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(54) Title: AN APPARATUS AND METHOD FOR MONITORING A CIRCUIT UNDER LOAD USING A CIRCUIT BREAKER

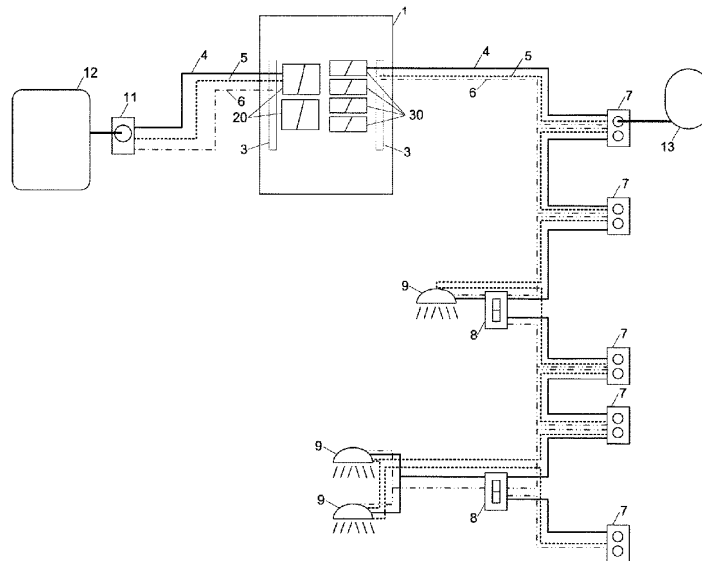


FIGURE 1

(57) Abstract: A method and apparatus provide an improved way to monitor a circuit for deterioration and obtain an advance warning of the deterioration so that action can be taken before the circuit breaker may trip for the circuit. The method establishes a baseline for the circuit, including monitoring the zero crossing point for the voltage and current for the circuit. In operation, the circuit is monitored using the zero crossing point and this information is compared to the baseline to determine if a change has occurred. The baseline information establishes thresholds that signify that the circuit is deteriorating so that the appropriate signal can be provided so that an appropriate action can be taken, interrupt the circuit, take remedial action, etc.

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