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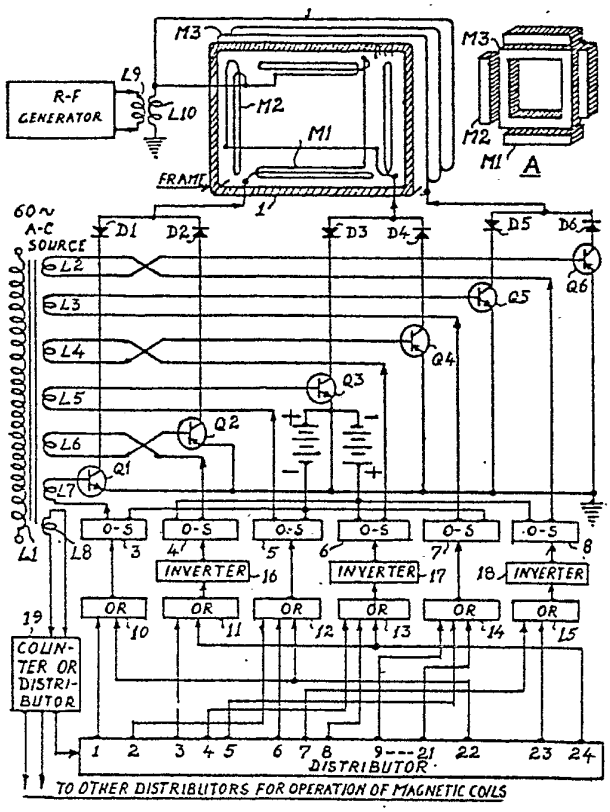
(57) Abstract

Ailments occur by inoperative states of the molecular mechanisms in the tissue matter. There are functional electrons in the molecular mechanisms, which rotate back and forth angularly within an arc of 45 degrees in normal operation. When these electrons rotate more than 45 degress, they keep on rotating toward 90 degrees, and 180 degrees. Because of operational interrelationship between molecules, adjacent molecules also become inoperative step by step, and lose their normal magnetic rejection to foreign molecules, and growth starts by invasion, as cancer. These depolarized electrons cannot return to their normal polar orientations, and therefore, artificial polar control is required. These mechanisms, however, are arrayed in the tissue three dimensionally, and the invention provides radiation of magnetic field that rotates in the tissue in at least three mutually perpendicular planes, for normalizing the depolarized electrons, as cure of cancer.



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Description

Field radiator for curing cancer & other ailments

This invention relates to apparatus for treating biological ailments, for example cancer, in tissue matter. More specifically, the invention relates to apparatus for treating ailing tissue matter through the application of magnetic field to the affected area of the tissue matter.

Background

The art of magnetic application for medical and biological treatment dates back several thousand years, as far as records indicate, due to observed beneficial effects that have been obtained under some methods of magnetic application. But the actual biological mechanism that responds to magnetic application has never been understood, and the experimentally skilled in this particular art have been trying all possible methods and systems of magnetic application with the hope of finding a way of ensuring that the magnetic field would strike the ailing area from the correct direction to effect the desired treatment.

The types of magnetic application that have been used so far, are: steady state magnetic application for a length of time from a singular direction; pulsed application from a singular direction for a length of time; and rotary application in a singular plane.

The main issue at this point is that these experiments have indicated that magnetic application can result in some beneficial effects, although so far, only partial improvement of any ailment has been achieved. However, no matter how insignificant the beneficial effects achieved may have been, it must be concluded that the observed effects can result only if the mechanisms in the tissue matter are responsive to

magnetic field. The present invention proceeds from the basis that all matters are constructed with atoms and electrons, and therefore, these are the component parts of the mechanisms of the living molecules that functionally respond to applied magnetism. This electron response represents a change in polar orientation and that the ailment which responds to applied field has been the result of pole disorientation of some of the active electrons from their normal polar orientations, rendering them inactive. The beneficial effects of well being, resulting from the magnetic application, is due to those pole-disoriented electrons in the molecular mechanisms being reoriented to their normal polar orientations for regaining their active functions, as a representation of well being. The problem is, however, in normal tissue matter the molecular mechanisms containing these functional electrons are arrayed three dimensionally in the tissue, and polar reorientation of only those electrons that happen to be located within a single plane can be achieved and, accordingly, effect only a partial well being, which is what has been observed and claimed by the previous experimenters.

