

The Expression of Magnetic Field and Verification Method of its Operating Principle ⁽²¹⁾

– For a rational understanding of the magnetic field –

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Abstract

1. stationary electrons do not produce a magnetic field, but a magnetic field is developed around a kinetic electron (current). Also, The light wave emitted by an electron consists of a combination of “photocurrent” and “photomagnetic”. Here, the electrons do not emit photomagnetic, but the photocurrent in the diffusion process has photomagnetic.

2. photocurrent and kinetic electrons have a common point of displacement (movement) relative to the base of outer space. Also, the magnetic field is expressed in the displacement process of the photocurrent and the moving electron, and the magnetic field reflects the characteristic of the space. Therefore, space is to be regarded as having the components of magnetic force.

3. The magnetic force has N pole and S pole oriented function. Furthermore, the transmission speed of light waves is affected by the change within the magnetic field where the intensity of the magnetic force increases or decreases with the present progressive type. Such changes in light speed can be simply verified using an interferometer.

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※ **For your reference** – This paper denies some arguments of quantum mechanics, and suggests a new alternative. It is hoped the quantum mechanics of the abolition target will be excluded from the judgment standard.

I . Introduction

Stationary electrons produce only an electric field (electric force) and do not produce a magnetic field (magnetic force). Also, stationary electrons are not affected by the invariable magnetic force. That is, stationary electrons and invariant magnetic forces are not functionally linked and do not interact with each other. The magnetic forces of these conditions cannot be included in the basic interactions of Elementary particle.^[8]

<<http://batangs9.com/E-8.pdf>>

The reason why the invariable magnetic force and electric force (electric field) of stationary electrons do not work is that the magnetic force and electric force are made up of different elements and exist in different forms. The operating principles of these magnetic and electric forces should be handled independently from an individual standpoint.

However, a magnetic field is developed around a kinetic electron

(current). Also, the movement of electrons is induced in the magnetic field where the intensity of the magnetic force is variably increased or decreased. In other words, the variable magnetic force and kinetic electrons have a functional connection and interact with each other.

As described in the thesis "**Structural and Functional Characteristics of Electromagnetic Waves,**" stationary electrons emit light waves directly. In addition, the propagation process of light waves has the effect of the current. The current effect of such light waves is called "**photocurrent**" for convenience. The photocurrent of light waves here consists of individual units (1, 2, 3...) of the particle model and propagates by the elasticity of the speed of light.^[17] <<http://batangs9.com/E-17.pdf>>

The stationary electrons emit photocurrent (Light Electric) but do not emit photomagnetic. However, "photomagnetic" in the direction of vertical rotation is expressed at the periphery of the photocurrent propagated at the speed of light. These photomagnetic are generated later in the propagation process of the photocurrent. In other words, stationary electrons do not simultaneously emit photocurrent and photomagnetic from the initial moment.

The form of light waves consists of a combination of photocurrent and photomagnetic. Here, the photocurrent of light waves and photomagnetic depend on each other and permanently maintain an aggregate of individual

units. The functional relationship between the photocurrent and the photomagnetic is formed only in the propagation process of light waves and consists of the present progressive type.

The photocurrent of light waves emitted or absorbed by an electron must have a cross section smaller than the diameter of the electron. However, the photomagnetic of light waves propagates into a wide area of outer space, and has a very wide cross section. As an example, the photomagnetic of a wide cross section cannot pass through a tunnel a thousand times larger than the diameter of the electron (or photocurrent).^[17]

<<http://batangs9.com/E-17.pdf>>

The kinetic electrons (current) and photocurrent have a common point of displacement with respect to the spatial system of outer space (base of space). In other words, when kinetic electrons and photocurrent pass through outer space, the outer space reacts with the expression of magnetic force. Therefore, it can be interpreted that the spatial system of outer space has a component of magnetic force.^[5]

<<http://batangs9.com/E-5.pdf>>

In the production process of magnetic force, the speed of the electron and intensity of magnetic force are proportional. Therefore, the speed of the electron can be expressed as an absolute value of the spatial system in outer space. In other words, outer space has an absolute coordinate system. If the existence of such an absolute coordinate system is

recognized, Einstein's special relativity theory must be modified.^[4]

[<http://batangs9.com/E-4.pdf>](http://batangs9.com/E-4.pdf)

In this paper, the functional relation between the outer space and magnetic field will be explained in detail. Furthermore, the conditions and processes in which magnetic force is expressed in outer space will be explained, and a method to verify the operating principle of magnetic force in real experiments will be presented.

