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Scalar Fields

PDF Files :

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Warren York : "Scalar Wave Technology" ; *Extraordinary Science* (Jan/Feb/Mar 1989).

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Gregory Hodowanec : "Do Intense Scalar Fields Affect Life Processes?"

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http://en.wikipedia.org/wiki/Scalar_field

Scalar Field

In mathematics and physics, a scalar field associates a scalar value, which can be either mathematical in definition, or physical, to every point in space. Scalar fields are often used in physics, for instance to indicate the temperature distribution throughout space, or the air pressure. In mathematics, or more specifically, differential geometry, the set of functions defined on a manifold define the commutative ring of functions.

Just as the concept of a scalar in mathematics is identical to the concept of a scalar in physics, so also the scalar field defined in differential geometry is identical to, in the abstract, to the (unquantized) scalar fields of physics.

Definition

A scalar field is a function from Rn to R. That is, it is a function defined on the n-dimensional Euclidean space with real values. Often it is required to be continuous, or one or more times differentiable, that is, a function of class Ck.

The scalar field can be visualized as a n-dimensional space with a real or complex number attached to each point in the space.

The derivative of a scalar field results in a vector field called the gradient.

Differential geometry

A scalar field on a Ck-manifold is a Ck function to the real numbers. Taking Rn as manifold gives back the special case of vector calculus.

A scalar field is also a 0-form. The set of all scalar fields on a manifold forms a commutative ring, under the natural operations of multiplication and addition, point by point.

Uses in physics

In physics, scalar fields can be used to ascribe forces (which are usually vector fields) to a more general scalar field, the gradient of which describes the force.

* Potential fields, such as the Newtonian gravitational potential field for gravitation, or the electric potential in electrostatics, are scalar fields which describes the more familiar forces.

* A temperature, humidity or pressure field, such as those used in meteorology. Note that when modeling weather on a global basis, the surface of the Earth is not flat, and thus the general language of curvature in differential geometry plays a role. Dopplerized weather radar generates a projection of a vector field onto a scalar field.

Examples in quantum theory and relativity

* In quantum field theory, a scalar field is associated with spin 0 particles, such as mesons or bosons. The scalar field may be real or complex valued (depending on whether it will associate a real or complex number to every point of space-time). Complex scalar fields represent charged particles. These include the Higgs field of the Standard Model, as well as the pion field mediating the strong nuclear interaction.

* In the Standard Model of elementary particles, a scalar field is used to give the leptons their mass, via a combination of the Yukawa interaction and the spontaneous symmetry breaking. This mechanism is known as the Higgs mechanism [1]. This supposes the existence of a (still hypothetical) spin 0 particle called Higgs boson.

* In scalar theories of gravitation scalar fields are used to describe the gravitational field.

* scalar-tensor theories represent the gravitational interaction through both a tensor and a scalar. Such attempts are for example the Jordan theory [2] as a generalization of the Kaluza-Klein theory and the Brans-Dicke theory [3].

* Scalar fields like the Higgs field can be found within scalar-tensor theories, using as scalar field the Higgs field of the Standard Model [4], [5]. This field interacts gravitatively and Yukawa-like (short-ranged) with the particles that get mass through it [6].

* Scalar fields are found within superstring theories as dilaton fields, breaking the conformal symmetry of the string, though balancing the quantum anomalies of this tensor [7].

* Scalar fields are supposed to cause the accelerated expansion of the universe (inflation [8]), helping to solve the horizon problem and giving an hypothetical reason for the non-vanishing cosmological constant of cosmology. Massless (i.e. long-ranged) scalar fields in this context are known are inflatons. Massive (i.e. short-ranged) scalar fields are proposed, too, using for example Higgs-like fields (e.g. [9]).

Other kinds of fields

* Vector fields, which associate a vector to every point in space. Some examples of vector fields include the electromagnetic field and the Newtonian gravitational field.

* Tensor fields, which associate a tensor to every point in space. For example, in general relativity gravitation is associated with a tensor field (in particular, with the Riemann curvature tensor). In Kaluza-Klein theory, spacetime is extended to five dimensions and its Riemann curvature tensor can be separated out into ordinary four-dimensional gravitation plus an extra set, which is equivalent to Maxwell's equations for the electromagnetic field, plus an extra scalar field known as the "dilaton".

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http://en.wikipedia.org/wiki/Scalar_field_theory

Scalar Field Theory

In theoretical physics, scalar field theory can refer to a classical or quantum theory of scalar fields. Such a field is distinguished by its invariance under a Lorentz transformation, hence the name "scalar", in contrast to a vector or tensor field. The quanta of the quantized scalar field are spin-zero particles, and as such are bosons.

No fundamental scalar fields have been observed in nature, though the Higgs boson may yet prove the first example. However, scalar fields certainly do appear in the effective field theory descriptions of many physical phenomena. Because of the relative simplicity of the mathematics involved, scalar fields are often the first field introduced to a student of classical or quantum field theory.

Although scalar fields are Lorentz scalars, they may transform nontrivially under other symmetries, such as flavour or isospin. For example, the pion is invariant under the restricted Lorentz group, but is an isospin triplet (meaning it transforms like a three component vector under the SU(2) isospin symmetry). Furthermore, it picks up a negative phase under parity inversion, so it transforms nontrivially under the full Lorentz group; such particles are called pseudoscalar rather than scalar. Most mesons are pseudoscalar particles.

In this article, the repeated index notation indicates the Einstein summation convention for summation over repeated indices. The theories described are defined in flat, D-dimensional Minkowski space, with (D-1) spatial dimension and one time dimension and are, by construction, relativistically covariant. The Minkowski space metric, ???, has a particularly simple form: it is diagonal, and here we use the + ? ? ? sign convention.

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http://en.wikipedia.org/wiki/Scalar_field_theory_(pseudoscience)

Scalar field theory (pseudoscience)

For the quantum mechanical "scalar field theory" which is a field theory of spinless particles, see "Scalar field theory"

Scalar field theory (SFT) is a set of theories in a model which posits that there is a basic mechanism that produces the electric field and the magnetic field. Proponents of this theory claim that it advances the standard electromagnetic theory.