Brief embodiment of the invention

The present invention provides apparatus for treating biological ailments in tissue matter, the apparatus being adaptable for radiating three separate pole-controllable magnetic fields from directions that cross transversely perpendicular one another at a segment of the body under treatment. The poles and radiations of these three fields are then controlled in a sequence and combinations, such that, the magnetic field at the segment of the body lies successively, and with 180 degree polar reversals along a plurality of lines of orientation, which occur in at least three mutually perpendicular planes, for rotating the depolarized electrons in the tissue to their normal polar orientations, as cure of the ailment.

Scientific understanding of the art

For simple understanding of how electron depolarization occurs in the tissue matter, the following brief analytical explanation describes how the molecular mechanism in the tissue operates in normal healthy state - how it is transformed into an ailing (more specifically, a cancerous) state - and how the ailing state can be reversed into normal operating state.

Atomic arrangement of the molecule

A living molecule consists of a series of interleaved generators which operate in a specific sequence for generating specifically oriented magnetic fields at the periphery of the molecule. These complex magnetic fields are so timed and oriented that adjacent molecules control each other's trigering actions of generation alternately, so that an operational interrelationship is created between adjacent molecules for binding only similar operating molecules in the tissue structure, and rejecting alien molecules.

Each generator consists of a pair of atoms and a functional electron entrapped between the two atoms. This electron rotates back and forth within a limited arc of 45 degrees under the control of RNA (ribonucleic acid) and DNA (deoxyribonucleic acid) for generation of the required magnetic field. In operation, the electrons from the RNA source are released and drawn toward the functioning electron by the initial force of the pair of atoms, and regenerated by precessional (wobble) feed-back of the functioning electron. This electron rotates up to 45 degrees while precessing from the lowest precessional resonance of about 12 centimeter wavelength, up to 3 centimeter at 45 degree rotation. At 45 degree rotation, a storage mechanism responsively resonant to 3 centimeter wavelength, stores and produces a pulsed voltage to trigger

the DNA source for release of DNA atoms. A single DNA atom and a single positive RNA atom are released simultaneously, which travel toward each other to the center of released string of RNA electrons. The travel motion of the DNA and RNA atoms toward each other causes sufficient magnetic flux for a single released electron to travel to the positive RNA atom, and the ywo atoms move away for elimination, or reuse.

From the above explanation, it is seen that the triggering action of the RNA source represents start of regeneration in a backward process, and this process continues until all of the released RNA electrons are eliminated for a new start of cyclic generation. This generates the specific field that binds similar molecules together in normal operating state. One important aspect of such operation is that, both the RNA and DNA sources to the generator are attached to respective RNA and DNA supply atoms, so that when one of these sources releases an atom it must be replenished by an atom from its string at the same time, because when this string is broken the source will not release an atom, no matter how much it may be stimulated to do so. Similarly, the RNA source will release electrons without being replenished by electrons, but when the magnetic tie of the string is broken, it becomes incapable of releasing electrons.

Transformation into cancerous state

The above given conditions relate to the normal operation of a molecule. Supposing now that during release of RNA electrons the RNA source is stimulated unnaturally (for example, by cancer causing agent) for releasing far greater number of electrons than required for normal operation. In this case, the charge of the storage mechanism cannot start triggering action of the DNA source for reverse regeneration, and the functioning electron is regenerated toward rotation to 90 degrees (at this point electron precession stops completely),

