

E.E.S. II, BACKGROUND INFORMATION & CONCEPT

With alternating electrical current, electrons do not move from point "A" to point "B" as commonly envisioned! Electrical potential (oscillating electrons) at point "A" results in harmonic electron activity at point "B", when the grounding switch (circuit) is closed. That is to say, point "B" supplies it's own electrons and mirrors the activity of point "A". Impulsing (turbulence) by magnetic induction causes electrons to be pulled into the system, which then oscillates. When the magnetic field collapses (becomes absent) the electrical potential returns to it's natural background.

Several major flaws are present in the conventional 60 Hertz's per second method of electrical power generation and it's iron core transformer system. ***This system is handcuffed by the inverse relationship of volts to amperes.*** This represents a stodgy inflexible inheritance, courtesy of Mr. T.A. Edison and his concept of electrical power generation.

Nikola Tesla stood, almost alone, against Edison and managed to prevail with his alternating current system. Without the alternating current system, electronic things in the modern sense would not exist.

This report will be concerned with some of the extensions and benefits of the alternating current electrical system. ***This study will limit it's scope to air core coil transformers at radio frequency and upward. The electrical power produced by this method is inverted to direct current and then to alternating current as required for popular usage.*** There are several important advantages of this system over conventional power generation.

Start with two coils (separate-apart), one being a reactor coil (L-1) and a second coil (L-2), being the reactant coil. Magnetic field fluxing (off-on of the electrical source) causes inductive reactance of L-1 which replicates by induction in L-2. Pulsing of the magnetic field (from L-1) in the presence of L-2, generates electrical potential. For example, should the L-1 coil have ten turns, with an imposed A.C. potential of 1,200 volts. This results in each turn of L-1 acquiring 120 volts of potential. This induced magnetic field, then replicates itself in each turn of the L-2 coil. The L-2 coil may have one or many hundreds of turns. Modern encapsulation techniques makes high frequency and high energy controllable.

Let's take another important step in this air core transformer process. For purpose of discussion, let the value of inductive reactance at 60 Hertz's per second equal one. Each time the Hz's. are doubled, the effectiveness of induction is squared. At about 20,000 Hz., ***when radio frequency is achieved, the electrons begin spinning free, outside of the inductor. They become increasingly free of the inverse relationship of volt-amperes.*** From this point on, they replicate by the inductive

process as V.A.R.. *That is to say, volts and amperes are equal, until resistance (work) is introduced.*

Therefore, additional, not previously available electrons become incorporated for a very large net gain in potential. This gain is real!

The quality of the grounding system determines the effectiveness of this method of producing electricity. A handy reference to locate the negative grounding areas for power generation can be found in the Aeromagnetic Map Studies of the US Geological Survey. They provide an excellent method for locating the best sites for optimum negative grounding areas.

When this method is combined with the induction coil system, already described, it provides an electrical power generating system millions of times more efficient than any known conventional method.

This new system (E.E.S. II) is uncomplicated, small in physical size and inexpensive to build. Technology required already exists. Maintenance is near zero, as there are no moving parts. Once operating, this system could last forever.

Small mobile E.E.S. II units are presently available as replacements for the batteries used in electric automobiles. Larger E.E.S. II units can be provided as a replacement source of power for hotels, office buildings, subdivisions, electric trains, manufacturing, heavy equipment, ships, and; generally speaking; in any present day application of electrical power.

Earth Electrical System II, Modular Units

The system consists of three separate modules. Reverse engineering is used in matching the modules to the desired usage.

HIGH VOLTAGE INDUCTION TRANSFORMER MODULE:

1. Preferably an off-the-shelf-unit similar to a TV flyback and/or automobile ignition type related coil (transformer).
2. Ratio of input to output may be from less than 1/100 to greater than 1/1,000. A voltage tripler may then be used.
3. A connection allowing the high voltage output to pass onward through the induction coil L-1 and then to it's grounding.

