CLAIMS:

1. An electrical heating element comprising a main body comprising a ceramic material and an electrically conductive path formed on or in the main body, the electrically conductive path comprising a reduced form of the ceramic material and having first and second contact portions for connection to a voltage source, ~~wherein the main body is formed in a manner to receive an aerosol-forming substrate, and~~ wherein the electrically conductive path forms a pattern on a surface of the main body.

2. An electrical heating element according to claim 1, wherein the main body is formed fully or partially from a metal oxide and the conductive path is formed from the metal component of the metal oxide.

3. An electrical heating element according to claim 1 or claim 2, wherein the main body is formed from Zirconia and the conductive layer formed from Zirconium.

~~4. An electrical heating element according to any preceding claim, wherein the electrically conductive path completely covers a surface of the main body.~~

~~5~~4. An electrical heating element according to any preceding claim, wherein the main body has a substantially circular cross-section.

~~6~~5. An electrical heating element according to any preceding claim, wherein the main body has an elongate form with the first and second contact portions positioned at a first end of the main body and the electrically conductive path extending to and from the second end of the main body.

~~7~~6. An electrical heating element according to any preceding claim, further comprising a passivation layer on an external surface of the main body.

~~8~~7. An electrically heated aerosol generating system for receiving an aerosol forming substrate comprising one or more heating elements in accordance with any preceding claim and a voltage source coupled to the heating elements at the first and second contact portions.

~~9~~8. A method of manufacturing an electrical heating element, comprising the steps of:
forming a heating element main body, the main body comprising a ceramic material ~~formed~~

~~in a manner to receive an aerosol-forming substrate~~;

placing the heating element main body in a reducing environment at sufficient temperature to form a conductive path on the main body, the conductive path comprising a reduced form of the ceramic material and forming a pattern on a surface of the main body; and

providing electrical contact portions for connection of the conductive path to a voltage source.

~~10~~9. A method according to claim ~~9~~8, wherein the step of placing the heating element main body in a reducing environment comprises placing the main body in a hydrogen environment.

~~11~~10. A method according to claim ~~9~~8 or ~~10~~9, wherein the sufficient temperature is between 1000 °C and 1300 °C.

~~12~~11. A method according to claim ~~9~~8, ~~10~~9 or ~~11~~10, further comprising the step of forming a passivation layer on the heating element main body subsequent to the step of placing the heating element main body in a reducing environment.

~~13~~12. A method according to any one of claims ~~9~~8 to ~~12~~11, wherein the step of forming the heating element main body comprises injection moulding.

~~14~~13. A method of manufacturing an electrical heating element, comprising the steps of:

forming a heating element main body, the main body comprising a ceramic material ~~formed in a manner to receive an aerosol-forming substrate~~;

placing the heating element main body in a reducing electrolyte and performing an electro-chemical reduction of the heating element main body to form a conductive path on the main body, the conductive path comprising a reduced form of the ceramic material and forming a pattern on the surface of the main body; and

providing electrical contact portions for connection of the conductive path to a voltage source.