which is the maximum regeneration, and all operations stop at this point with no possibility of pole reversal. This is the stage in which strong paramagnetic resonance at about 3 cm. wavelength can be obtained by an external magnet. As stated in the foregoing, alternate control of adjacent molecules is now interferred with, and the adjacent molecules also stop operation step by step, but very slowly at the beginning. In time, when sufficient number of molecular mechanisms have become inoperative, the loss of the original peripheral magnetic field between adjacent molecules causes the strings of supply atoms to the RNA and DNA sources to recede, and because of the precessional radiation of the functioning electron has stopped at this point, the released RNA electrons are now drawn to the positive atoms in the RNA source. The direction of withdrawal of these electrons is such that the functioning electron keeps rotating in the same direction that it had rotated to 90 degrees, and makes a complete 180 degree pole reversal, instead of returning to its normal polar orientation. This is the condition in which param cannot be obtained - it stops completely, but can be resonated by electromagnetic radiation at about decimeter wavelength. This is because the functioning electron is bound to the 180 degree pole reversed orientation so strongly that it will require much stronger magnetic field to rotate the electron from its new polar position, except by resonant radiation. In other words, without the help of RNA electrons in the molecule, external magnetism alone cannot influence the functioning electron for polar normalization.

Treatment of cancerous state

As explained above, the RNA and DNA sources in a molecule become separated from their strings of supply atoms only after some number of molecules from normal molecules become

inoperative, because of a threshold volume in which they are forced to lose their magnetic hold of their supply strings. Thus, those inoperative molecules that are in the vicinity of normally operating molecules, have their RNA and DNA sources still intact with their respective strings of atoms, so that an external influence upon these functioning electrons from a direction at right angle to the pole disoriented positions will rotate these electrons to 90 degree angle by the regenerative help of released RNA electrons. If now we change the direction of this influencing field to the direction of the electron's normal polar orientation, the released RNA electrons will now be removed by degenerative DNA released atoms, and the functioning electrons will be reoriented to their normal polar states for normal operation. Thus, all that is necessary is external influencing field from two proper directions. Since this is not possible to predetermine, however, we may arrange this external field to undergo angular changes in direction in three dimensions to obtain the desired treatment. As stated in the foregoing, the curing action starts from those inoperative molecules which have their RNA and DNA sources still intact with their respective supply strings, which means that cure starts from the outer periphery of the growth, and not from the center. Since only few degrees of electron rotation is required to start regeneration, a field strength anywhere between 800 gauss to seven thousand gauss can be used, non-critically.

Brief description of the drawings

Fig. 1 illustrates partly diagramatic view of a rectangular assembly of magnetic coils M1, M2 and M3, wound around a rectsngular tubing through which the patient is inserted for treatment. A perspective view of M1-M3 is shown at A of Fig. 1. In conjunction with these coils, there is included a distributor arrangement for energization of the coils in a

specific sequence, for producing the required magnetic field in the body for treatment. Fig. 2 is a chart showing exemplary sequence of energization of the magnetic coils M1-M3. And Fig. 3 is an alternate version of the distributor and switching arrangement of Fig. 1.

Best mode of carrying out the invention

In Fig. 1, there are used three magnetic coils M1, M2 and M3, which are wound around a rectangular tubing 1, for producing three separate magnetic fields mutually perpendicular relative to each other, transversely to the longitudinal axis of the inner space of the rectangular tubing. For example, the first field is produced by the magnetic coil M3, which is wound around the rectangular tubing, to produce a magnetic field in a first direction longitudinal through the two open ends of tubing. The second field is produced by the coil M2, which is split into a pair of series-connected coils, for producing transverse field perpendicular to the longitudinal axis in the first direction. And the third field is produced by the coil M1, which is split into a pair of series-connected coils, for producing a transverse field perpendicular both to the longitudinal axis in the first direction, and to the field in the second direction. Thus, when the coils M1 and M2 are energized by a quadrature phased sine wave current, the polar orientation of the field in the rectangular tubing 1 will rotate circularly in a first plane. When the coils M1 and M3 are energized by the same wave current, the field will rotate in a second plane, perpendicular to the first plane. And when the coils M2 and M3 are energized by the same wave current, the field will rotate in a third plane, perpendicular to the first and second planes. Further, when M1 and M2, M3 are energized by the current, the field will also rotate circularly, but in this case, at an angle 45 degree with respect to the first and second planes. By these