II. Body

1. Functional connection between the outer space and the magnetic field.

Like the contents of the previously introduced thesis "The components of outer space and the existing conditions of light waves", the outer space is composed of the distribution structure of "batangs" which has individual units of particle models. Also, batangs are classified into two components of "taes" and "pyeongs".^[6] [<http://batangs9.com/E-6.pdf>](http://batangs9.com/E-6.pdf)

Taes and pyeongs of batangs are used as media in the propagation process of various energies. For example, electric force, magnetic force, and light waves are delivered by using pyeongs of batangs as the medium. Also, neutrino, nuclear force, and gravity are delivered by using taes of batangs as the medium.

Pyeongs of batangs have magnetism which is evenly acted on all

directions. However, if the magnetism of pyeongs received an external stress, the distribution of pyeongs is tendentiously focused inside batangs. Like this, the effect in which the distribution of pyeongs is tendentiously focused can be easily understood through the diagram in Figure 1.

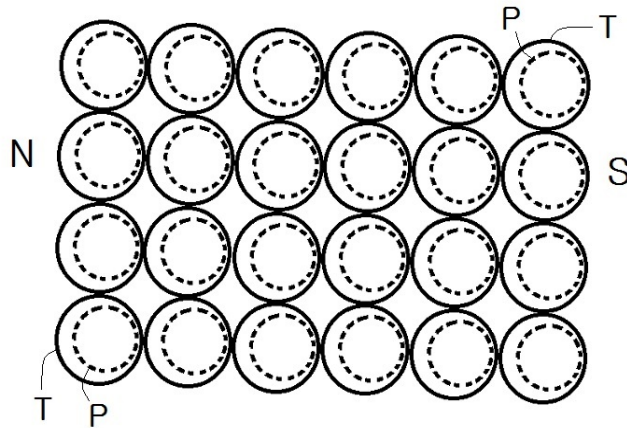


Figure 1. The diagram illustrates the process in which the orientation effect of the magnetic force occurs inside batangs.

In the diagram at Figure 1, *T* of circle's line is taes which composes the body of batangs, *P* of circle's dotted line is pyeongs inside batangs, and *N* and *S* are the stimulation of the magnetic field. In here, taes of *T* and pyeongs of *P* have the same size of diameter, but they are marked differently in different sizes for better understanding.

Like the diagram in Figure 1, if the distribution of pyeongs is tendentiously focused inside the batangs, the orientation effect of pyeongs is formed. Also, the orientation effect of pyeongs is expressed as "magnetic force" of *N* pole and *S* pole. Therefore, all batangs in outer space individually have a magnetic force of the orientation effect, and the effect of magnetic force has to be divided into individual units of batangs. Also, an

organic body of "magnetic field" is formed by the process in which the magnetic force of batangs (pyeongs) is mutually connected.^[17]

<<http://batangs9.com/E-17.pdf>>

Batangs (pyeongs) in outer space have components of magnetic force and preserve the orientation effect of magnetic force. Therefore, batangs in outer space should be called as "**magnetic substances.**" On the other hand, the current of electrons is acted inside the metallic magnet (or electromagnet of solenoid) and the effect of the current produces a magnetic force of the orientation function. These metallic magnets should be called as "**source body of magnetic force**". In here, the magnetic substances of batangs which have components of magnetic force and the source body of metallic magnets which produces magnetic force should be strictly distinguished.^[6]

<<http://batangs9.com/E-6.pdf>>

As described in the thesis "**Structural and Functional Characteristics of Electromagnetic Waves,**" The photocurrent (Light Electric) of light waves has the representativeness of the particle model and the progress of light velocity (C) is made by the lead of photocurrent. Also, the photomagnetic of vertically rotational direction occurs like Fleming's rule at the location of outer space where the photocurrent of light waves (or current of moving electrons) passes. These photocurrent and photomagnetic are mutually dependent, and the mutual dependence between photocurrent and photomagnetic forms clusters of light waves.^[17]

<<http://batangs9.com/E-17.pdf>>

However, the photomagnetic of light waves which occurs in outer space doesn't recklessly follow the photocurrent of light velocity (c), and it disappears immediately after the photocurrent goes through. That is, the photomagnetic of light waves instantly appears at the point where the photocurrent passes and doesn't get out of the original location because batangs in outer space have the original basis of photomagnetic.

In the process wherein the photocurrent of the particle model is propagated, pyeongs of batangs which are used as the medium of photocurrent are displaced as much as the volume of photocurrent. Therefore, pyeongs inside batangs are turned into the progress direction of the photocurrent as much as the volume of photocurrent. Also, pyeongs in the exchange process have torque that is displaced into vertically rotational direction. Torque of these pyeongs are delivered to the inside batangs.

