Auxiliary Request 01

1. *An efficiency monitor (4300; 5300)*

   for monitoring power transmission by an inductive power outlet (4210; 5210), the inductive power outlet comprising a primary coil (4220; 5220) wired to a power supply (4240; 5240), the inductive power inductively coupling with a secondary coil (4260; 5260) wired to an electric load,

   the efficiency monitor comprising:

   at least one input power monitor (4122; 5122) for measuring an input power (Pin) received by the primary coil from the power supply;

   at least one processor (4162; 5162) for determining an index of power-loss indicative of an efficiency of an inductive coupling between the primary coil and the secondary coil; and

   at least one communication channel for communicating the input power and an output power (Pout) to the at least one processor,

   wherein the index of power-loss comprises:

   an efficiency quotient Q, defined as a ratio of the output power to the input power, or

   an efficiency differential Δ, defined as a difference between the output power and the input power.

2. *The efficiency monitor of claim 1, wherein the efficiency monitor (4300; 5300) comprises:*

   at least one circuit-breaker (4280; 5280) configured to disconnect the primary coil (4220; 5220) from the power supply (4240; 5240).

3. *The efficiency monitor of claim 1, wherein the efficiency monitor (4300; 5300) comprises:*

   one or more hazard detectors in communication with the processor (4162; 5162).

4. *The efficiency monitor of claim 3,*

   wherein the one or more hazard detectors comprise a magnetic sensor, a heat sensor, an electromagnetic radiation sensor, or a Hall probe.

5. *The efficiency monitor of claim 1, wherein the efficiency monitor (4300; 5300) comprises:*

   at least one output power monitor (4124; 5124) for measuring the output power received inductively by the secondary coil (4260; 5260) from the primary coil (4220; 5220).

6. *An inductive power outlet (4210; 5210) comprising*

   the efficiency monitor (4300; 5300) of any of claims 1-4.

7. *An inductive power receiver unit*