examples, therefore, it is seen that the assembly arrangement of the coils M1-M3 is capable of producing a magnetic field in the spacing of the tubing 1, the polar orientation of which can be changed in any direction and plane, as desired. It will be noted, however, that the rectangular windings of the coils, especially the coil M3, will not produce uniform field in the central region of the tubing 1. But such imperfection is allowable for the purpose herein, because electron polar normalization can be established under wide variations of angular directions through which the field is applied. If desired, however, the assembly can be cylindrical, or square, as shown at A.

The current applied to the magnetic coils M1-M3 is supplied by the R-F generator in block 2, from its output transformer comprising L9 and L10. One of the terminals of L10 is connected in parallel with one of the terminals of M1, M2 and M3, and the other terminal of L10 is connected to ground for establishing closed circuits with the other terminals of M1 to M3 connected in series with the pairs of diodes D1, D2; D3, D4; D5, D6, and the pairs of PNP control transistors Q1, Q2; Q3, Q4; and Q5, Q6, respectively, connected to ground.

The NPN and PNP transistors Q1 to Q6 are normally rendered non-conductive by negative and positive bias supply voltages B1 and B2. The alternating sine wave voltages across the secondary inductance L7 to L2 are connected to the base electrodes of transistors Q1 to Q6, respectively, in series with the output circuits (not shown) of the one-shots in blocks 3 to 8, respectively, and the bias batteries B1, B2, to ground.

The bias voltages of B1 and B2 in series with the output operating voltages of the one-shots, and the peak output

voltages across the secondary coils L2 to L7 are so preadjusted that, during operation of one of the one-shots, for esample, the block 3, the NPN transistor Q1 becomes conductive only during the positive half cycle of the alternating wave from L1, and during operation of anyone of the one-shots, for example, the block 4, the PNP transistor Q2 becomes conductive, only during the negative half cycle of the alternating wave from L6. Thus, the outputs of one-shots in blocks 3, 5 and 7 are arranged to produce at their outputs positive pulse voltages, and the outputs of one-shots 4, 6 and 8 are arranged to produce negative pulse voltages. The operating duty cycles of the one-shots 3 and 8 are preadjusted to be a little longer than one half cycle period of the alternating wave from L1, to make sure that the transistors are kept active during a complete half cycle period of the alternating wave, which may be a standard commercial 60 cycle, or 40 cycles per second, in different countries. If greater time period than a half cycle of the sine wave is desired to be devoted to energization of the magnetic coils, then the operating duty cycles of the one-shots 3-8 can be lengthened, up to the full time periods devoted between different coil energizations by the switchings to the coils M1-M3. In this case, the energization of coils M1 to M3 will be only during periodic half cycles of the sine wave from L1, because during the alternate half cycle periods one of the pairs of transistors remain inoperative.

The operating distribution of these one-shots is controlled by the outputs of distributor in block 9, the sequentially operating outputs of which are coupled to the multi-inputs of the OR-gates in blocks 10 to 15, in prearranged sequence and combinations. The comman outputs of OR-gates 10 to 15 are coupled to the operating inputs of the one-shots 3 to 8, respectively, for operation. As mentioned in the foregoing, the outputs of one-shots 3, 5 and 7 should produce

positive pulses at their outputs, and the one-shots 4, 6 and 8 should produce negative pulses. Thus, it may be necessary that the inputs of one-shots 3, 5, 7 and 4, 6, 8 are of opposite polarities. For this reason, the voltage inverters 16, 17 and 18 are included in the drawing. But such an arrangement depends on how the internal circuits of commercially available integrated devices are designed. Then again, when the magnetic coils M1 to M3 are designed for low frequency operation, for example, at 60 cycles per second, they may require high current energization, and therefore, the transistors Q1 to Q6 should also be capable of delivering these high currents. Thus, the commercially available one-shots might need amplifiers to drive the inputs of these transistors. If R-F is used for the coils M1-M3, the R-F may first be 100 percent amplitude modulated by the half sine waves from coil L1. It will be observed that the OR-gates; one-shots; and the diodes in operation act as switching circuits, and therefore, other suitable switching means may also be utilized, operated under control of the distributor.

