

tion travels in material media.

The first result of the interaction of these massfree electric waves with the metallic matter of the coil is the establishment of an alternate current of massbound charges, since the kinetic energy of the latter is physically derived from the ambipolar radiation of the massfree charges. Given that we have already explained how the interaction of these electric waves with massbound electronic charges operates by way of coupling the electric voltage wave to an elementary charge that is configured as massbound in the usual aetherometric form, with an intrinsic magnetic wave function W_k -

$$q = m_e W_k = f = p_e = \lambda_e W_k$$

the electrokinetic energy swing of each massbound charge exposed in the coil proper to the electric energy of the massfree radiation, is obtained as-

$$E_K = p_e W_{v2^\circ} = (\lambda_e W_k) W_{v2^\circ}$$

The reader will recall that the electrocapacitative frequency of the electric waves assembled by our TC 728 operating under the described conditions, is:

$$F_A = V_{2^\circ}/C_{2^\circ} = f = W_{v2^\circ}/n \lambda_{y1} = \mathbf{E}/n = 4,185 \text{ sec}^{-1}$$

Taking this function as a characteristic of massbound charges, the fine wave structure underlying the composition of each massbound charge for the total or molar quantity of charge being accumulated at any time is:

$$Q_{2^\circ} = C_{2^\circ} V_{2^\circ} = f = n \lambda_e W_k = n p_e = 2.8469 \cdot 10^{15} \text{ m}^2 \text{ sec}^{-1} = f = 3.265 \cdot 10^{-5} \text{ C}$$

where $n = 2.0 \cdot 10^{14}$ elementary charges. If we consider further the fine wave structure of the electric energy swing, we have:

$$Q_{2^\circ} V_{2^\circ} = C_{2^\circ} V_{2^\circ}^2 = f = n \lambda_e W_k W_{v2^\circ} = n p_e W_{v2^\circ} = 9.82 \cdot 10^{24} \text{ m}^3 \text{ sec}^{-2}$$

Following our determination of the cyclotron frequency function, the ultimate fine structure of each constituent energy swing of the molar quantity of massbound charge involved is then readily expressible as -