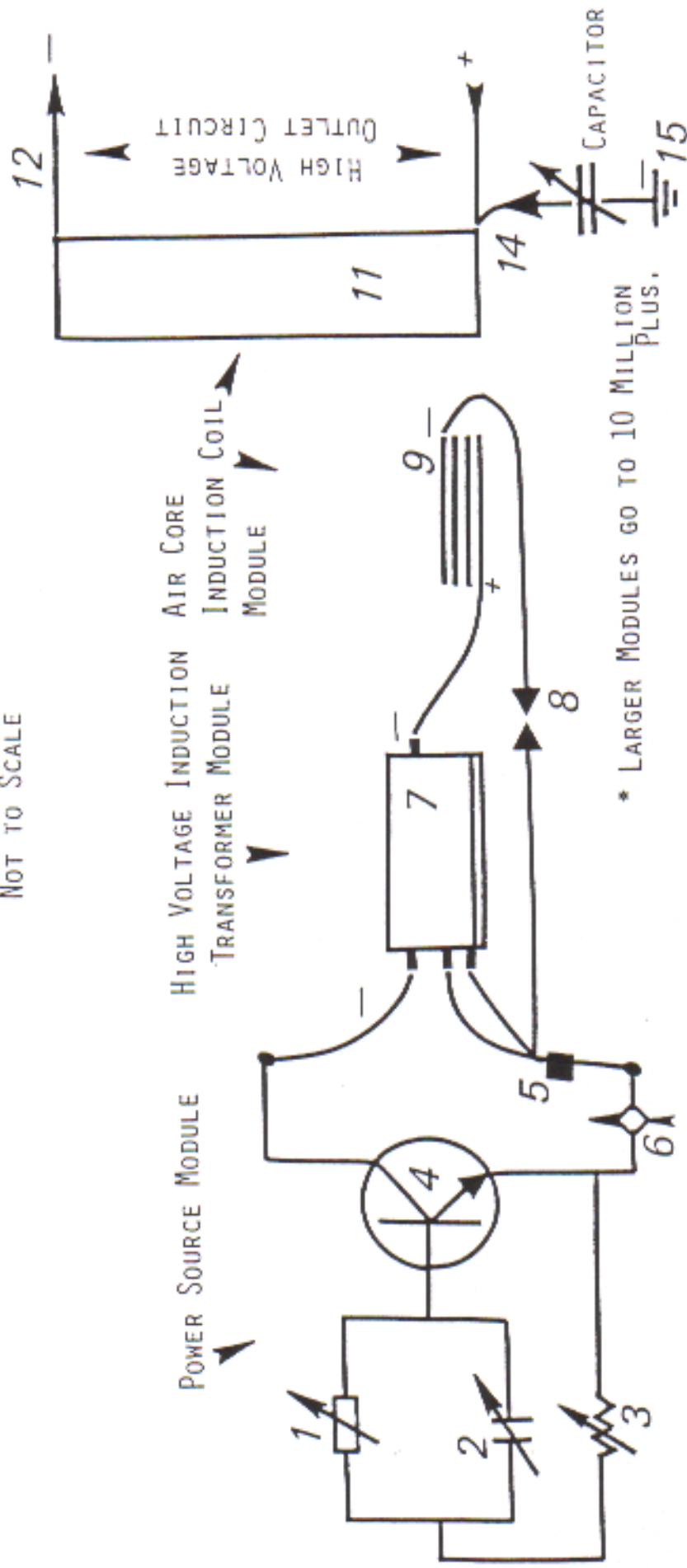
AN AIR CORE INDUCTION COIL TRANSFORMER MODULE:

1. Two coils, the reactor coil L-1 and the reactant coil L-2. L-1 has a high voltage radio frequency capacitor between it and it's grounding.
2. Input into the L-1 inductor is divided by the number of turns therein. The magnetic flux field provided from each turn of L-1 replicates itself as an electrical potential in each turn of L-2.
3. L-2 may have one turn or many hundreds of turns. The net gain depends upon the number of turns in L-2. Output from L-2 is in V.A.R. ***With this type of output, volts and amperes are the same until work(resistivity) is introduced***

THE INVERTER MODULE:

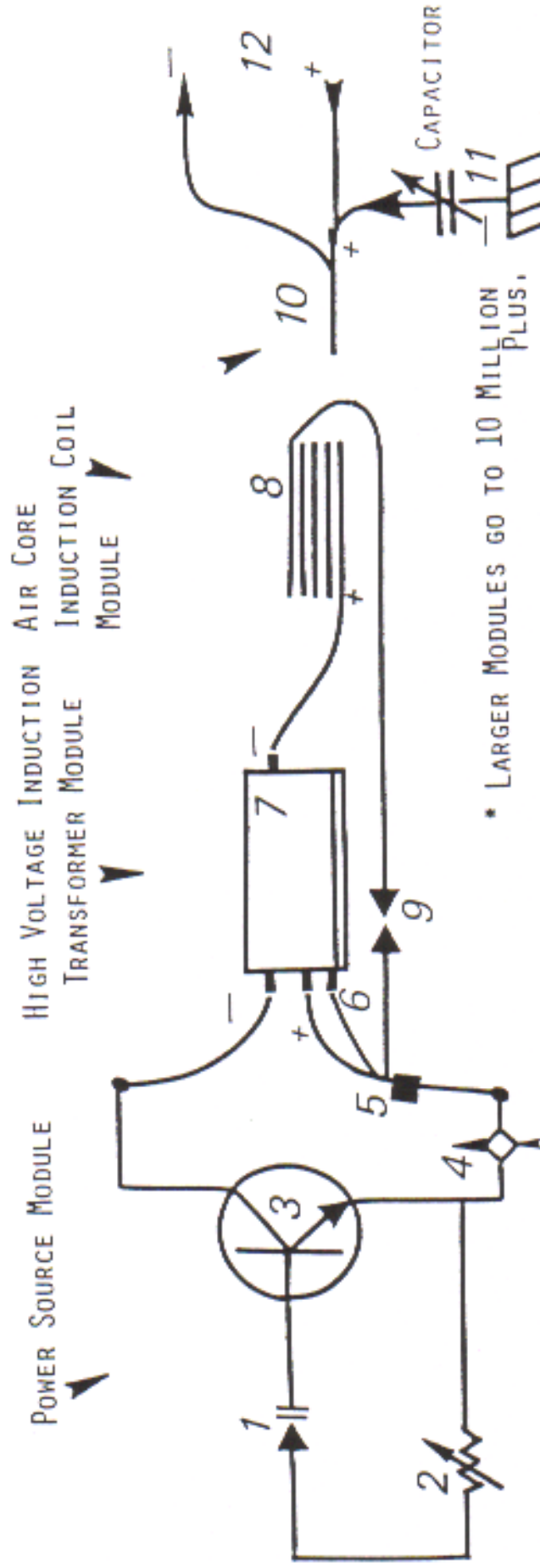
1. Inverts to direct current (D.C.)
2. Inverts to alternating current (A.C.), as desired.
3. Provides customized output of electrical power ready for designated usage.

EARTH ELECTRICAL SYSTEM II, DOMESTIC USE RANGE MODULE
 UP TO TWO MILLION VOLT-AMPERES-REACTIVE OUTPUT *
 PLAN "A", WITH VARIABLE CONTROLS
 NOT TO SCALE



- PARTS: 1. COIL, VARIABLE, 2. CAPACITOR, VARIABLE, 3. RESISTOR, VARIABLE, 4. TRANSISTOR, R.F.,
 5. BATTERY, RECHARGEABLE, 6. OFF-ON SWITCH, VARIABLE, 7. HIGH VOLTAGE TRANSFORMER,
 8. FEED BACK WITH SPARK GAP, 9. REACTOR, INDUCTION COIL, 10. FEED BACK WITH SPARK GAP,
 11. REACTANT COIL, 12. OUTPUT FOR # 11, 13. INPUT FOR ELEVEN, 14. GROUNDING FOR ELEVEN,

EARTH ELECTRICAL SYSTEM II, DOMESTIC USE RANGE MODULE
 UP TO TWO MILLION VOLT-AMPERES-REACTIVE OUTPUT *
 PLAN "B", ELECTRICAL AUTOMOBILE ENERGY SOURCE



- PARTS: 1, VARACTOR, RADIO FREQUENCY, 2, RESISTOR, 3, TRANSISTOR, RADIO FREQUENCY,
 4, OFF-ON SWITCH, MULTI-POSITION, 5, BATTERY, RECHARGEABLE, 6, TRANSFORMER GROUNDING,
 7, HIGH VOLTAGE INDUCTION TRANSFORMER, 8, REACTOR, INDUCTION COIL, 9, FEED BACK WITH
 SPARK GAP, 10, REACTANT, INDUCTION COIL, 11, GROUNDING FOR # 10, OUT-PUT CIRCUIT,
 IN VOLT-AMPERES-REACTIVE.