A segment of the special coupling arrangement of the outputs of distributor 9 to the inputs of OR-gates 10 to 15 is shown to concur with the sequence of magnetic coil energization, as shown by the chart of Fig. 2. For example, in a reference starting point (number 1 of the chart) of coil energization, a positive current is passed through the coil M1, which produce a first magnetic field in a first direction toward a first plane between its series connected windings, transverse the longitudinal axis of the rectangular opening of the tubing 1. In the second step of coil energization sequence, a positive current is passed through the coil M2, which produces a second magnetic field in a second direction toward a second plane perpendicular to the first plane, between its series connected windings, transverse said longitudinal axis of the tubing 1. And in the third step of coil

energization, a negative current is passed through the coil M3, which produces a third magnetic field in a third direction toward a third plane perpendicular both to the first and second planes, transverse said longitudinal space. These steps of coil energization are continued to the twelvth step, for rotation of the field in 90 degree angular steps within mutually perpendicular first, second and third planes. When rotation of the field is desired to occur in 45 degree angular steps, then the sequence of steps 13 to 16 may be used, as example - but the simultaneous availability of oppositely polarized R-F voltage is not shown in Fig. 1, as required in the step 16 of the chart in Fig. 2. Also, if rotation of the field is desired to occur in more than three planes, then the sequence of the steps 17 to 24 can be used, as example. By these examples, accordingly, it is seen that the magnetic field produced in the space region of the tubing 1 can be rotated in any direction and plane, as desired, by modifying the couplings from the output of the distributor in block 9, to the multi-inputs of the OR-gate in blocks 10 to 15. For fast operation of the magnetic coils M1 to M3, however, the sequence of coil energization from the first to the twelvth switching of the chart in Fig. 2 will suffice for practical purposes. For this reason, a manual switch may be incorporated with the arrangement of Fig. 1, so that the technician in charge can decide which mode to use.

The time period of a depolarized functional electron to rotate to its normal polar orientation is about one eighth of a second, as the shortest time period, and one half second as the longest period. Therefore, the rectified half cycles of the a-c voltage from the coil L8 (circuit not shown) may be counted by the counter 19, and operate the distributor 9 at every predetermined count, as shown. The distributor 19 is shown with extra outputs, for operation of other sets of magnetic coils that may be placed at different segments of

the body for simultaneous tratment as desired.

Modified arrangement of Fig. 1.

In Fig. 1, the magnetic coils M1 to M3 are shown to be high frequency inductances, which are energized by the R-F generator in block 2. The preference between high frequency coils and low frequency coils is a matter of choice for practical purposes, because in using low frequency coils, for example at 60 cycles, the coils would require large number of copper wire, which will add bulk and weight to the apparatus. But at commercial 60 cycle line, the power is readily available, either directly, or through a transformer, if higher voltage is required. Whereas, at high frequency operation, the weight of the coils M1 to M3 can be light, but an R-F generator is required. Also, the high frequency field will cause heat in the body. In either case, a radiation shield may be preferred to be used surrounding the coils. In high frequency operation, the shielding material is conventional, but for low frequency operation, magnetic shielding material is used, for example, the MU metal. In the case that 60 cycle line power is preferred for energizing the coils M1-M3, the distributing arrangement of Fig. 3 may be used.

In Fig. 3, the pulse-formers in blocks 20 and 21 derive pulse signals from the a-c source in block 22, as shown graphically by waves at the right hand side of blocks 20-22. The output pulses of blocks 20 and 21 are mixed in the OR-gate in block 23, and applied to the input of the distributor 24, which operates at the crossing points of the upper and lower lobes of the a-c sine wave. The distributor 24 counts the half cycles of the a-c source to a predetermined count, and the last two outputs of the predetermined counts are mixed at the two inputs of the OR-gate in block 25. The last output is applied to one of the inputs of OR-gate 50, for impressing upon its clear input, for a new start of counting.