Scalar waves in these theories (as opposed to a scalar field in mainstream physics) are hypothetical waves, which differ from the conventional electromagnetic transverse waves by having one oscillation level parallel to the direction of propagation; they thus have characteristics of longitudinal waves. Their existence however, as presupposed in numerous theories, has not been supported by experiment. Scalar waves are called also "electromagnetic longitudinal waves", "Maxwellian waves", or "Teslawellen" (tr., "Tesla waves"). Variants of the theory claim that Scalar electromagnetics (also known as scalar energy) is the background quantum mechanical fluctuations and associated zero-point energies (in contrast to "vector energies" which sum to zero).[citation needed]

Description

Terminology

The basic understanding of scalar field theory begins with several definition of terms within the theory, which are also used in academic physics, but assigns them other meanings. A

"scalar field" is a set of assigned observable magnitudes at every point in n-dimensional space (compare this with the standard definition; n is also 4 or greater). [1] An "electric field" is composed of the spinning charged mass, in motion through a finite change in electrostatic scalar potential (compare this with the current academic definition). A "potential" is pure energy and, is any ordering (static or dynamic) in the vacuum (eg., the position of the object relative to other objects). A "scalar potential" is the stationary ordering in the virtual particle flux of the vacuum (compare this with the current academic definition). A "vector potential" is any nonstationary ordering in the virtual particle flux of vacuum (compare this with the current academic definition). Scalar potentials and vector potentials are thus defined as: "contained" inside the energy domain.[citation needed]

Magnetic fields interaction

SFT is based on "non-symmetrical regauging" potentials, demonstrated by the interaction of two magnetic fields.

When the field lines oppose each other, the magnets are pulled together. When the fields are aligned in the same direction, the magnets push apart. When two magnets strongly oppose each other but are not permitted to move apart, the force between them is said to create a "scalar bubble" between the magnets. The greater the repulsive force, the larger this scalar bubble becomes. As the magnets move away and the pushing force decreases, the scalar bubble shrinks in size and strength.

In a similar manner, two magnets that are strongly attracted create a "scalar void" between them that grows larger the closer the two magnets become. Two magnets powerfully attracted to one another create a very large scalar void, that decreases as the attracting magnets are moved apart.

Despite the claims of its proponents, no repeatable experiments were able to show the existence of the scalar field. All observed effects were shown to comply to the standard physical laws of electrodynamics. The observations are in spectacular agreement not only with classical electromagnetics, but also with quantum electrodynamics, both of which are fields of physics.

Field effects of scalar energy

SFT suggests that scalar energy can move through space much like an electromagnetic wave. However, the operating principles are different. The regular expansion and contraction of a scalar bubble/void is like rhythmicly splashing water on a pond. It sends out ripples through the general scalar field that can subtly affect the size and strength of distant scalar bubbles/voids.

This means that a pair of magnets that are rhythmically opposing/attracting each other are sending out scalar ripples through space that will slightly perturb the scalar bubble/void between a second pair magnets nearby. The net effect is that the attraction and/or repulsion between the second pair of magnets exhibits a change in strength, even though the magnets and fields themselves are motionless.

According to skeptics, the following description given for an application to a communication system reportedly failed to give reproduceable results.

A basic scalar communications system

A scalar communications broadcast antenna does not make any sense according to normal electromagnetic theory. The goal of a scalar broadcast antenna is to create powerful repulsion/attraction between two magnetic fields, to create large scalar bubbles/voids. This is done by using a broadcast antenna with two opposing electromagnetic coils that effectively cancel out as much of each other's magnetic field as possible. An ideal scalar broadcast antenna will emit no electromagnetic field (or as little as possible), since all power is being focused into the repulsion/attraction between the two opposing magnetic fields. Normal electromagnetic theory suggests that since such a device emits no measurable electromagnetic field, it is useless and will only heat up. For a scalar broadcast antenna, any normal RF emission is wasted energy.

A scalar reception antenna similarly excludes normal electromagnetic waves and only measures changes in magnetic field attraction and repulsion. This will typically be a two-coil powered antenna that sets up a static opposing or attracting magnetic field between the coils. The coils are counter-wound so that any normal RF signal will be picked up by both coils simultaneously and effectively cancel itself out, leaving only the scalar component.

Scalar field detection by normal RF antennas

Even though a scalar wave train does not contain the regular EM components that are used by radio frequency communications, it can still be detected by a normal RF antenna, if that antenna is in the presence of some other static magnetic field. When the scalar wave train passes through, it will create a disturbance in the field surrounding that magnet and make the field lines move, which will impart a small electrical current in the standard RF antenna, as if the magnet itself were moved.

Since all normal RF antennas are immersed in the magnetic field of the planet, they can serve as crude scalar detectors, though the reception will be extremely weak and washed out by any normal RF in the vicinity. Detection ability is greatly increased by enclosing the antenna and circuitry in a faraday cage, and by placing a very strong magnet near the antenna inside the cage.

Scalar antennas and detectors

Various proponents have claimed to have developed instruments with characteristics and specifications for different designs. Scalar antenna and detector examples include:

Types [2]

* Magnetostatic Detectors
* Electrostatic Detectors
* Barkhausen Detector

Windings [3]

* single-wire bifilar
* dual-wire bifilar
* pancake bifilar
* cone bifiliar

Proponents of the theory have constructed bifiliar test antennas as isolation transformers. These have taken the form of a ferrite rod, ferrite ring, an air core, or the common square

transformer shape.

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http://www.rense.com/general84/ben.htm

Benjamin Fulford's 'Creature' (?)

From **Brad Steiger**
1-26-9

Absolutely Bizarre 'Creature' In Benjamin Fulford's Spine

On Friday, January 23rd, Benjamin Fulford shocked the audience of the Jeff Rense Program by emailing the claim, accompanied by a photograph, that surgeons had removed a bizarre life form, very much resembling a salamander, from his spine. Those who could view the strange creature were shocked and horrified. Immediately, everyone who saw the "thing" wondered what it was--and if it were real.

Whether the creature was real or whether it was an ill-advised hoax, I wanted to find out if it was possible to place or to inject such a life form into an unsuspecting victim. One of the experts that I queried was a top-research scientist and inventor, who quickly responded that not only was it possible to inject the embryo of a parasite into a targeted victim without his or her knowledge, but that in the world of deep black operations, Russian scientists had already perfected such grotesque methodology.

I asked the scientist to come on the Rense Program and discuss the science of bioenergetics being developed for Black Ops projects, but he informed me that he had been placed under "very strict warnings" not to make any appearances on any radio or television program. What he did do was to write a very informative email on the incredible world of bioenergetics and psychoenergetics which I reproduce below with his special permission. At the present time, he prefers to remain anonymous.

