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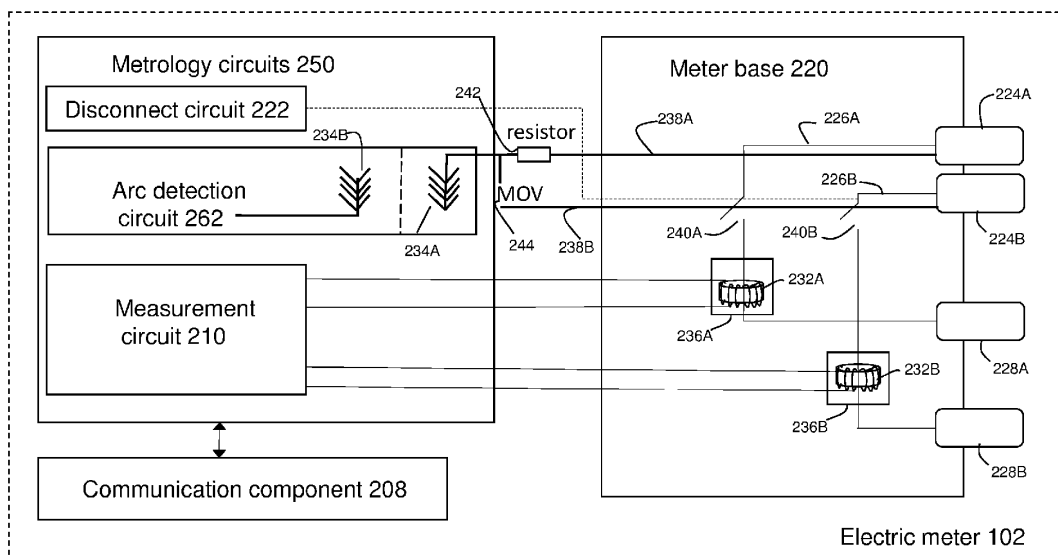


FIG. 2

(57) Abstract: An electric meter for detecting electrical arcing between the electric meter and a meter socket in a utility box that is connected to a power line, the electric meter comprising: a baseplate assembly comprising: an electrical conductor connecting two meter blades, each of the meter blades configured to be positioned in a corresponding socket jaw of the meter socket to electrically connect the electric meter to the meter socket; and a housing assembly configured to be coupled to the baseplate assembly, the housing assembly comprising: a multilayer circuit board comprising: a first layer circuit board hosting a first arc detection antenna for emitting a signal indicative of electrical arcing; and a second layer circuit board hosting a second arc detection antenna for receiving the signal, wherein the first and second layers are electrically isolated from each other.

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