The output of OR-gate 25 is applied to the input of the distributor in block 26, which makes two distinct operations at every predetermined count of the counter 24. This provides two output operations of the distributor 26, at every predetermined count coincident with the timings of the positive and negative half cycles of the a-c input. Thus, at any required timing of energization of the coils M1-M3, either the positive or negative lobe of the a-c source is available, even though there occurs a half cycle timing difference between the two separate operations at the outputs of the distributor 26. In other words, the coils M1-M3 may be connected to either the positive voltage or the negative voltage of the a-c line source, by selecting the proper timing during which the particular outputs coincide with a positive or negative lobe of the alternating cycle - disregarding the timing difference that occurs between the positive and negative lobes.

To make it clearer how the outputs of the distributor 26 are selected for coil energization, and in reference to the chart in Fig. 2, assume that a positive voltage of the a-c source occurs at the number 1 output of the distributor 26. This output is coupled to one of the multi-inputs of the OR-gate in block 27, which operates the set-reset trigger circuit in block 28, the output of which is amplified by the block 29 for operation of the relay RY1. The contact points 30, 31 and 32, 22 (as shown), and the control electrodes of controlled rectifiers D1 and D2 are connected to their anode electrodes in series with the current limiting resistors R1 and R2, for conduction. Thus, the magnetic coil M1 is energized by the positive lobe of the a-c wave.

During the negative lobe of the a-c wave, the number 2 output of the distributor 26 operates, and this output having been coupled to one of the multi-input OR-gate in block 34,

the set-reset triggers 28, 35 and 36 operate in reset states for releasing the operations of the relays RY1-RY3, by way of the amplifiers 29, 37, 38. The contact points of the relays open, and current to the coils M1-M3 stop. Thus, after each half cycle period of the a-c voltage, during which anyone, or combination, of magnetic coils are energized, during the following half cycle periods of the a-c line voltage the current through the magnetic coils are switched off, until the distributor in block 24 counts another predetermined number of half cycles of the a-c line voltage, for repetitive operation. In order to synchronize the timings of operations of the distributors 24 and 26, a pulse signal is derived from the last output (marked 59) of the distributor 26, by the one-shot in block 49, which applies this pulse signal to the clear input of the distributor 26, and simultaneously to the clear input of the distributor 24 by way of the OR-gate 50, so that the starting time periods of both distributors become coincident. Commercially available integrated circuits, however, contain feed-back connections to their clear inputs, and some of them may contain auxiliary connections, which may be used to eliminate the OR-gate 50, and the one-shot 49.

The number of outputs of the distributor in block 26 are marked by the numerals just below the output terminal connections, and the number of output terminals coupled to the inputs of the OR-gates 27, 47 and 48 are marked by the numerals below the numerals just mentioned. The numerals just below the output terminals are shown for the purpose to indicate which output terminals are coupled to inputs of OR-gate in block 34, and which outputs are left open, in order to select the proper timings of the positive and negative lobes of the a-c sine wave, for energization of the magnetic coils M1 to M3. If simultaneous positive and negative voltages of the a-c line is available, however, such as across the

secondary of a center tapped transformer, then the parallel connected anode terminals of diodes D1, D3, D5 may be connected to one secondary terminal, and the parallel connected cathode terminals of diodes D2, D4, D6 connected to the other secondary terminal of the transformer. By this availability of simultaneous positive and negative voltages of the a-c line, the output connections of the distributor to the OR-gates 27, 47, 48 can be simplified. The differentiating capacitors C1 to C13 are used to avoid direct connections from the outputs of the distributor to the inputs of the OR-gates 27, 47 and 48. This use, however, is not imperative, and they may be dispensed with, when proper integrated circuits are selected.

