

ELECTRICAL ENERGY FROM AMBIENT RADIANT ENERGY

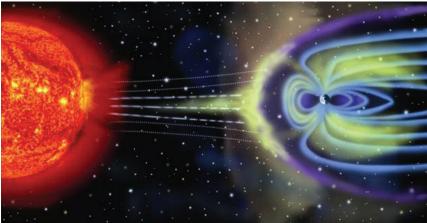
Bruce A. Perreault --|-- info@earthionenergy.com Earth Ion Energy™ Research Trust PO Box 22 • Rumney, New Hampshire 03266-0022 USA

It is a generally known fact that when light radiation falls on a solar cell electrical current is generated. What is not as well known is that when this same radiation falls on the junction of a germanium crystal radio diode it will generate a small amount of electrical current. What does this indicate? This reveals that a solar cell and the crystal radio diode are fundamentally the same. The only difference between them is surface area.

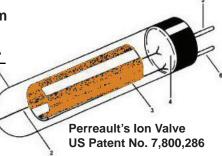
The solar cell has a much higher surface area than the small crystal and therefore has the ability to absorb and to convert more light energy into electrical energy. Knowing this we can convert ambient radio frequency radiation into useful electrical current. We can do this by building a high surface area radio diode. What we end up with is a solid state cell that can provide useful electrical energy when it is exposed to ambient radio waves. We can connect them in series. making them into a panel, to obtain the voltage that we require, just like we do with solar cells.

Ambient radio energy is all around us. We can hear it on an ordinary AM 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 electromagnetic oscillations. Some are short pulses of energy that contain an immense concentration of energy. They represent an enormous reservoir of energy. To efficiently convert this source of energy into useful current a radio diode with a large surface area is required. A solar panel converts light wave energy into useful electrical current. Why not build a radio panel that can convert radio wave energy into useful electrical current?

I have built radio cells that convert ambient radio energy into electrical current. I don't claim to have invented anything new. What I have accomplished is to use an old technology to obtain results where others have missed. I have also taken this over looked concept to greater heights which will be revealed in the not so distant future.



The Earth's geomagnetic field forms a shield protecting us from solar flares and a potential energy source from ionic current flow...



Radio Waves Are Naturally Generated

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 the neutral state. However, the air is actually composed of varying quantities of neutral molecules and positive and negative ions. 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 height 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 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.

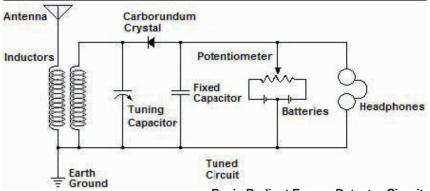
The entire earth's surface and the ionosphere may be considered to be oppositely-charged plates of a vast capacitor with the air between them acting as a rather inferior insulator, for it leaks continuously. In addition to the presence of ions, which make the atmosphere slightly conductive, various meteorological processes called precipitation or hydrologic cycle, contribute to the leakage rate of this earth capacitor. T. H. Moray reported that his radiant energy receiver produced more power when it was raining. Falling rain tends to bring down the lessmobile large ions toward the earth while electrons are carried upwards on rising moisture-laden air.

This steady loss of electrons from the earth is called ionic current, and, 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 (raindrops, snow, dust, etc.) strike the antenna, inducing a current impulse in the associated circuitry and thereby producing broadband radio frequency noise.

Auroral Kilometric Radiant 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 the Earth energy structure, along with some rather complex mathematics for those wishing to follow their modeling. The conducting ionosphere can affect the instability by short circuiting the electrostatic part of the Earth electric field, thus requiring less energy to release charge from the upper layers.

These auroral arcs result in an acceleration process called ring currents, which proceed along the magnetic field lines that connect the magneto tail with the ionosphere. This is the primary supply of energy for the aurora, setting up an oscillating field aligned acceleration of aurora particles; therefore forming the aurora arcs. This process releases a radiation that is called "Auroral Kilometric radiation (AKR)" from about 50 to 500 KHz. These arcs are generated by convection currents formed in the plasma pause of the magneto tail and curve toward the Earth on the night side and enter or create the aurora field at around 68 degrees latitude between 22 and 24 hours local time.

The AKR has a frequency spectrum from 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,



Basic Radiant Energy Detector Circuit

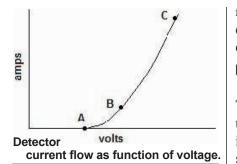
with a radiation power of about one per cent of the energy dissipation of the auroral particles. It appears that the ionizing wave front stimulates the ionosphere, thus allowing the influx of the powerful AKR energies. Very strong electrostatic waves have been monitored, between 17.8 and 100 KHz. with 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.

Perreault Radiant Energy Detector (ion valve)

Certain natural minerals can be used to detect radio signals, including zincite, silicon, germanium, galena, molybdenite, bornite, tellurium and carborundum. Rectification takes place at the point of contact with a sharp metal point of wire. A precise contact called a "cat's whisker" is made for the "detector" to operate. This allows current to pass in one direction but not the other, and so the high frequency radio wave carrier signal is "rectified." It is converted to provide a direct current, varying audio signal that can be heard with a sensitive high impedance earphone.

