CLAIMS

1. A device for use with an RF generating source, a first electrode, a second electrode and an element, the RF generating source being operable to provide an RF signal to the first electrode and thereby create a potential between the first electrode and the second electrode, said device comprising:

a connecting portion operable to electrically connect to one of the first electrode, the second electrode and the element; ~~and~~

a current sink in electrical connection with said connection portion and a path to ground~~,~~; and

a plurality of voltage sources,

wherein said current sink comprises a voltage threshold~~,~~ and a plurality of diodes arranged in parallel,

wherein each of said plurality of voltage sources is operable to provide a bias voltage to a corresponding one of said plurality of diodes, respectively,

wherein said plurality of diodes is operable to change the voltage threshold based on the bias voltages provided by said plurality of voltage sources, and

wherein said current sink is operable to conduct current from said connecting portion to ground when a voltage on the electrically connected one of the first electrode, the second electrode and the element is greater than the voltage threshold.

~~2. The device of claim 1, wherein said current sink comprises a diode.~~

~~3. The device of claim 2, further comprising:~~

~~a voltage source operable to provide a bias voltage to said diode,~~

~~wherein said diode is operable to change the voltage threshold based on the bias voltage provided by said voltage source.~~

~~4. The device of claim 1, wherein said current sink comprises a plurality of diodes.~~

~~5. The device of claim 4, wherein said plurality of diodes are arranged in parallel.~~

~~6. The device of claim 5, further comprising:~~

~~a voltage source operable to provide a bias voltage to at least one of said plurality of diodes,~~

~~wherein said at least one of said plurality of diodes is operable to change the voltage threshold based on the bias voltage provided by said voltage source.~~

~~7. The device of claim 6, further comprising:~~

~~a plurality of voltage sources, each being operable to provide a bias voltage to a corresponding one of said plurality of diodes,~~

~~wherein said plurality of diodes is operable to change the voltage threshold based on the bias voltages provided by said plurality of voltage sources.~~

~~8. The device of claim 1, wherein said current sink comprises a varactor.~~

~~9. The device of claim 1, wherein said current sink comprises a potentiometer.~~

~~10. The device of claim 1, wherein said current sink comprises a transistor.~~

~~11~~12. A system for use with an RF generating source, a first electrode, a second electrode and an element, the RF generating source being operable to provide an RF signal to the first electrode and thereby create a potential between the first electrode and the second electrode, said system comprising:

a first device having a first connecting portion and a first current sink; and

a second device having a second connecting portion and a second current sink,

wherein said first connecting portion is operable to electrically connect to a first portion of one of the first electrode, the second electrode and the element,

wherein said second connecting portion is operable to electrically connect to a second portion of said one of the first electrode, ~~and~~ the second electrode and the element,

wherein said first current sink is in electrical connection with said first connection portion and a first path to ground,

wherein said second current sink is in electrical connection with said second connection portion and a second path to ground,

wherein said first current sink comprises a first voltage threshold,

wherein said second current sink comprises a second voltage threshold,

wherein said first current sink is operable to conduct current from said first connecting portion to the first path to ground when a first voltage on the electrically connected first portion of the one of the first electrode, the second electrode and the element is greater than the first voltage threshold, and

wherein said second current sink is operable to conduct current from said second connecting portion to the second path to ground when a second voltage on the electrically connected second portion of the one of the first electrode, the second electrode and the element is greater than the second voltage threshold.

~~12~~3. The system of claim ~~11~~ 2, wherein said first connecting portion and said second connecting portion are connected to the same one of the first electrode, the second electrode and the element.

~~13~~4. The system of claim ~~11~~ 2, wherein the first voltage threshold is equal to the second voltage threshold.

~~14~~5. The system of claim ~~11~~ 2, further comprising:

a voltage source operable to provide a bias voltage to said first current sink,

wherein said first current sink is operable to change the first voltage threshold based on the bias voltage provided by said voltage source.

~~15~~6. The system of claim ~~14~~ 5,

wherein said voltage source is further operable to provide a second bias voltage to said second current sink, and

wherein said second current sink is operable to change the second voltage threshold based on the second bias voltage provided by said voltage source.

~~16~~7. A method of operating an RF generating source, a first electrode, a second electrode and an element, said method comprising:

establishing a voltage threshold in a current sink having a plurality of diodes arranged in parallel;

providing, via the RF generating source, an RF signal to the first electrode to thereby create a potential between the first electrode and the second electrode; ~~and~~

providing, via a plurality of voltage sources, a bias voltage to a corresponding one of the plurality of diodes, respectively, and

sinking current, via the current sink, from one of the first electrode, the second electrode and the element to ground when a voltage on the one of the first electrode, the second electrode and the element is greater than the established voltage threshold in the current sink.