【CLAIMS】

1. A multifunctional hair styling beauty electric heating device comprising:

a grip body part including a guide piece formed along an inner circumference at one side in a longitudinal direction in a state in which a plurality of control buttons is formed on an upper surface of the grip body part;

a finger manipulator having one side in a longitudinal direction, rotatably installed inside the grip body part, and a remaining side in the longitudinal direction, exposed in a downward direction of the grip body part, and rotated through manipulation of a user finger;

a hair styling part including a lower rotation body having one side in a longitudinal direction, rotatably installed along the guide piece of the grip body part, and an upper rotation body rotatably installed upward and downward with respect to the lower rotation body, and configured to generate heat by power supplied from outside; and

an up-down controller installed to be connected to the hair styling part and configured to rotate the upper rotation body upward and downward by the finger manipulator or to rotate the hair styling part by the control button.

~~2. The multifunctional hair styling beauty electric heating device according to claim 1, wherein the up-down controller includes:~~

~~a driving motor installed inside the grip body part and driven through manipulation of the control button;~~

~~a rotation manipulator connected to a driveshaft of the driving motor to rotate the hair styling part in a state of being installed at one side in a longitudinal direction of the lower rotation body; and~~

~~an upward rotation guide part formed at one side in a longitudinal direction of the upper rotation body to be connected to the rotation manipulator and to open the upper rotation body when the finger manipulator is manipulated.~~

~~3. The multifunctional hair styling beauty electric heating device according to claim 2, wherein the rotation manipulator includes:~~

~~a close mounting part installed at one side in a longitudinal direction of the lower rotation body and including a position mount hole formed therein to slidably insert the upward rotation guide part thereinto;~~

~~a pair of rotation guide pieces that extends toward the driving motor from one side surface of the close mounting part and to which one side in a longitudinal direction of the upward rotation guide part is coupled via a hinge shaft;~~

and

a shaft rotation connector that extends toward the driving motor from one side of the close mounting part while being positioned between the rotation guide pieces and connected to the driveshaft of the driving motor.

4. The multifunctional hair styling beauty electric heating device according to claim 3, wherein the upward rotation guide part includes:

an extension guide plate that extends from at one side in a longitudinal direction of the upper rotation body and is slidably inserted into the position mount hole; and

a receiver that is formed at an end of the extension guide plate, is coupled to the rotation guide pieces via the hinge shaft, and has a lower side in a longitudinal direction, which extends toward an internal lower side of the grip body part.

5. The multifunctional hair styling beauty electric heating device according to claim 4, wherein the finger manipulator includes:

a grip body part rotatably installed inside the grip body part;

a supporter formed above the grip body part; and

an extension pressurizer protruding from the supporter

~~and configured to rotate the upper rotation body by pressurizing the receiver when the grip body part is manipulated.~~

~~6. The multifunctional hair styling beauty electric heating device according to any one of claims 1 to 5, further comprising:~~

~~a hair grip piece spaced apart from the hair styling part by a predetermined interval while being connected to the grip body part and configured to guide the hair styling part to grip hair when the hair styling part is rotated.~~

~~7. The multifunctional hair styling beauty electric heating device according to claim 6, wherein the hair grip piece is detachably installed on the grip body part.~~

~~8~~1. A multifunctional hair styling beauty electric heating device having grounding continuity in a rotation state, comprising:

a grip body part having an outer upper surface on which a control device configured to control temperature and rotation is formed and having an outer surface having a streamlined shape;

a finger manipulator exposed out of an outer lower side of the grip body part and configured to rotate the upper

rotation body of a hair styling part upward and downward by manipulation of a user finger;

the hair styling part formed in a longitudinal direction at a front end of the grip body part and having a symmetrical structure in which a lower rotation body and an upper rotation body face each other in contact with each other, the lower rotation body being independently driven from the grip body part and continuously rotated clockwise or counterclockwise and the upper rotation body being independently driven from the grip body part and rotated upward and downward; and

a power supply and heating part having grounding continuity whereby a conducting state is also maintained while the hair styling part is continuously rotated clockwise or counterclockwise and configured to maintain a heating state while the hair styling part is rotated due to continuous power supply to a hot plate installed in the hair styling part.

~~9~~2. The multifunctional hair styling beauty electric heating device having grounding continuity in a rotation state according to claim ~~8~~1, wherein the power supply and heating part includes:

a non-rotating conducting rotation guide part forming a plurality of metal circular ring structures, and including a

rotation grounding guide groove formed along an inner circumferential surface of the circular ring structure;

a first power supply line connected to one side of an outer circumferential surface of each of the plurality of circular ring structures and configured to supply external power;

a grounding rotation part capable of being continuously rotated clockwise or counterclockwise along the rotation grounding guide groove while being coupled to the rotation grounding guide groove of the conducting rotation guide part to maintain a face-to-face grounded state;

a second power supply line having one side electrically connected to a hot plate installed in the hair styling part and a remaining side electrically connected to the grounding rotation part to supply external power supplied through the first power supply line to the hot plate; and

the hot plate configured to dissipate heat using external power supplied through the second power supply line.

~~10~~3. The multifunctional hair styling beauty electric heating device having grounding continuity in a rotation state according to claim ~~8~~1, wherein the power supply and heating part includes:

a non-rotating part including a conducting rotation

guide part fixedly installed inside the grip body part and a plurality of first power supply lines connected to one side of an outer circumferential surface of a circular ring structure and configured to supply external power; and

a rotating part including a grounding rotation part coupled to a rotation grounding guide groove of the conducting rotation guide part and rotated along the rotation grounding guide groove while maintaining a face-to-face grounded state, a second power supply line having one side electrically connected to the hot plate installed in the lower rotation body and the upper rotation body of the hair styling part and a remaining side electrically connected to the grounding rotation part to supply external power supplied through the first power supply line to the hot plate, and a hot plate configured to dissipate heat due to heating action of current supplied through the second power supply line and being capable of being continuously rotated clockwise or counterclockwise.

~~11~~4. The multifunctional hair styling beauty electric heating device having grounding continuity in a rotation state according to claim ~~8~~1 or ~~9~~2, wherein the plurality of conducting rotation guide parts is formed to maintain a 1:1 grounded state with the grounding rotation parts through the rotation grounding guide groove.

~~12~~5. The multifunctional hair styling beauty electric heating device according to claim ~~8~~1 or ~~9~~2, wherein the pair of hot plates is installed in inner upper and lower parts of the lower rotation body and the upper rotation body, respectively, and is configured to dissipate heat through an entire surface including a surface at which the lower rotation body and the upper rotation body are in contact with each other and an outer circumferential surface.

~~13~~6. The multifunctional hair styling beauty electric heating device having grounding continuity in a rotation state according to claim ~~8~~1 or ~~9~~2, wherein the pair of hot plates is installed in inner upper and lower parts of the lower rotation body and the upper rotation body, respectively, and is configured to manipulate the lower rotation body and the upper rotation body to maintain different temperatures.

~~14~~7. The multifunctional hair styling beauty electric heating device having grounding continuity in a rotation state according to claim ~~8~~1, wherein the grip body part includes a lock button formed on an outer lower surface thereof and having a rotation lock function for blocking and releasing rotation of the hair styling part.