

Abstract

Postage Meter with Rotor Movement and Die Cover Sensor

A postage meter has an improved means of monitoring the position of the cover providing access to the print rotor. A mechanical latch and associated mechanism is provided responsive to a cam on the print rotor and responsive to the movement of the cover, and the mechanism has an electrical sensor output to the processor of the postage meter. In the event that the cover is opened at a time when the rotor is away from its home position, for example at a time when the power to the meter has failed, the latch enters a latched state. Upon the restoration of power the meter determines if the rotor is away from its home position, and if it is, the meter inspects the sensor output to determine if the latch has been caused to enter its latched state. This condition is annunciated, for example by rendering the meter incapable of printing postage.

The meter has a hardware circuit external to the processor which receives as an input at least one signal indicative of rotation of the print rotor, and which counts the rotations. The circuit also receives a reset signal from the processor which, it is assumed, will be provided if the processor is functioning normally but will not be provided in the event of processor malfunction. If the counter reaches a predetermined threshold the circuit halts the print motor.