The synthetic carborundum detector was a more reliable detector in its time. Unlike the natural minerals that used a cat's whisker it was stable, but it required a potential of about 1 volt to be applied to it. This was supplied by a battery and was adjusted with a potentiometer.

The potentiometer allowed about 1 milliamp to flow from the battery. The current was measured flowing in one of the arms from the potentiometer; it was adjusted until the current just started to flow. Alternatively, a person could listen on high impedance earphones to a weak station and adjust for maximum loudness.



The curves A to B and B to C are much the same for most crystal detectors. They all have right around the same frequency responses between them. The differences in performance from one crystal species to another depends on their unique threshold conduction voltage. This is where the crystal electrically conducts when it is forward biased. When it is forward biased it does not initially conduct electrical current until the voltage reaches a threshold value at A shown in the above graph. There is a slight curve difference between A and B, then a relatively straight line from B to C and beyond. The initial threshold voltage varies from mineral to the next mineral species.

Below is a partial list of crystal detectors and their respective voltage thresholds where they become electrically conductive when forward biased:

```
Perreault Detector (semiconductor
exposed to a radioactive substance)
= 0.0V
Perikon (zincite + bornite) = 0.1V
Cuprous Oxide (Cu2O) = 0.2V
Lead Sulfide (Galena) = 0.3V
Germanium = 0.3V
Silicon on metal (Schottky) = 0.4V
Selenium = 0.5V
Silicon = 0.6V
Silicon Carbide (Carborundum)=1.0V
```

You may have read about circuits that used multiple diodes that increased the output of a crystal radio. This was an incorrect assumption, each detector added increases the resistance and the voltage drops. The earphones have to have a correspondingly higher resistance, an extra 2,000 ohms is required for each detector that is added.

Decreasing Threshold Voltage with Radioactivity

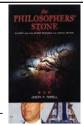
The Perreault radiant energy detector conducts electrical current when it has a forward bias no matter how small the radiant potential energy that is applied to it, in precisely timed surges. This is accomplished by creating a semiconductive crystal detector that is doped with a precise amount of radioactive substance. Adding too much dopant will actually increase the electrical resistance.

The type of radioactive substance used and the amount used will also determine how many pulsations per second are obtained. The correct amount of radioactive dopant serves to drastically decrease the electrical resistance with every atomic decay event.

These event windows only last for a minute fraction of a second... within one window a flood gate is opened to the powerful flow of radiant energy that is supplied to it. What follows is a surging or sharp pulsation of high frequency radiant energy that only flows in one direction through the radiant energy detector valve. The current of energy that is harvested in each surge is immense but only exists for a fleeting moment.

The radiant energy valve (detector) allows us to dam up the received radiant energy to charge electrical condensers (capacitors). With a properly tuned electrical resonant circuit connected to the capacitors energy may be obtained with extreme efficiency from an ambient radiant energy source and where it can be converted into a useful voltage and/or frequency to power exotic or conventional electrical loads for instant use. **_BAP**

Philosophers' Stone Alchemy and the Secret Research for Exotic Matter



--- Joseph P. Farrell --

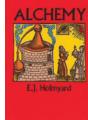
Connections of modern physics and ancient alchemy are demnstrated by investigating monatomic gold, work of Russian astrophysicist Nikolai Kozyrev, and the fuel for the mysterious Nazi "Bell" device, Serum 525. Farrell's previous books investigated the scientific and astronomical implications of ancient monuments and the secret space operations of the Nazis who were brought into NASA to continue their highly classified research as a result of "Operation Paperclip." Includes information on:

- David Hudson's Monatomic Gold,
- Soviet Red Mercury Legend,
- Physics of Rotation,
- H-Bombs and Torsion Physics,
- Laser & Isotope Enrichment,
- Transmutations and time,
- The Bell and Serum 525,
- Platinum Group Metals,
- ... plus tons more! (337 pp)

220055 - The Philosopher's Stone ... 17.95

Alchemy

- by E. J. Holmyard -



This classic study by noted scholar ranges over 2,000 years of alchemy. Topics covered include ancient Greek and Chinese

alchemy, alchemical apparatus, Islamic and early Western alchemy; signs, symbols, and secret terms; Paracelsus, English and Scottish alchemists, and more. Erudite coverage of philosophical, religious, mystical overtones; replacement of alchemy by scientific method, more. Illustrated. (320 pp)

390010 - Alchemy 13.95

Shipping /Handling Rates 1st Item: \$6-US; \$8-Can/Mex; \$12-Other Each Add'I Item: \$2-US; \$3-Can/Mex; \$6-Other TeslaTech, Inc 296 E Donna Drive Queen Valley, AZ 85118 Call (520) 463-1994 www.teslatech.info