

Claims

1. A cordless hairstyling device, the device comprising:
a heatable hair contact member having a hair contact-able surface, the hair contact member being operable to apply heat to a tress of hair of a user via the hair contactable surface;
at least one sensor configured to sense a change in state of the device from a first stationary state to a second moving state; and
a controller configured to, in response to the at least one sensor sensing a change in state from the first state to the second state, cause the hair contact member to heat to a pre-determined operating temperature by a pre-determined amount of time after the detected state change.
2. A cordless hairstyling device according to claim 1, wherein the controller is configured to cause the hair contact member to start heating when the at least one sensor senses the state change.
3. A cordless hairstyling device according to claim 1, wherein the controller is configured to cause the hair contact member to start heating after a pre-determined time delay.
4. A cordless hairstyling device according to any preceding claim, wherein the controller is configured to cause the hair contact member to heat at a pre-determined rate.
5. A cordless hairstyling device according to any preceding claim, wherein at least one of the:
pre-determined amount of time;
pre-determined rate;
pre-determined time-delay; and
pre-determined operating temperature
is initially set to a default value.

6. A cordless hairstyling device according to any preceding claim, wherein the at least one sensor is configured to output signals dependent on movement of the hairstyling device, wherein the controller is configured to;

receive the output signals from the at least one sensor,

identify one or more user operation parameters associated with how a user operates the device; and

adapt, on the basis of the one or more identified user operation parameters, at least one of the:

pre-determined amount of time;

pre-determined rate;

pre-determined time-delay; and the

pre-determined operating temperature.

7. A cordless hairstyling device according to claim 6, wherein the controller is configured to identify one or more user operation parameters specific to multiple users, and wherein the adaption is performed on the basis of the user specific operation parameters.

8. A cordless hairstyling device according to claim 6 or claim 7, wherein the identified one or more user operation parameters comprise one or more of:

temporal parameters;

spatial parameters; and

thermal parameters.

9. A cordless hairstyling device according to any preceding claim, wherein:
the at least one sensor is configured to sense a change in state of the device from the second moving state to the first stationary state, and wherein

the controller is configured to, in response to the at least one sensor sensing a change in state from the second state to the first state, prohibit heating of the hair contact member, thereby allowing the heating element to cool below the pre-determined operating temperature.

10. A cordless hairstyling device according to any preceding claim, wherein the at least one sensor comprises a touch sensor configured to sense when a user has picked up the device, wherein the controller is configured to, in response to the touch sensor sensing that the

device is not being held by the by the user, prevent the hair contact member from heating to the pre-determined operating temperature.

11. A cordless hairstyling device according to any preceding claim, wherein the at least one sensor comprises an inertial measurement unit, IMU, sensor, configured to sense when the device is in the second moving state.

12. A cordless hairstyling device according to any preceding claim, comprising at least one other sensor configured to sense one or more environmental conditions, and wherein the controller is configured to cause heating of the hair contact member to the pre-determined operating temperature further on the basis of the sensed environmental conditions.

13. A cordless hairstyling device according to claim 12, wherein the environmental conditions comprise temperature and/or humidity of a room in which the device is being operated.

14. A cordless hairstyling device according to any preceding claim, wherein the pre-determined operating temperature is user-configurable.

15. A cordless hairstyling device according to any preceding claim, wherein the device comprises a hair straightener.

16. A cordless hairstyling device according to any preceding claim, wherein the device comprises a hair curler.

17. A hairstyling device according to any preceding claim,
wherein the hairstyling device comprises a heating element operable to heat the hair contact member, and

wherein the controller is configured to control the heating element to cause the heating element to heat to a pre-determined operating temperature by a pre-determined amount of time after the detected state change.

18. A cordless hairstyling device according to any preceding claim, wherein the hair contact member is operable to apply heat to a tress of hair via the hair-contactable surface by movement of the contact member along the tress of hair between a hair-root end of the tress and a hair-tip end of the tress.

19. A method of operating a cordless hairstyling device, the method comprising:
generating a sensor signal in response to a user moving the device from a first stationary state to a second moving state;
at a controller, processing the sensor signal to determine that the device is in use
and
in response to determining that the device is in use, causing a heatable hair contact member to heat to a pre-determined operating temperature by a pre-determined amount of time after the detected state change.

20. A computer program comprising a set of instructions, which, when executed by a computerized device, cause the computerized device to perform a method of facilitating use of a cordless hairstyling device, the method comprising:
generating a sensor signal in response to a user moving the device from a first stationary state to a second moving state;
at a controller, processing the sensor signal to determine that the device is in use; and
in response to determining that the device is in use, causing a heatable hair contact member to heat to a pre-determined operating temperature by a pre-determined amount of time after the detected state change.