SECTION2 25

## **Ion Valve Corona Dischargers**



By Bruce A. Perreault - January 01, 2015

Ambient radioionic energy is all around us. We can hear it on an ordinary A.M. Radio. It is the "static noise" that we all have heard one time or another. This noise that we have heard is not static at all. It consists of an infinite number of radioionic oscillations. Some are short pulses of energy that contain an immense concentration of energy. The planet contains an enormous amount of this energy. Near the ground surface there is a gradient of potential, where the strength of the electrostatic field is near to 130 volts per meter. At a height of the human head the strength of the electrostatic field is near 200 volts per meter. The higher we go up in elevation the greater the potential. Air, a mixture of gases, is largely composed of nitrogen and oxygen. It is generally considered as insulator, and would be an excellent one if all the oxygen and nitrogen molecules were in a neutral electrical state. However, the air is actually composed of a mix containing varying quantities of neutral, positive and negative ions. At an elevation of around 33 to 49 feet above the ground the air has potential of about +2,000 volts!

## **Naturally Generated Radioionic Waves**

As the number of ions in the air is increased, the air becomes a progressively better conductor. In general, gradually more ions are found the higher we ascend, until at about a elevation of forty to fifty miles, a region called the ionosphere is reached. Here, there are sufficient numbers of ions to reflect radio waves. The ionosphere, although conductive, can be considered as a whole as being uncharged. This is due to the number of positive ions being equal to the number of negative ions, plus electrons that are distributed in layers varying in height and in a degree of ionization. In contrast, the earth has a surplus of electrons and is actually about 300,000 to 400,000 volts negative with respect to the ionosphere. This potential difference together with the total conductive qualities of the atmosphere is sufficient to cause the earth to continually lose electrons to the ionosphere. The entire earth's surface and the ionosphere may be considered to be oppositely-charged plates of a vast capacitor with the air between them acting as a rather inferior insulator, for it leaks continuously. In addition to the presence of ions, which make the atmosphere slightly conductive, various meteorological processes called static precipitation or the hydrologic cycle, contribute to the leakage rate of this earth capacitor. Falling rain tends to bring down the less-mobile large ions toward the earth while electrons are carried upwards on rising moisture-laden air. Therefore, a radioionic receiver can obtain more power when it is raining. The steady loss of electrons from the earth is called ionic current.

As infinitesimal as it is, it has been measured and amounts to about 9 micro amps for every square mile of the earth's surface. This current flows from the earth via the most convenient conductive path or those offering the least electrical resistance. Most of the electrons are discharged at natural and manmade points that project into the atmosphere. Static discharge can also occur when electrically charged particles such as raindrops, snow, dust, etc..., strike the antenna, inducing an impulse of current into electrical conductors and thereby producing broadband radioionic noise.



Fig. 1

At times corona discharge can be seen brightly glowing at the end of a high metal mast; sometimes the corona charge causes trees, or a metal cross at the top of churches to glow with a faint light. Corona discharge is especially bright in the mountains and at sea where the air is especially clear. Such corona discharge was well known from the very old of times, when it was called "Saint Elmo's fire."

If the potential between the air and the earth ground is increased the current which flows in a radioionic circuit also increases. The ions create further ionization of the air near the antenna and current flow through the circuitry increases significantly.

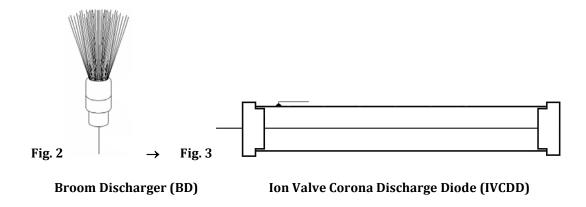
## **Corona Discharge Radioionic Noise**

Another type of radio noise is due to corona leakage. This is the discharge of atmospheric ions through an electrical conductor into the ground when a charged cloud is near the antenna conductor shown in the drawing in **fig. 1** above. Corona or brush discharge occurs when a charge is built up and electrostatic lines of force are developed. More lines of force per square inch appear at the sharpest points and the more likely it is that a strong field will pull free electrons from the point. Electrons pulled out from a sharp point form a corona or brush discharge. This noise can also be generated by a mobile in motion and is the reason that mobile antennas have a ball of some sort at the tip. The ball eliminates the sharp point and tries to minimize the effect. If enough electrons leave in such quantities that the air is heated and becomes ionized, a spark of electronically heated air will be visible, also known as St. Elmo's fire. Corona is a major noise source but not the only one that should be in this category. There are also streamer currents, arcing and others. When a charge is built up on the antenna and tower or other supporting structures, it is possible

for arcing to occur. The arcing will occur between any insulated parts or poorly connected ones if the charge potential rises to a sufficient level which it does frequently.

