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(54) Title: UTILITY METER WITH SOLAR-POWERED REAL-TIME CLOCK

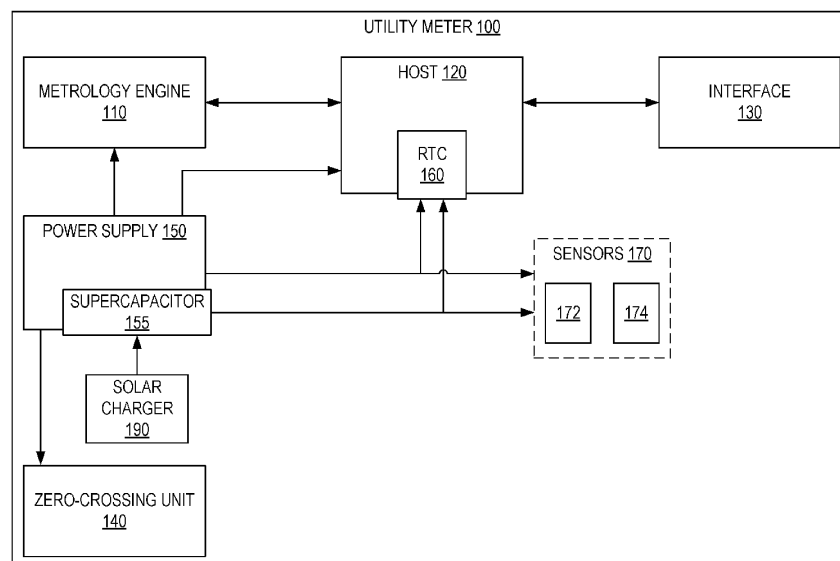


FIG. 1

(57) Abstract: A utility meter includes a real-time clock (RTC), a supercapacitor, a power supply, and a set of photodiodes. The RTC keeps time utilized for time stamps applicable to events that occur during alternating current (AC) power outages of the utility meter, and the supercapacitor powers the RTC. The power supply operates in an active mode responsive to an AC line voltage meeting a threshold and, when in the active mode, charges the supercapacitor to power the RTC. The set of photodiodes absorbs energy from ambient light and charges the supercapacitor to power the RTC. Thus, the supercapacitor is configured to be charged based on the power supply and based on the set of photodiodes.

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