Yes, Brad, the "embryo" for such a "new living parasite critter" could indeed be developed and inserted into a targeted victim, including at a great distance, but only by the highly "clandestine" world of the off-budget deep black operations -- particularly those in Russia, which are still far ahead of anything in the West.

The Russian science of "energetics" -- developed shortly after WW II by a tremendously massive Soviet effort of some of the best nonlinear scientists on earth -- did solve some of the perplexities of our modern physics, of psychology and biology, etc. And under Stalin's iron boot, the new and spectacular Russian scientific developments were immediately placed into extended weapons development.

To this day, our own more-materialistic scientists still do not really comprehend Soviet energetics. (And they also still do not even know what a mind actually is, what a "dead"

(separated) mind is, or what a "mind and body linked living system" really is).

Soviet energetics had three branches: (1) the science of inert matter, called by the same name "energetics". (2) the science of living biological systems, where a mind is linked to a living body. This branch is called "bioenergetics". (3) the science of the mind and mental phenomena, which is called "psychoenergetics".

Western science, being so materialistic, has not yet comprehended the most important thing about "mind": that is, that the mind and mental things exist in time, but not in 3-space.

If one turns to modern quantum field theory, then there are now FOUR photons available, not the two transverse photons so well known to classical electrodynamicists etc. In the following discussion, the travel direction of the photon in 3-space is assumed along the Z axis. The "regions of vibration" of the photon -- i.e., the type and direction of its oscillation -- may occur in four ways. These are (1, 2) the two "orthogonal" oscillation polarizations, one along the X-axis and the other along the Y-axis. Then there is (3) the longitudinal (i.e., longitudinally-polarized) photon, which oscillates along the Z-direction of travel itself. And finally there is (4) the time-polarized or "scalar" photon, which oscillates along the time axis. These four photons are all in standard quantum field theory, even in the West.

Now note that only the two transverse-polarized photons (1) and (2) are observable by our instruments. The longitudinal (3) photon is nonobservable, as is the time-polarized (4) photon.

Here's the first "magic":

A combination of a longitudinal photon (3) and a time-polarized photon (4) is OBSERVABLE AS A SPIKE OF VOLTAGE -- more precisely, a spike of electrostatic scalar potential.

Now suppose you have a hidden (nonobservable) electromagnetic "system" you have built in the time-domain, so that it is built only of time-polarized photons. The system is not observable, nor is any part of it observable.

But then suppose you also build a corresponding set of operations (a "system") in 3-space matter so that this new EM system consists only of longitudinal photons. And suppose you have made this "longitudinal" photon system's operations so that they exactly parallel the time-domain system's operations. In short, you now can superpose your longitudinally-polarized EM wave system and the time-polarized EM wave system. And your instruments will now observe the combination -- i.e., the actual ongoing linkage system's operation -- as a very strange but highly organized system of voltage spikes!

The West has totally missed the fundamental characteristic of mind: Mind occupies time but not 3-space. Hence, mind is a totally "electromagnetic" system, but it is comprised of only non-observable time-polarized photon operations!

Well, how could you possibly couple that mind to a biological (3-space) material body?

You would have to have a parallel longitudinally-polarized set of electromagnetic operations ongoing in that 3-space body.

And the direct coupling of those two "operational systems" would be the mechanism of the coupling of the mind to the body -- and it would and could be directly observed by our

instruments as a correlated system of voltage spikes!

And that is why the dendrite cells of the body all have so many endings and "continual and incredible voltage spikings"! In looking at the entire set of spiking, you are looking at the "coupling mechanism" (that couples the mind to the body) in action! That set of spikings is what links or couples (coherently) the living temporal mind to the living biological body!

Now if you place great scientific effort on that area and in that fashion, for some decades, you will eventually be able to (1) directly produce an operating living mind in the laboratory, including a human mind and any version of it, and (2) link it to a properly designed biological body (to a proper set of longitudinal operations therein), and this will give you a living biological system created directly in the laboratory.

In about 1990, the Russian hidden psychoenergetics science had progressed to the point that living minds were being designed and produced in the laboratory, including various "versions" (personalities) of a given mind.

If one knows where to look, there is and has been quite a bit of external "testing" by the Soviets to stimulate the West and see if we recognize what is being done (in short, to see whether the West also has developed such science). Sadly, the provocative tests have clearly shown the Soviets that we do not have such capabilities or such scientific development. Indeed, we still do not even recognize that "testing" is even going on!

One of the New Energy scientists--Tom Bearden--stumbled onto a portion of this Soviet energetic work. In his 2005 book, Oblivion: America at the Brink, Bearden gave an abbreviated presentation of the development of the energetics weaponry and some of the actual "evocative testing" examples. There are many more weapons and examples that he did not run across.

Presently, the Russians can clandestinely duplicate the mind of a targeted individual, in the duplicate mind they can "alter" portions to produce "different behavior" if that alternate mind is inserted into the targeted individual in the West, and then they can do several things. (1) they can just leave it in that individual as an extra "multiple personality," so they have the 'perfect spy" that hears everything the person's ears hear, sees everything his eyes see, and also receives all the thoughts that his true mind thinks. And they can put that on the TV screen in Moscow if they wish. With the portion for which he actually encountered evidence, Bearden gave examples of the military use of such capabilities in Oblivion.

Sadly, the West still thinks that the human "mind" is just some electron wiggles in the brain, and that we are like a giant "nonliving" computer.

There is also a way to directly engineer any physical observable system one wishes, in any part of it, living or nonliving. One can directly engineer and change inert matter or living matter, etc. I have learned that Bearden plans a future book (hopefully this year) dealing with this scientific methodology, which he calls "precursor engineering", but which the Soviets still have embedded in its term "energetics" with its associate science (and weapons).

Once you understand something about this 3-fold secret weapons science of energetics that the Soviets have highly developed, then you can understand how -- with such developed technology -- one could directly build both the physical body system (its correlated longitudinal EM photon system) and the "mind system" of such a "living critter" one creates in the laboratory, and how one could then use such capability (such weird and artificially-

created critters) by sudden surprise on an unsuspecting enemy to overwhelm and crush him almost instantly.

As you can see, we are referring to a gigantic leap forward in what the West calls "biological weapons" and in "biological warfare".

Well, one should be looking for "very strange incidents" suggesting the development of such "critters" and parasites. And here is at least one "candidate" occurrence.