As described in the foregoing, the use of the commercial a-c line at 60 cycles is only for convenience. Therefore, the a-c source in block 22 can be a source of different frequency, or, it may be bipolar d-c source. Also, in reference to the distributor of Fig. 1, and the chart of Fig. 2, it may be desired to use only up to the twelvth switching of the coils M1 to M3. Thus in Fig. 3, an auxiliary one-shot, such as the one-shot 49, may be connected to the thirteenth output terminal of the distributor 26, and a manual switch to select either the one-shot 49 or the auxiliary one-shot. In this case, the OR-gate may have three inputs, so that the output of the auxiliary one-shot can be connected to the third input of gate 50. The outputs of one-shot 49 and the auxiliary one-shot may then be mixed in a two input OR-gate for connecting to the clear input of the distributor 26.

In reference to the output terminals of the distributor 26, there are shown 59 output terminals. But this is only exemplary, and any number of outputs for different modes of operation may be used, for example, arranging the couplings fron these terminals for allowing energization of the coils

M1-M3 during two or more periodic half cycles of the same sign, instead of only during one half cycle period of the a-c line wave.

In reference to the rectangular assembly of the magnetic coils M1-M3, these coils may be extended longitudinally, along the length of the body to be treated, so that the whole body can be treated by the same magnetic field, for fast treatment. But if such large volume of tissue matter is not desirable to be treated simultaneously by the same field, advantage can be taken from the fact that, after each pulsed field application the electron pole normalization is conducted in the tissue by self regeneration, as described in the foregoing. Thus, after a pulsed magnetic field is applied to a segment of the body, another segment of the body is ready to receive a magnetic field while the first segment is in a process of self regeneration. Therefore, instead of contructing the coils M1-M3 in one piece extending the length of the body, they can be made in narrow modules, for example, 2.5 centimeter wide, and operate these modular arrangements sequentially, for example, by the distributor in block 19 of Fig. 1. In fact, these modules can be made ring like, and plugged in on a base holder. This way, the weight of the magnetic coils can be reduced for mobility.

If high frequency is used by the generator in block 2, it may be at standard frequency for diathermy purposes, for example, at 13.56 megahertz. The standard power requirements will satisfy for the present purpose. Also, in reference to the coils M1-M3, the body shape relative to the coil M3 is such that inductive radiation is necessary for producing the longitucinal field through the body. Whereas, the inductances of M1 and M2 are parallel devices around the body. Thus, in the case of high frequency field application, the pairs of coils M1 and M2 can be pairs of capacitive plates, while the coil M3 can be inductive. Or, the coils M1, M2 and M3 can be

three pairs of spaced parallel capacitive plates, the electric field radiations between the three pairs of plates projecting toward a central area crossing transversely mutually perpendicular relative to each other.

The foregoing and other advantages obviously indicate that various other modifications, substitutions of parts, and adaptations can be made without departing from the true spirit and scope of the invention.

Claims

1. Apparatus for treating biological ailments resulting from depolarized electrons in three dimensionally arrayed molecular mechanisms in the tissue matter, comprising an assembly of first, second and third energizable radiators, for radiating electron-attracting fields from directions toward a treatment area, where the polar axes of said radiations cross transversely perpendicular relative one another; a bipolar energizing source; first, second and third pairs of controlled rectifier means interconnecting the energizing source and the first, second and third radiators, respectively, each rectifier means having a respective control means; first, second and third pairs of switching means, each pair having a plurality of inputs and a pair of outputs connected to a respective pair of the rectifier control means; and means operable to distribute successive switching signals selectively to the switching means for selective energization of the radiators, the said distributor means having a plurality of outputs coupled to the inputs of the switching means in an order of sequence such that, in operation the radiated field at said area changes in direction lying successively and with 180 degree polar reversals substantially in at least three mutually perpendicular planes, for normalizing said depolarized electrons.

