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(54) **Title:** SMART ELECTRICAL OUTLET/SOCKET DEVICE, SYSTEM, AND ASSOCIATED METHOD

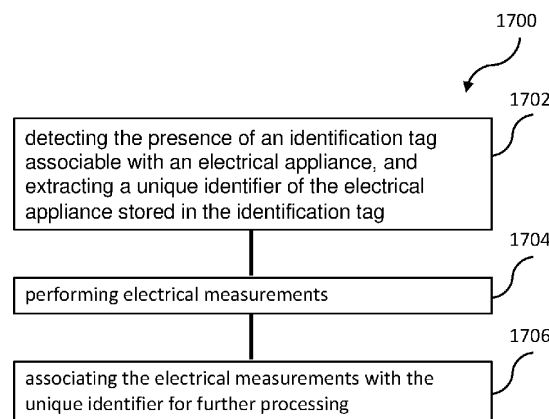


Figure 17

(57) **Abstract:** An electrical outlet/socket device, a system for smart electrical power supply within a building, and a method for smart electrical power supply within a building are presented. The electrical outlet/socket device comprises a sensor for detecting the presence of an identification tag associated with an electrical appliance, the sensor being configured for extracting a unique identifier of the electrical appliance stored in the identification tag; one or more electrical conductors configured for coupling to the electrical appliance for supply of power to the electrical appliance; a measurement unit coupled to the one or more electrical conductors for performing electrical measurements; and a processor configured for associating the electrical measurements with the unique identifier for further processing.

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WO 2019/151955 A1

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