This present "incredible tumor" discovery [in Benjamin Fulford's spin] may be the discovery of one "provocative test" of these capabilities, just to see what our western science and biological warfare experts make of it.

And if it is a "provocative test" to see what we know, of if we know anything of it at all, we have certainly once again assured them we have not the foggiest notion of the true reach of Soviet energetics science.

WO2008092205
METHOD AND APPARATUS FOR ANALYSING GEOLOGICAL FEATURES

Inventor(s): DUNCAN ANDREW [AU]
Classification: - international: G01V3/00; G01V3/15; G01V3/16; G01V3/17; G01V3/00; G01V3/15 - European: G01V3/165
Abstract -- An apparatus (10) for analysing geological features comprises a receiver (20) for measuring a magnetic field received from adjacent geological features (18) excited by a periodic transmitted electromagnetic signal, wherein the measured magnetic field is a scalar amplitude of the magnetic field or a scalar amplitude of the magnetic field is derivable from the measured magnetic field, wherein the receiver generates a received signal from the measured magnetic field; and a processor (28) for filtering unwanted signal components which are substantially synchronous with the periodic transmitted electromagnetic signal from the scalar amplitude of the received signal or the scalar amplitude derived from the received signal, such that target geological features are able to be analysed using the filtered scalar amplitude.

WO2008060213
METHOD FOR PREDICTING WHERE THE NEXT MAJOR EARTHQUAKE WILL TAKE PLACE WITHIN AN AREA

Inventor(s): SLUNGA RAGNAR [SE]
Classification: - international: G01V1/28; G01V1/00; G01V1/28; G01V1/00- European: G01V1/00E
Also published as: WO2008060213 // SE0602417 (A) // SE530569 (C2)
Abstract -- The present invention relates to a method of predicting where the next major earth- quake will occur within a area based on knowledge of the stress tensor field in the area, including determining stress tensors that have caused a shear slip in the form of an earthquake. It is first assumed that said first shear slip is the only one that is not stable according the Mohr-Coulomb slip criterion applied to contenplated fault planes with all conceivable orientations and calculating according to the Mohr- Coulomb slip criterion the principal stress directions as a function of the friction coefficient f. After that, it is established

according to the Mohr-Coulomb slip criterion a relationship between two of the principal stresses.; Moreover the normal stress sv in a known direction Sv is determined and, according to the elasticity theory, a relationship between the normal stress sv and the principal stresses is established. Then expressions of the three principal stresses as a function of a scalar parameter is established, and a function of the elastic deformation energy per unit of volume relative to an isotropic reference stress state with the pressure sv based on the expressions of the principal stresses is established. Finally, the remaining degree of freedom is eliminated by determining the value of said scalar parameter which minimises the function of the elastic deformation energy and the value of the scalar parameter in the expressions of the principal stresses is inserted.

WO2008050137
MAGNETIC SIGNATURE ASSESSMENT

Inventor(s): TWELVETREES ROGER [GB]; COX EMILY [GB]; GANDERTON CARL [GB]; RAWLINS PAUL [GB]; WATSON STEPHEN MILES [GB]
Classification: - international: B63G9/06; B63G9/00 - European: B63G9/06
Also published as: GB2443265 (A)
Abstract -- Magnetic signature assessment apparatus for a vehicle comprising sensors for incorporation in the vehicle to measure the magnetic field normal to a closed surface at least approximately bounding the vessel and processing means for calculating from the normal field measurements a scalar magnetic potential outside the surface. Apparatus may be provided on the vehicle to generate a magnetic field to suppress the magnetic signature corresponding to the scalar potential. The invention also extends to corresponding methods and to programs for implementing those methods.

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RU2005105859
LONGITUDINAL-SCALAR ELECTROMAGNETIC WAVE RADIATING DEVICE

Applicant(s): KUZNETSOV JURIJ NIKOLAEVICH
Classification: - international: H01Q13/02; H01Q13/00
Also published as: RU2287212
Abstract -- FIELD: radio communications and radiolocation, geological prospecting, and medicine. ^ SUBSTANCE: proposed radiating device is provided with second waveguide and second exciting component; exciting components are installed in waveguides which have different length and are brought to single plane through their open ends and further through return horn to equally shaped adding waveguide terminating in horn. Waveguides differ by half-length of common radiated electromagnetic wave. In planar-wave approximation strength vectors of electric and magnetic fields are oriented in longitudinal-scalar electromagnetic wave in open space collinearly to vector of electromagnetic energy flux density (S = Ei ¦Hi¦ + Hi ¦Ei¦).Irrotational electric field of longitudinal electromagnetic wave builds up potential difference across open electric conductor longitudinally oriented to this field.; Magnetic field of longitudinal-scalar electromagnetic wave acts upon moving electric charges by force directed along their velocity vector. ^ EFFECT: enhanced reliability due to use of irrotational longitudinal-scalar electromagnetic waves apart from rotational cross-vector ones.

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http://v3.espacenet.com/publicationDetails/biblio?KC=A1&date=20050908&NR=2005197808A1&DB=EPODOC&locale=en_EP&CC=US&FT=D

US2005197808
Method for determining electrical and magnetic field effects

Inventor(s): KUO, AN-YU
Classification: - international: G06F17/10; G06F17/10; (IPC1-7): G06F17/10
Abstract -- A method for determining electrical and magnetic field effects determines Lanczos matrices by performing a preconditioned conjugate gradient method using a nested multi-grid, vector and scalar potential preconditioner so that Pade via Lanczos frequency expansion may be used to determine the electrical and magnetic field effects over a frequency range without having to perform computationally slow and memory intensive matrix decomposition.

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http://v3.espacenet.com/publicationDetails/biblio?KC=A1&date=20040311&NR=2004046553A1&DB=EPODOC&locale=en_EP&CC=US&FT=D

US2004046553
Vector Measurement of a Magnetic Field

Inventor(s): LEGER JEAN-MICHEL [FR]; GRAVRAND OLIVIER [FR]; BERTRAND FRANCOIS Classification: - international: G01R33/24; G01R33/24; (IPC1-7): G01V3/00 - European: G01R33/24
Also published as: US6844726 // FR2815416 // FR2815416 // WO0233434 // EP1344075
Abstract -- A vectorial magnetometer (1), measures the components of a magnetic field in three directions (Oxyz) using a scalar magnetometer (2). The field is periodically modulated in each of the directions by generators (Gx, Gy, Gz) which have a specific frequency for each direction and that power coils (Ex, Ey, Ez). Synchronous demodulation of the of the output signal of the scalar magnetometer (2) for each of the three frequencies permits the relative continuous component of each axis to be found.; The vectorial magnetometer (1) is characterised in that it has means (Dx D'x, Dy D'y, Dz D'z) that can carry out a double demodulation for phase and quadrature for each of the frequencies and processing means (70) that use the continuous component modules for phase and quadrature to calculate a transfer function of the scalar magnetometer at the frequency in question, and to apply this function to the correction of the components.

