



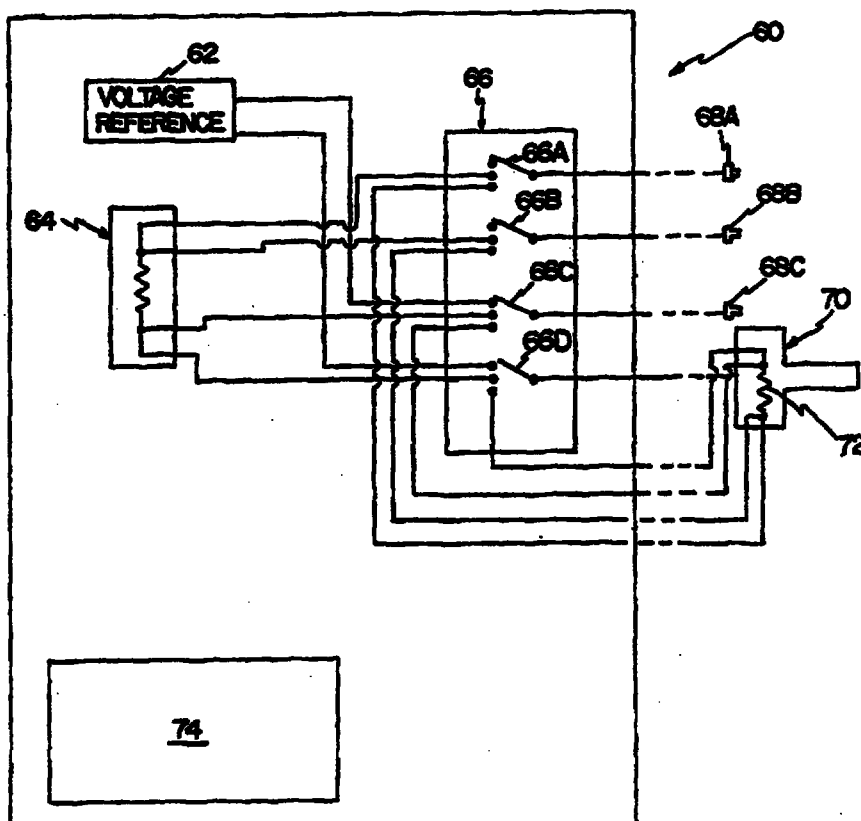
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(54) Title: CALIBRATION OF PROCESS CONTROL TEMPERATURE TRANSMITTER

(57) Abstract

A transmitter (10) in a process control loop (12) measures temperature. A calibrator (60) includes a known calibration element (64) which is connected to the transmitter (10). Software in the transmitter (10) compares a measured value of the calibration element (64) with the actual value of the calibration element (64) and responsively calibrates the transmitter (10). The calibrator (60) includes a temperature calibration sensor (70) for coupling to a terminal block (14) of the transmitter (10). The temperature calibration sensor (70) provides an actual temperature input to the transmitter (10). The transmitter (10) measures actual temperature of the terminal block (14) and compares actual temperature with a temperature measured by an internal terminal block temperature sensor (34), and responsively calibrates the internal temperature sensor (34).



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