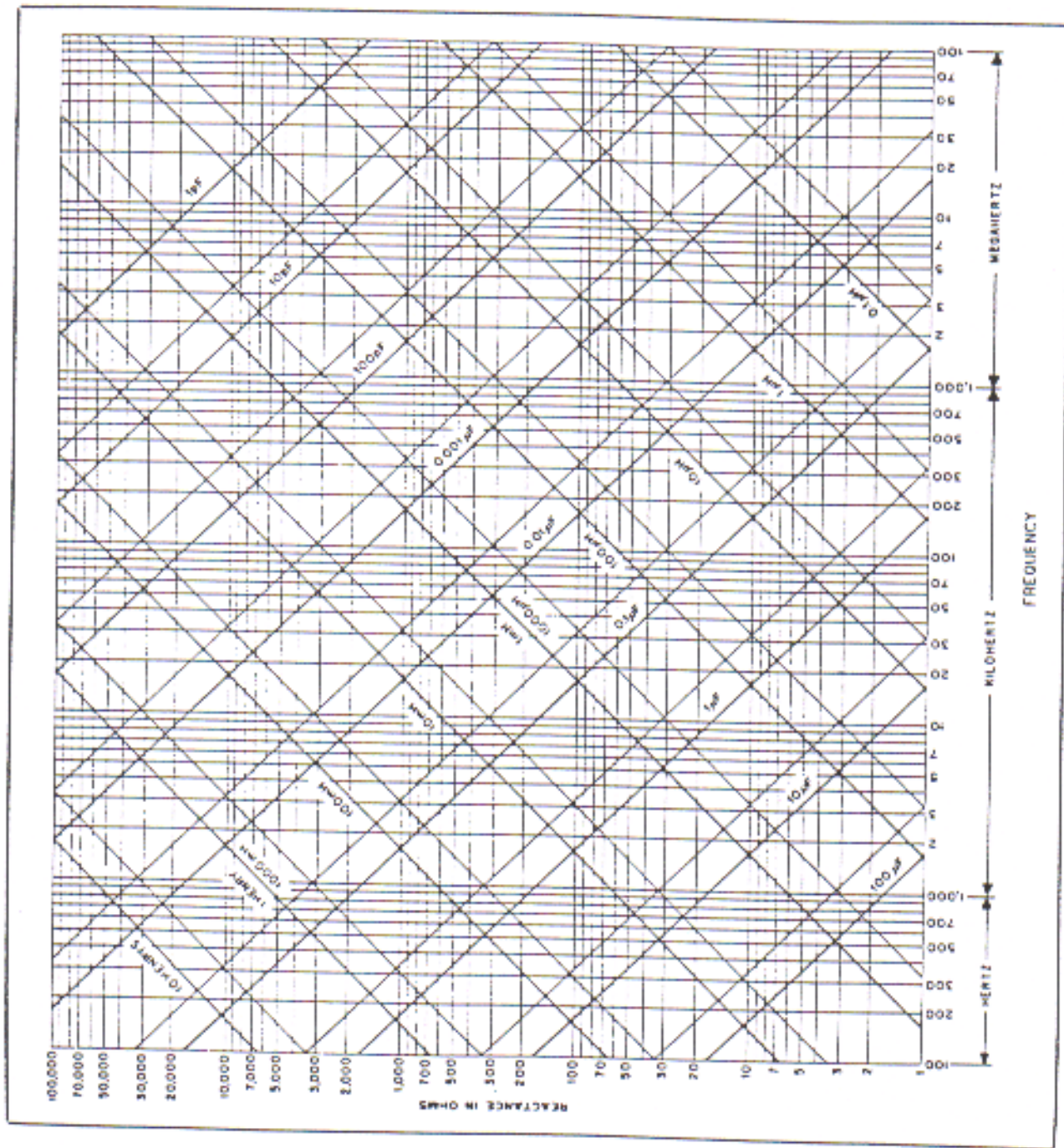


Fig. 44 — Inductive and capacitive reactance vs. frequency. Heavy lines represent multiples of five. For example, the light line between 10 μH and 100 μH represents 50 μH ; the light line between 0.1 μF and 1 μF represents 0.5 μF , and so on. Intermediate values can be found within the chart range. For example, the reactance of 10 henrys at 60 Hz can be found by taking the reactance of 10 henrys at 600 Hz and dividing by 10 for the 10 x times decrease in frequency.