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http://v3.espacenet.com/publicationDetails/biblio?KC=A1&date=19991215&NR=0964260A1&DB=EPODOC&locale=en_EP&CC=EP&FT=D

EP0964260
Device for Measuring Magnetic Field Components Comprising a Scalar Magnetometer

LEGER, JEAN-MICHEL
Classification: - international: G01R33/26; G01R33/24; (IPC1-7): G01R33/26 - European: G01R33/26
Also published as: FR2779530 // US6313628 // CA2274623

Abstract -- The system uses a scalar magnetometer with additional fields applied by external coils, which are arranged with mutually orthogonal axes. The system for measuring the components of a magnetic field includes a scalar magnetometer (10,14,16,21,24,26,30,40,46,56). This magnetometer provides an output signal corresponding to the modulus of the applied magnetic field. There are also at least two conducting coils (Ex,Ey,Ez) disposed around the scalar magnetometer with mutually orthogonal axes. Each coil is supplied with a current at a given frequency. Processing circuits (Dx,Dy,Dz) receive the signal produced by the magnetometer and effect synchronous demodulation of the signal at the respective frequencies, to provide signals (Bx,By,Bz) corresponding to the components of the magnetic field which exists in this region.

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http://v3.espacenet.com/publicationDetails/biblio?KC=A&date=19991105&NR=11306328A&DB=EPODOC&locale=en_EP&CC=JP&FT=D

JP11306328
METHOD AND DEVICE FOR GENERATING TWO-DIMENSIONAL SCALAR FIELD

KAWAI, NAOKI
Classification: - international: G03F1/00; G06T1/00; G03F1/00; G06T1/00; (IPC1-7): G06T1/00; G03F1/00
Abstract -- PROBLEM TO BE SOLVED: To extract flow of each conduit from a conduit picture to generate a two-dimensional scalar field. SOLUTION: Conduits are extracted from the conduit picture one by one (S2), and representative points and values of flow are defined for each conduit, and respective values of flow are registered in positions corresponding to these representative points in a separately prepared two-dimensional area, and values of flow in other positions of the two-dimensional area are interpolated based on registered values of flow and their positions (S5), thus generating a two-dimensional scalar field.

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http://v3.espacenet.com/publicationDetails/biblio?KC=A&date=19981201&NR=5845220A&DB=EPODOC&locale=en_EP&CC=US&FT=D

US5845220
Communication method and apparatus with signals comprising scalar and vector potentials without electromagnetic fields

PUTHOFF, HAROLD
Classification: - international: H01Q7/00; H04B5/00; H01Q7/00; H04B5/00; (IPC1-7): H04B1/00
- European: H01Q7/00; H04B5/00
Abstract of US 5845220 (A)
Information that changes as a function of time is communicated from a transmitting site to a receiving site by transmitting a signal comprising scalar and vector potentials without including ay electromagnetic field. The potentials vary as a function of time in accordance with the information.

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http://v3.espacenet.com/publicationDetails/biblio?KC=A&date=19751202&NR=3924210A&DB=EPODOC&locale=en_EP&CC=US&FT=D

US3924210
Field Shaping Magnet Structure

1975-12-02
Inventor(s): DIONNE NORMAN J
Classification: - international: H01J31/50; H01F7/02; H01F7/20; H01J29/64; H01J31/08; H01F7/02; H01F7/20; H01J29/58; (IPC1-7): H01F7/02- European: H01F7/02C1; H01F7/20
Also published as: NL7512795 // NL7512795 // NL172496 // NL172496 // JP51067961

Abstract -- A magnet structure having a pair of spaced pole pieces interconnected by a reluctor circuit comprising an operatively aligned array of soft magnetic members suitably spaced apart by interposed nonmagnetic material to provide between the pole pieces a preferred magnetic scalar potential and an associated magnetic flux distributed as desired over a relatively large volume adjacent the array.

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http://amasci.com/hum/adetect.txt

Date: 10 Feb 97 18:50:04 EST
From: "Sara T. Allen"
To: Taos Hum list serve <taoshum-l@eskimo.com>

Subject: Scalar fields - Honeywell Patent Numbers

List of patents by Raymond C. Gelinas but assigned to Honeywell:
(note that a Vector Potential is a scalar field)

4,429,280
31 Jan 1984
Apparatus and Method for Demodulation of a Modulated Curl-Free Magnetic Vector Potential.

4,429,288
31 Jan 1984
Apparatus and Method for Modulation of a Curl-Free Magnetic Vector Potential Field.

4,432,098
14 Feb 1984
Apparatus and Method for Transfer of Information by Means of a Curl-Free Magnetic Vector Potential Field.

4,447,779
8 May 1984
Apparatus and Method for Determination of a Receiving Device Utilizing a Curl-Free Magnetic Vector Potential Field.

4,605,897
12 Aug 1986
Apparatus and Method for Distance Determination Between a Receiving Device and a Transmitting Device Utilizing a Curl-Free Magnetic Vector Potential Field.

4,491,795

1 Jan 1985
Josephson Junction Interferometer Device for Detection of Curl-Free Magnetic Vector Potential Fields.

Also, you can find a good article in Scientific American of April 1989, pp. 56-62, "Quantum Interference and the Aharonov-Bohm Effect" by Yoseph Imry & Richard Webb.

Another one:

US5845220: Communication method and apparatus with signals comprising scalar and vector potentials without electromagnetic fields , H. Puthoff

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http://www.unusualresearch.com/scalarbib/scalarbib.htm

Y. Aharonov and D. Bohm, "Significance of Electromagnetic Potentials in in the Quantum Theory," The Physical Review, vol. 115, no. 3, Aug. 1959.
Abstract: In this paper, we discuss some interesting properties of the electromagneticpotentials in the quantum domain. We shall show that, contrary to theconclusions of classical mechanics, there exists effects of potentials oncharged particles, even in the region where all the fields (and therefore theforces on the particles) vanish. We shall then discuss possible experiments totest these conclusions; and, finally, we shall suggest further possibledevelopments in the interpretation of the potentials.