If pyeongs of photocurrent pass through the body (*taes*) of batangs, pyeongs inside batangs simultaneously have an exchange effect of progress direction and the displacement effect of rotational direction. Also, the distribution of pyeongs is tendentiously focused by the rotational effect of pyeongs, and the tendentious concentration of pyeongs is expressed as the orientation function of magnetic force (*directional nature*). The tendentious concentration of these pyeongs determine the strength of magnetic force.

When two individual magnetic forces (A, B) are facing each other, the

orientation function of two magnetic forces is converted into motion effect. For example, when the orientation effect of two magnetic forces (A, B) is mutually accepted, the motion effect of gravitation occurs. However, when the orientation effect of two magnetic forces (A, B) is mutually rejected, the motion effect of repulsion occurs.

In the process wherein the motion effect of magnetic force occurs, the effect of current which produces a magnetic force must be displaced into the present progress. That is, the magnetic force represents the kinetic energy which is produced as the present progress.

2. The experimental method to verify the operating principle of magnetic force.

Directional nature is formed in the occurrence of magnetic force, and the center of batangs has the central point of directional nature. That is, pyeongs inside batangs are tendentiously focused, and the tendentious focus of pyeongs is expressed as the magnetic force of orientation function.

Therefore, the magnetic force of a single pole doesn't exist.^[17]

<<http://batangs9.com/E-17.pdf>>

The part in which the focus of pyeongs is externally oriented in the occurrence process of magnetic force is called the N polar of magnetic field for convenience, and the part wherein the focus of pyeongs is internally oriented is called S polar of magnetic field for convenience. Therefore, pyeongs of batangs have the original basis of magnetic force.

The magnetic force of orientation function only occurs inside batangs,
and batangs preserve the directional nature of N polar and S polar.
Therefore, N polar and S polar of magnetic force reflect the
circumstance of inner batangs. That is, the magnetic force with directional
nature can't occur outside batangs.

However, when pyeongs inside batangs are evenly distributed into all
directions, the orientation function (directional nature) of magnetic field is not
expressed. Under these conditions, there is no way to confirm the
existence of batangs, and it can be misunderstood (delusion) that batangs in
outer space don't exist. Therefore, like the opinion of Einstein, the space
model of empty vacuum and the special theory of relativity are selected as
advantageous conditions.^[2] <<http://batangs9.com/E-2.pdf>>

Pyeongs of batangs have the elastic force of light velocity (C).
Therefore, the effect in which pyeongs of batangs are tendentially
focused is acted as the light velocity. Also, even if the distribution of
pyeongs (magnetism) is tendentially focused, the elastic force of pyeongs
will not be changed if a certain magnitude of magnetic force is steadily
maintained. For example, two light waves (P^1, P^2) which are individually
propagated to directions of N polar and S polar have the same magnitude
of light velocity inside the invariable magnetic field like the magnetic force
of steel magnets.

However, when the intensity of magnetic force is increased at the present progress, the tendentious focus of pyeongs will acquire auxiliary help. That is, the orientation effect of magnetic force has an acceleration. Therefore, the tendentious focus of pyeongs is faster than general light velocity (C).

Increasing the intensity of magnetic force at the present progress represents that the tendentious focus of pyeongs (magnetism) is accelerated and the elastic force of pyeongs becomes stronger. Therefore, if the general elastic force (light velocity) of pyeongs is assumed to be C and the amount of increase of elastic force is V , the elastic force of pyeongs inside the variable magnetic force should have hyper light velocity (C^+) of $C + V$.

The photocurrent of all light waves is delivered by using the magnetism of pyeongs as the medium. Therefore, the photocurrent of light waves has to be propagated at the hyper light velocity (C^+) of $C + V$ inside the variable magnetic field in which the intensity of magnetic force increases at the present progress. The occurrence of this hyper light velocity can be easily confirmed through the experimental tools in Figure 2.

In the experimental tools in Figure 2, 1 is the cylindrical coil which is wound by the conducting wire, 2 is the power, 3 is the switch for the circuit, 4 is the magnetic line of force, N and S are poles of magnetic field, L is the light source of laser, R_1 is the first semitransparent mirror,

R_2 is the second semitransparent mirror, M is the reflection mirror, T is the telescope of an observer, P_A is the progress of number one light wave, and P_B is the progress of number two light wave. Also, the number one light wave which is released from the light source of laser passes through the center of the cylindrical coil.

