Journal of Physics and Astronomy

Viewpoint| Vol 10 Iss 1

My History to Tackle Electromagnetic Issues

Yasutsugu Ohki

Freelancer Engineer, Tokyo, Japan

*__Corresponding author__: Yasutsugu Ohki, Freelancer Engineer, Tokyo, Japan, Email: spatialgems@gmail.com

Received date: December 29, 2021, Manuscript No. M- 50802; **Editor assigned:** January 03, 2022, Pre QC No. P-50802; **Reviewed:** January 15, 2022QC No. 50802; **Revised:** January 16, 2022, Manuscript No. R-49032; **Published date:** January 19, 2022, DOI: 10.37532/2320–6756.2022.10(1).258

Introduction

Sq () and Cube (), and Sqrt () is a function squared, cubed, square rooted and a one-dimensional wave function for electric and magnetic flux density is expressed with Euler formula and root mean square with the factor 1/Sqrt (2), j denotes imaginary operator. First, I found out that Mystical is a point that electric and magnetic flux density increase and decrease, that is, to appear from an unknown region and disappear to the region, synchronizing with each other in phase, in other words, they do not conserve in a figure pictured by famous James Clerk Maxwell.

So, given flux density of electric D and magnetic B, I found out a way to get a solution for the mystery under a premise that Maxwell's equations are described as a complex function with real part observable and potential imaginary part invisible.

D(complex) = $D(R)+jD(I)=D(R)(1+jExp(j/2\pi))=D(1+Sq(j))=0$, at all times and anywhere.

where, real and imaginary part of electric flux density: $D(R)=A(D)Exp(2\pi j\theta)/Sqrt(2), D(I)=D(R)Exp(j/2\pi)$, respectively.

$B(complex)=B(R)+jB(I)=0$, at all times and anywhere.

where real magnetic flux density $B(R)=A(B)Exp(2\pi j\theta)/Sqrt(2)$, imaginary $B(I)=BExp(\pm j/2\pi)/Sqrt(2).$

Second, Given the well-known electromagnetic energy density $\rho(E)=0.5(Sq(D)/\varepsilon+Sq(B)/\mu)$, according to the above same process, Complex of the energy become to be zero, so that the energy conserves at all times and anywhere.

Most electrical engineers frequently make use of dimension analysis, multiplying both hands in the energy equation by electromagnetic constant εμ, so that electromagnetic mass density is defined as $\rho(m)=\varepsilon\mu\ \rho(E)[kg/Cub(m)]$. Besides, according to the above same process, so the mass conserves at all times and anywhere. Moreover, this equation infers an equation of mutual conversion between an electromagnetic mass and electromagnetic energy times electromagnetic constant εμ.

Third, a one-dimensional beam is defined as a continuous entity representable to quintuple terms of electromagnetic mass, momentum, energy, power, force in a self-medium postulated as a continuous medium with homogeneity, isotropy, and differentiable

Citation: Yasutsugu Ohki. My history to tackle electromagnetic issues. J Phys Astron. 2021;10(1):258.

continuity, concurrently radiated with the quintuple and the self-medium from a source of the beam.

Forth, using an equation of $\mu Sq(D) = \varepsilon Sq(B)$ derived from the exact differential equation, we can get a mass equation, $\rho(m) = \mu\ Sq(D) = \varepsilon\ Sq(B) = \varepsilon\mu\ \rho(E)$. So, this equation makes only of electromagnetic terms, so it follows that this mass equation, corresponding to the famous mass-energy equivalence in the particle mechanics, but not to represent mass and kinetic energy of an isolated particle with mass for the continuity of the beam is unable to cut up an element.

Fifth, provided, however, in case of a particle-wise entity that three the beams assemble at a node of itself, more specifically, given an electron with perfect sphere, we can get an equation of a classical relationship of electron mass m, elementary charge e, and radius R of the perfect sphere: Using $\rho(m) = \mu Sq(D)$, we can get an equation of one-dimensional mass: $m = \rho(m)(4\pi Cub(R)/3) = \mu\ Sq(e/4\pi Sq(R)) = (1/3)\ \mu Sq(e)/4\pi R$, multiplying the equation by three, so a classical electron mass m(e) is, $m(e) = \mu Sq(e)/4\pi R$.

This fifth statement infers that an electron is split into fractional charge, that is, one-sixth elementary charges on two fronts of the beam.

Sixth, if the one-sixth elementary charge allocates on an orbit of an atom under equally-spaced intervals, a resultant repulsive force due to the mutual repulsive electrostatic forces countervails the electrostatic attraction force between electron with negative charge and atom with positive, so that each charge point become to be stationary, and each point can avoid being drawn into a point of positive charge.

Seventh, for the beam is described as a waveform with full-spectrum, all of an interval between nodes become to be a distance of the speed of beam per unit second, so that if the continuity of the beam is forced to cut up on a space base, we are assumed three types: (S-a) Perfect beam with several fold the distance, in case of cutting up less than the distance, (S-b-1) A cubic particle-wise entity with a node that each wave converges at, like case of an electron, (S-b-2) A membrane plane with a node that each wave converges at, (S-c) A string with a node that each wave converges at, so that multiple lengths of the string will be created, some string will become to be some group of the so-called quark.

Eighth, we can postulate that the beam has a fractional positive and negative charge on the z-axis, and magnetic circularly flowing in a closed clockwise and anticlockwise loop circuit on x-y plane perpendicular to the z-axis.