Yoseph Imry and Richard A. Webb, "Quantum Interference and the Aharonov-Bohm Effect," Scientific American, vol. 260, no. 4, Apr. 1989.
Abstract: Can electrons be influenced by a nearby magnet so well shieldedthat its force field cannot be detected? The counterintuitive answer is yes:an energy emanation from the magnet known as the potential does indeed affectthe electrons' wave function. This quantum-mechanical effect is being brought tobear on the development of new microelectronic devices.

Capt. Robert M. Collins (TQTR), "Soviet Research On The A-Vector Potential and Scalar Waves (U)," Unknown.
Abstract: Active in the areas of the Aharonov-Bohm effect as applied to the A-vector potential and scalar fields as applied to solving force related problems.

Capt. Robert M. Collins (TQTR), "Soviet Research On Unified Field Theories, False Vacuum States, and Antigravity (U)," Unknown.
Abstract: Theoretical progress in dealing with unified field theories...new concepts in weapons, transportation, propulsion

Dr. Jack Dea, "Fundamental Fields and Phase Information," P.A.C.E. Newsletter, vol. 4, no. 3 (Planetary Assoc. f. Clean Energy)

K.J. van Vlaenderen, "Electrodynamics with the scalar field," Sep. 2001.
Abstract: The expressions of the electric and magnetic fields, that can be derived from the Li'enard-Wiechert potentials, are in good agreement with experiments. Surprisingly the Li'enard-Wiechert potentials do not satisfy the Lorenz gauge condition, therefore they cannot be regarded as solutions of the Maxwell equations in the Lorenz gauge, but only as solutions of the inhomogeneous potential wave equations. Therefore, the inhomogeneous potential wave equations should be regarded as a separate set of differential equation that are unconnected with Maxwell's equations. In order to simplify this theory of classical

electrodynamics we propose a generalization of Maxwell's equations, such that a gauge of the potentials is unnecessary in order to derive the Lorenz inhomogeneous potential wave equations. This generalization can be described as a conditional current regauge that does not violate the conservation of charge. This has several consequences: - the generalized Maxwell equations also contain scalar field terms. - the prediction of a longitudinal electro-scalar wave (LES wave) in vacuum. - a generalized Lorentz force expression that contains an extra scalar term. - generalized energy and momentum theorems, with an extra power flow term associated with LES waves.

E. T. Whittaker in Cambridge, "On the partial differential equations of mathematical physics," vol. 57, pp. 333-355, Nov. 1903.
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CAVEAT: There are what appear to be errors in the original. Those that are changed are noted here. Spelling and other obvious errors remain as in the original.
On Page 346: The first double integral was missing the 'x' on the 'x sin u cos v' term of the first argument of f().
Frank Lofaro gives the 1903 paper this description: 1903 paper on potentials being composed of harmonic phase-conjugate scalar pairs.
He also gives the 1904 paper this description: 1904 paper on EM waves being composed of two scalars.

E. T. Whittaker in Cambridge, "The Electromagnetic Field Due to Electrons by Means of Two Scalar Potential," pp. 367-372, Nov. 1904.
Although as much care as possible was taken in its reproduction, no warranty is expressed or implied as to the suitability or accuracy of this document for any purpose whatsoever.
CAVEAT: There are what appear to be errors in the original. Those that are changed are noted here. Spelling and other obvious errors remain as in the original.
The equation in the middle of page 368 appears to be in error in the original. The "c-square, del-square, a-sub y" term is missing the superscript 2 on the del in the original paper. From looking at the other equations in the group, it seems like it should be squared also.

Concetto R. Giuliano, "Applications of optical phase conjugation," Physics Today, vol. 34, no. 4, pp. 27-35, Apr. 1981.
Abstract: Light waves that are, in effect, time-reversed images of their original can serve to restore severely aberrated waves to their original state.

Dr. Harry E. Stockman, "Plasma-diode experiments," Ham Radio, Feb. 1980.

GSC-12645, "Precise Phase Comparator for Nearly Equal Frequencies," NASA Tech Briefs, Fall/Winter 1981, vol. 6, no. 3, Nov. 1981.

Dwight W. Batteau and Peter R. Markey, "Man/Dolphin Communication Final Report," Dec. 1966.
Abstract: Research intended to determine the feasibility of establishing a language, approaching English, between man and dolphin. Neurophone like circuit in Appendix-A.

http://www.eskimo.com/~billb/freenrg/bark.html

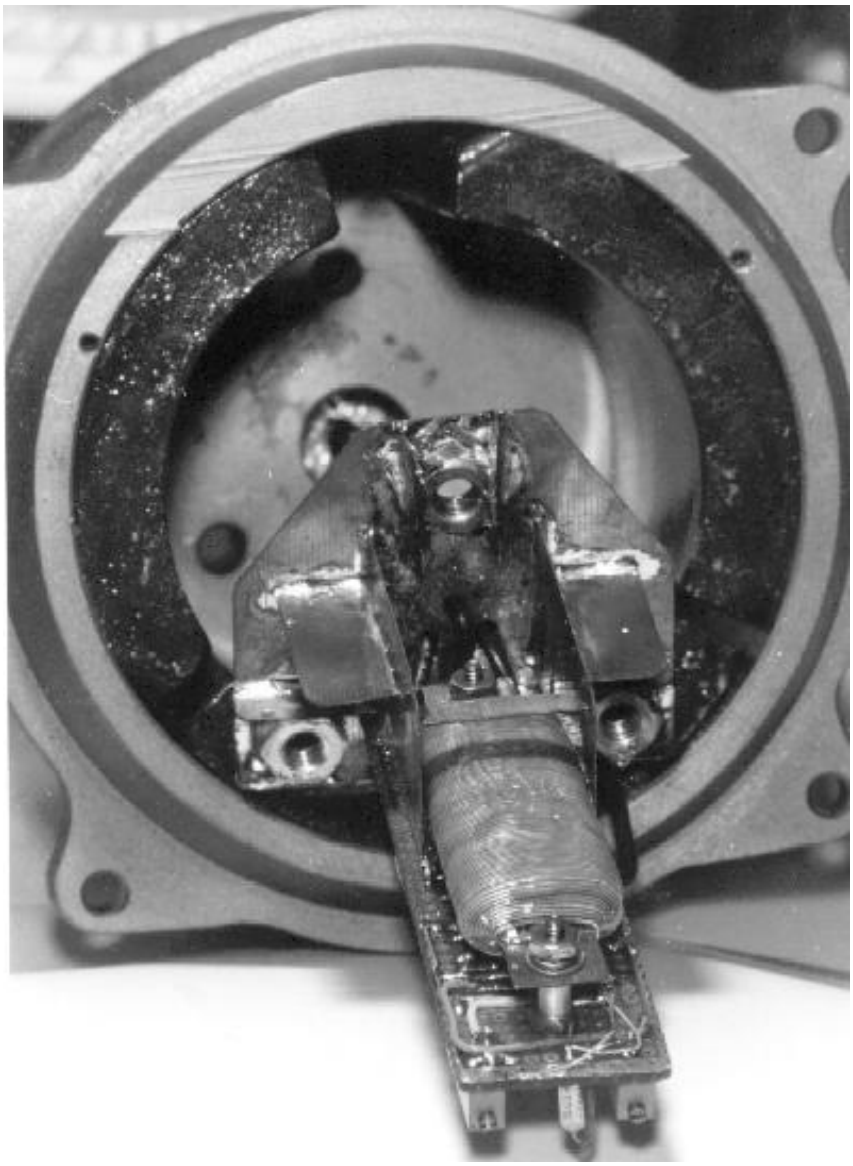
http://www.textfiles.com/bbs/KEELYNET/ENERGY/reply2.asc

