparatus and method for interfacing a time variant waveform between two hardware environments. In one aspect, the invention comprises a circuit for accurately simulating the output of one or more types of sensing device (e.g., passive bridge pressure transducer) for use with a plurality of different monitoring and/or analysis devices, thereby obviating the need for specialized interface circuitry adapted to each different monitor/analyzer. In one exemplary embodiment, the sensing device comprises a non-invasive blood pressure monitor (NIBPM), which universally interfaces with prior art patient monitors via the interface circuit of the invention. In a second aspect of the invention, an improved NIBPM device incorporating the interface circuit is disclosed. An improved disconnect circuit adapted to sense the status of the electrical connection between the sensing device and monitor is also described.

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