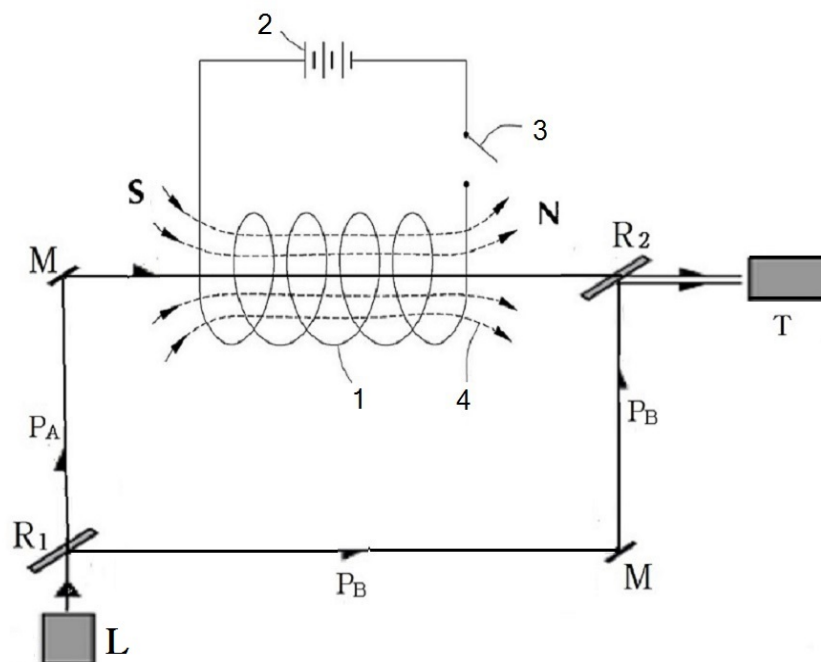


Figure 2. The experimental tool to verify the effect in which the propagation velocity of light waves is changed during the increase and decrease process of magnetic force.

When the initial current flows through the cylindrical coil in the experimental tool in Figure 2, the amount of current is gradually increased and the variable magnetic force is produced at the center of coil. In here, the more the amount of current which is supplied to the coil, the greater the intensity of the magnetic force is. If the intensity of magnetic force is weak,

the propagation velocity of light waves will not be influenced by the magnetic force.

At the center of coil where the intensity of magnetic force is increased at the present progress, the elastic force of batangs (pyeongs) is increased to the direction of N polar and decreased to the direction of S polar. Therefore, the light wave which proceeded to the direction of N polar inside the coil is delivered at hyper light velocity, and the light wave which proceeded to the direction of S polar is delivered at a much slower velocity than the general light velocity (C).

However, if the amount of the current which is supplied to the coil isn't gradually increased or decreased and it steadily maintains the magnitude, the intensity of magnetic force will not be changed like the steel bar magnet. The elastic force of pyeongs at the center of these coils has the light velocity of C to all directions and the propagation velocity of light waves are the same for all directions.

If the propagation velocity of the first light wave which passes through the center of coil is increased to the direction of N polar and that of the second light wave does not change, it could be possible to observe from an observer's telescope that the interference fringes are moved. The movement effect of these interference fringes proves that the distribution of pyeongs (magnetism) is focused at a much faster pace and the elastic force

of pyeongs is changed during the incremental process of magnetic force.

However, when the current which is supplied to the coil is blocked, the intensity of magnetic force is gradually decreased and the interference fringes of light waves move to the opposite direction.

In the experimental tools in Figure 2, if the direct current is used, the progress of the current is periodically changed as much as the frequency of the current and the effect in which the intensity of magnetic force (or elastic force of pyeongs) is gradually increased or decreased is repeated. Therefore, the interference fringes generated by an observer's telescope is moved back and forth as much as the frequency of the current.

III. Conclusion

The outer space is composed of batangs which have the elastic force of light velocity. Also all types of energies are propagated at the speed of light by using batangs as the medium. However, the elastic force of batangs is either decreased or increased based on the circumstance. Likewise, the effect in which the elastic force of batangs is increased or decreased can be proven through the effect in which the propagation velocity of light waves is changed.

The outer space is not composed of the form of a physical vacuum.
Therefore, all opinions in the theory of relativity and quantum physics that presupposes the space model of an empty vacuum must be modified.

※ Request – If there is a progressive researcher who has a positive interest in the experimental method shown in Figure 1, please try it. I do not have accurate numerical data on the experiment above at present.

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*** Difference becomes specialty, Ideal becomes reality,
at the center of world in the name of center**

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