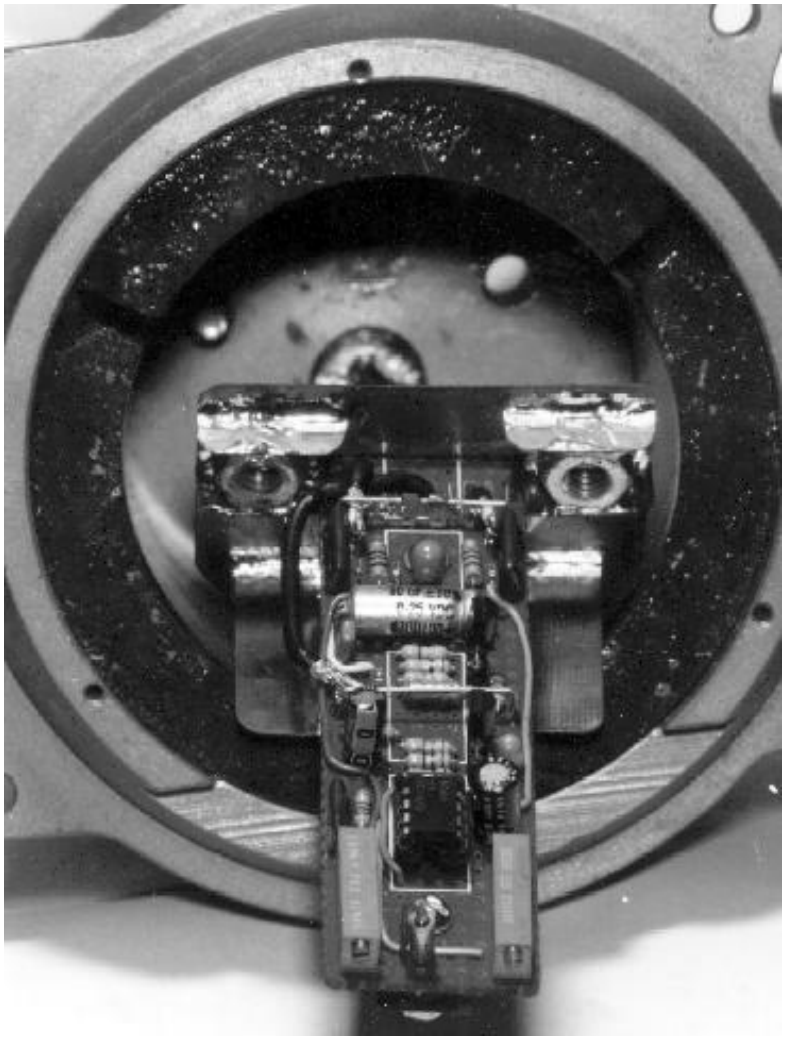
http://www.textfiles.com/bbs/KEELYNET/ENERGY/replytvq.asc

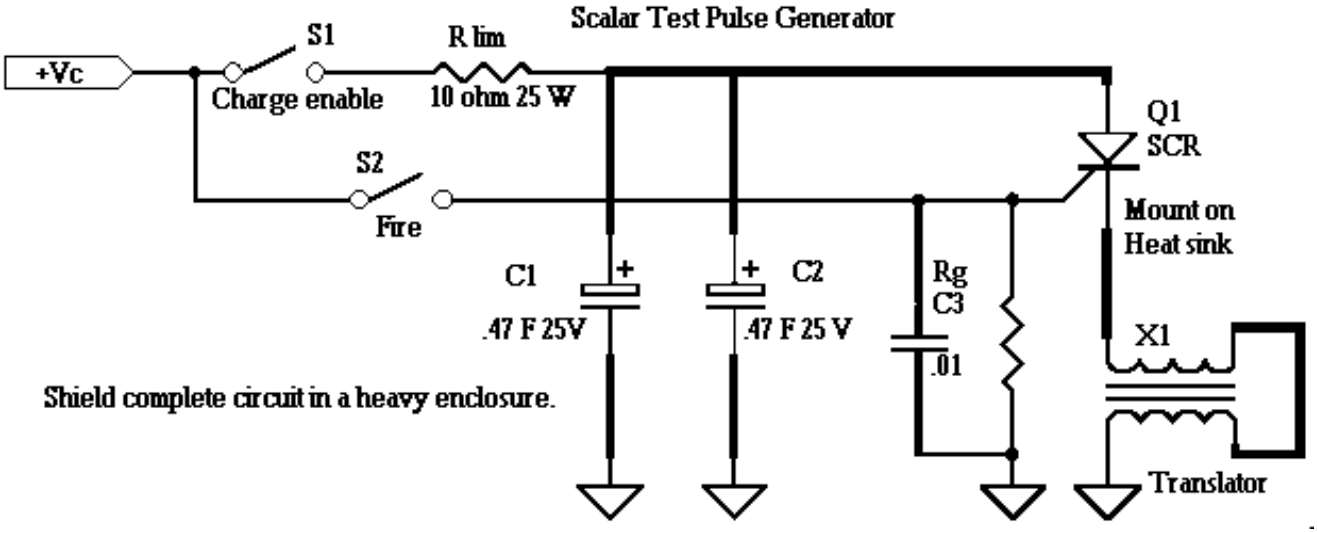
http://www.textfiles.com/bbs/KEELYNET/BIOLOGY/health1.asc

