CLAIMS

1. A heating plate for a hair styling appliance, the heating plate having a length a depth and a width, the heating plate comprising a first continuous hair facing surface and a second surface opposite the first surface, the heating plate comprising at least one groove which runs across the width of the heating plate, each groove extends from the second surface towards the first surface and allows the heating plate to flex.

2. A heating plate according to claim 1, wherein there are a plurality of grooves which run across the width of the heating plate, each groove extends from the second surface towards the first surface and allows the heating plate to flex.

3. A heating plate according to claim 1 or 2, wherein the first surface is flat.

4. A heating plate according to any of claims 1 to 3, which is monolithic.

5. A heating plate according to any preceding claim, wherein the first surface is rectangular in shape.

6. A heating plate according to any preceding claim, formed from Beryllium Copper.

7. A heating plate according to any preceding claim, wherein a distance between the first surface and the top of each of the grooves is depth (D2).

8. A heating plate according to claim 7, wherein depth (D2) is from 0.001mm to 1mm.

9. A heating plate according to claim 8 wherein depth (D2) is from 0.01mm to 0.1mm.

10. A heating plate according to claim 8 or 9, wherein the ratio between depth (D2) and the depth (D1) of the heating plate is 1:60.

11. A heating plate according to any preceding claim, wherein there are from 20 to 100 grooves.

12. A heating plate according to any preceding claim, wherein walls are present on each side of each groove and the walls define the grooves.

13. A heating plate according to claim 12, wherein the walls are wider than the grooves.

14. A heating plate according to any preceding claim, further comprising a first channel which runs along the length of a side of the heating plate.

15. A heating plate according to claim 14, having a first channel arranged on both sides of the heating plate.

16. A heating plate according to claim 14 or 15, wherein the first channel(s) house a first strip of material which is less conductive than the remainder of the heating plate.

17. A heating plate according to any of claims 14 to 16, further comprising a second channel which runs along the length of a side of the heating plate.

18. A heating plate according to claim 17, having a second channel arranged on both sides of the heating plate.

19. A heating plate according to claim 17 or 18, wherein the second channel(s) house a resilient member.

20. A heating plate according to claim 19, wherein the resilient member is a strip of material which runs the length of the second channel(s).

21. A heating plate according to any preceding claim, further comprising an elongate recess formed in the second surface.

22. A heating plate according to claim 21, wherein the elongate recess extends the full length (L) of the heating plate.

23. A hair straightener comprising the heating plate according to any preceding claim.

24. A hair straightener according to claim 23, further comprising first and second arms which are connected such that they can move between an open position and a closed position for the purpose of gripping hair.

25. A hair straightener according to claim 23 or 24 wherein at least one of the arms has the heating plate.

26. A hair straightener according to claim 25 wherein both arms have the heating plate.