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(54) Title: SMART SOCKET

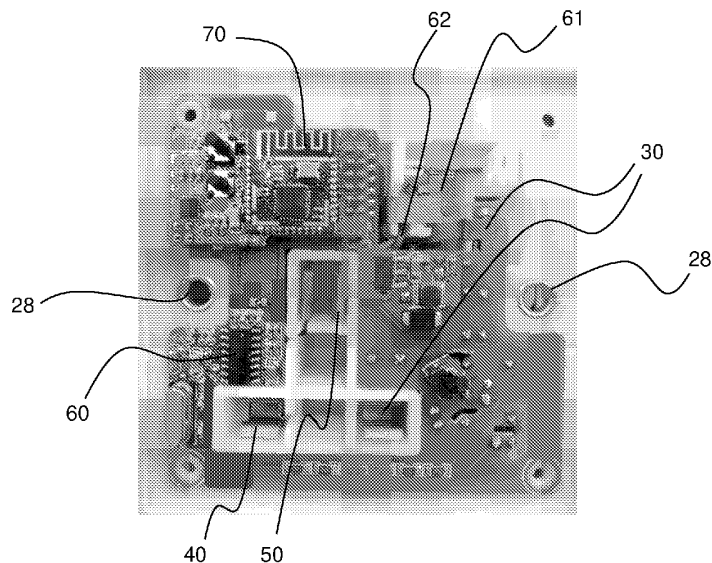


FIG. 3

(57) Abstract: A smart socket configured to be in electrical connection with an alternating current (AC) power supply and to electrically connect an electrical appliance with the AC power supply, the electrical appliance provided with an electrical plug, the electrical plug having a live pin and a neutral pin configured to be inserted into the smart socket, the smart socket comprising: a housing having at least one opening for insertion of a live wire and a neutral wire into the housing, the live wire and the neutral wire configured to be in electrical communication with the AC power supply, the housing further comprising a live opening for insertion of the live pin into the housing and a neutral opening for insertion of the neutral pin into the housing, a live conductor provided in the housing to electrically connect the live pin with the live wire within the housing; a neutral conductor provided in the housing to electrically connect the neutral pin with the neutral wire within the housing; a current sensor; a metering chip in the housing to obtain data including voltage of the

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AC power supply and current from the current sensor when the live pin and the neutral pin have been inserted into the housing and the electrical appliance is in electrical connection with the AC power supply; and a communication module in the housing to transmit the data from the metering chip to a communication gateway.