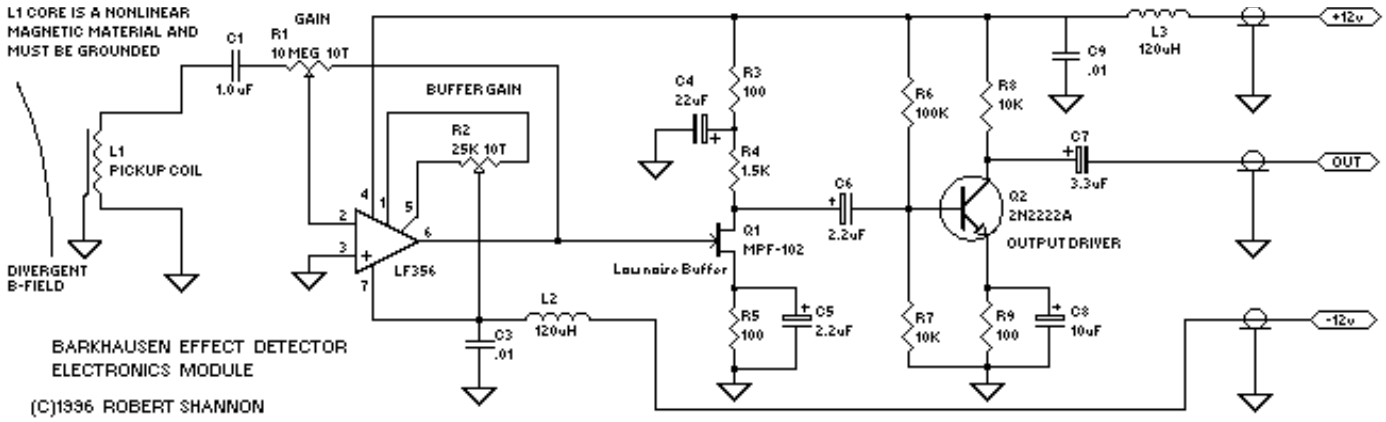
http://www.textfiles.com/bbs/KEELYNET/BIOLOGY/warning1.asc

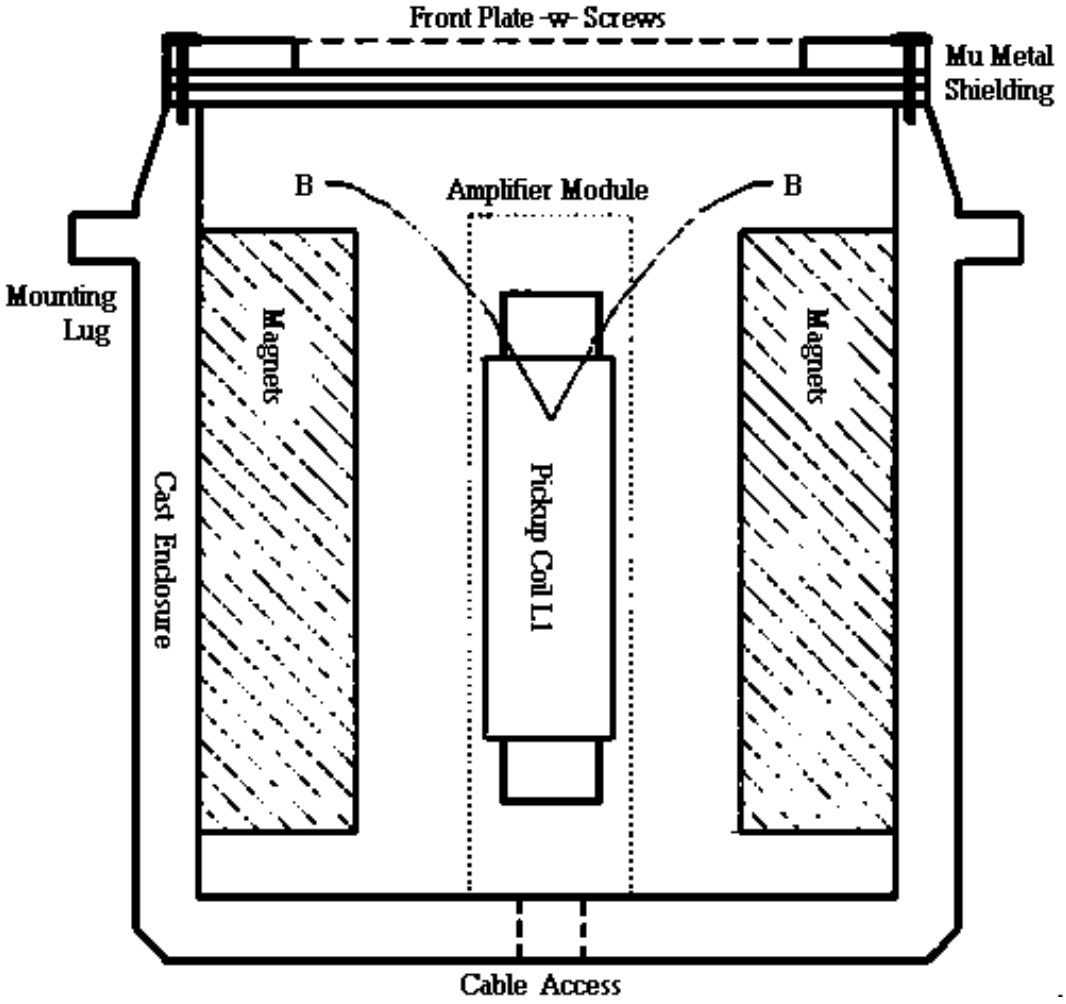
Barkhausen Effect Scalar Detector






Scalar Test Pulse Generator
+Vc
S1
Charge enable
R lim
10 ohm 25 W
S2
Fire
Q1
SCR
Mount on
Heat sink
C1
.47 F 25V
C2
.47 F 25 V
Rg
C3
.01
X1
Translator
Shield complete circuit in a heavy enclosure.





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