## **Auroral Kilometric Radioionic Energy**

A publication by the Center for Academic Publication in Tokyo, Japan, Magnetospheric Plasma Physics, edited by Atsuhiro Nishida, brings together some prominent world physicists for a very clear picture of their Earth energy model, along with their complex mathematics for the model. The conducting ionosphere causes instability of this Earth energy model by short circuiting the ions in the Earth electric field. Auroral displays result in a process called 'ring currents,' which occurs along magnetic field lines that connect the magnetotail with the ionosphere. This is the primary supply of energy for the aurora. The process studied releases a radiation that is being called "Auroral Kilometric radiation (AKR)" from around 50 to 500 KHz. Auroral arcs are generated by convection currents formed in the plasma of the magneto tail. These arcs curve toward the Earth on the night side, enter and generate the aurora field at around 68 degrees latitude between 22 and 24 hours local time. The AKR has a frequency spectrum from around 30 to 500 KHz, with a peak power at around 200 KHz. The total power is about 1,000 Megawatts. It originates at a low altitude, less than three Earth radii, with a radiation power of about one per cent of the energy dissipation of the auroral particles. It appears that the ionizing wave front stimulates the ionosphere, thus allowing the influx of the powerful AKR energies. Very strong electrostatic waves have been monitored, between 17.8 and 100 KHz. with the greatest amplitude at around 31.1 KHz. Some of these same frequencies have been observed by the **Voyager II** when it passed the magnetospheres of Jupiter and Saturn.



Negatively charged air ions cling to the ends of the sharply pointed brush wires of a broom discharger (**BD**), shown in **fig. 2**, when its single wire is connected to a grounding rod that is embedded in the ground. When the **BD** is elevated in the air positively charged air ions rush towards the stationary negative ions. The negative and positive ions make contact with each other where their charge is neutralized generating a current flow of high frequency radioionic oscillations. Each discharge generates a small current flow of radioionic energy; the more wires that the **BD** contains the more current flows through it.

The **IVCDD** shown in **fig. 3** is a more advanced **BD** design. Its advantage is that it is compact and doesn't have to be elevated in the air. **Fig. 4** shows a state of the art radioionic valve.

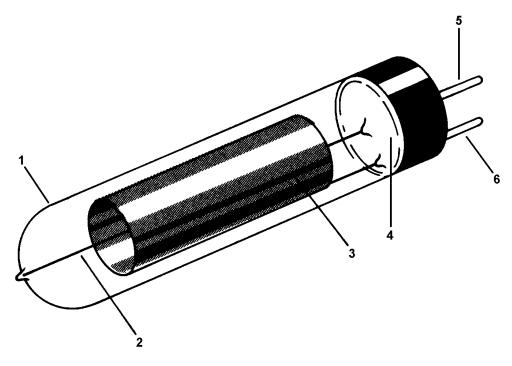


Fig. 4

**Cold Cathode Corona Discharge Diode - Radioionic Valve (RV)** 

Glass enclosure
Corona wire
Metallic cylinder
Radon impregnated ceramic disc
External corona wire contact terminal
External cylinder contact terminal

The ever present quantity of "free" ions that are stored in the air and in the ground are diverted to flow through an greatly improved ion valve that is described in my <u>U.S. Patent No. 7,800,286</u>. I offer it as a gift to anyone who will use it to secure the survival of the human species. Not mentioned in this patent is the fact that the invention functions as a cold cathode corona discharge diode which generates radioionic electrical power, using only the energy taken from the planet. The energy taken from the planet is raw energy which is converted into useful electrical power, using my improved ion valve. The conversion of this raw energy into electrical power has remained hidden from our species.

Positively charged atmospheric ions and negatively charged ions, or electrons from the ground are attracted to each other are made to discharge (neutralize) each other through the valve. The result is pulsating unidirectional flow of radioionic oscillations which can be transformed into a useful flow of electrical power. When a radioionic receiver is synchronized (tuned) to the frequency of the ionic oscillations it transforms them from a high potential, low current into a more useful lower potential, and higher current flow of electricity.