Claims

1. An induction hair-styling appliance heating ~~induction heater~~ mat ~~for heating up hair styling appliances~~, the induction hair-styling appliance heating ~~induction heater~~ mat comprising:

a mat that is made up of flexible material, the mat having an induction coil embedded therein; and

a power supply and controlling unit that is electrically connected to the induction coil of the mat, the power supply and controlling unit operationally controls the power supply to the induction coil to heat up the hair-styling appliance at a suitable temperature that is placed on the mat.

2. The induction hair-styling appliance heating ~~induction heater~~ mat according to claim 1, wherein the mat is fabricated to form a monolithic body to house the induction coil there between.

3. The induction hair-styling appliance heating ~~induction heater~~ mat according to claim 2, wherein the mat comprises two substrates laminating the induction coil there between.

4. The induction hair-styling appliance heating ~~induction heater~~ mat according to claim 1, wherein the induction coil is made up of flexible, re-shapeable wire.

5. The induction hair-styling appliance heating ~~induction-heater~~ mat according to claim 1, wherein the induction coil is disposed on the mat in a serpentine manner.

6. The induction hair-styling appliance heating ~~induction-heater~~ mat according to claim 1, wherein the induction coil is disposed on the mat in a swirling manner.

7. The induction hair-styling appliance heating ~~induction-heater~~ mat according to claim 1, further comprising a sensor unit operationally detecting a temperature of the appliance and feeding back information to the power supply and controlling unit.

8. The induction hair-styling appliance heating ~~induction-heater~~ mat according to claim 7, wherein the sensor unit is embedded in/on the mat at a suitable location.

9. The induction hair-styling appliance heating ~~induction-heater~~ mat according to claim 7, wherein the sensor unit is positioned on the power supply and controlling unit.

10. The induction hair-styling appliance heating ~~induction-heater~~ mat according to claim 1, wherein the induction-heater mat is a low/mid frequency induction-heater mat.

11. The induction hair-styling appliance heating ~~induction-heater~~ mat according to claim 1, wherein the mat is detachable from the power supply and controlling unit.