2. Apparatus for treating biological ailments resulting from depolarized functional electrons in three dimensionally arrayed molecular mechanisms in the tissue matter, comprising an assembly of first, second and third energizable radiator means, for radiating electron-attracting fields from directions toward a treatment area, where the polar axes of said radia-

tions cross transversely perpendicular relative to each other; a bipolar alternating wave energizing source; first, sevond and third pairs of controlled rectifier means interconnecting the bipolar energizing source and the first, second and third radiator means, respectively, each rectifier means having a respective control means; first, second and third OR-gates, each gate having plurality of mixing inputs and an output; coupling means from the outputs of said first, second and third OR-gates to the pairs of control means of said first, second and third pairs of rectifier means, respectively. for operating each pair of the rectifiers at a time, whereby allowing anyone of said radiators to be energized by either lobe of said alternating wave source that may be present at a time of operation of said OR-gates; and a distributor means under control of the alternations of said source, for distributing operating signals to the plurality of inputs of said first, second and third OR-gates in an order of selective sequence and timing of the alternations of said source, such that, the polar orientation of the field radiated to the region of said area of the body by the selective energization of said radiators changes in angular directions lying successively and with 180 degree polar reversals substantially in at least three mutually perpendicular planes, for effecting electron polar normalization in the said area of the patient.

3. Apparatus for normalizing the polar orientations of depolarized electrons in three dimensionally arrayed molecular mechanisms of the tissue matter, causing biological ailments, the apparatus comprising an assembly of first, second and third radiator means for radiating electron-attracting fields from

directions toward a central area where the polar axes of said radiations cross transversely at right angles relative to each other, when energized; a bipolar energizing source; first, second and third pairs of controlled rectifier means interconnecting the energizing source and the first, second and third radiator means, respectively, each rectifier means having a respective control means; first, second and third pairs of switching means, each pair having a plurality of inputs and a pair of outputs connected to a respective pair of the rectifier control means; and means operable to distribute successive switching signals selectively to the switching means for selective energization of the radiators, the said distributor means having a plurality of outputs coupled to the inputs of the switching means in an order of sequence such that, in operation the radiated field at said control area changes in direction lying successively and with 180 degree polar reversals substantially in at least three mutually perpendicular planes, so that when an area of tissue containing depolarized electrons is placed at said central area, said polar normalization will occur.

4. The apparatus as in preceding claims, wherein said field radiators are electromagnetic radiators, comprising a first coil having a central longitudinal open space with a winding arranged to radiate a longitudinal first magnetic field through said open space, when energized; a second coil divided into a pair of parallel spaced series connected coils, wound in an orientation to radiate a second magnetic field between the pair of said second coils, transversely perpendicular to the axis of the first field through said longitudinal space, when energized; a third coil

divided into a pair of parallel spaced series connected coils, wound in an orientation to radiate a third magnetic field, when energized, between the pair of the third coil, transversely perpendicular both to the axes of the first and second fields, through said longitudinal space, whereby forming a longitudinal open space adaptable for insertion of a segment of a body for treatment, for said polar normalization.

5. The method of treating biological ailments, resulting from depolarized functional electrons in three dimentionally arrayed molecular mechanisms of the tissue matter, the method comprising the steps of radiating controllable first, second and third bipolar electron pole-attracting fields, from directions that are originally positioned in a singular plane, and the radiations of said fields cross each other at right angles transversely in a segment of the body of the patient under treatment; controlling the poles and radiations of each of said radiations selectively, and selectively distributing the said controls of poles and radiation states in an order of sequence and combinations such that, the polar orientation of the radiated field in said segment of the body changes in direction lying successively and with 180 degree polar reversals substantially in at least three mutually perpendicular planes, thereby effecting polar reorientation of said depolarized electrons at said segment to their normal polar orientations.

6. Apparatus, or method claims, as set forth in claims 1 to 3, or 5, wherein the distribution of energization to said first, second and third radiators is in an order ot sequence and combinations such that, each of said 180 degree pole reversals of said field at the said area is established by at least two 90 degree angular steps.

7. The apparatus, or method claims, as set forth in claims 1 to 3, or 5, wherein the distribution of energization to said first, second and third field radiators is in the form of pulses.

8. Apparatus as set forth in claim 2, wherein is included a counter for counting the alternation of said alternating wave source; and means for changing the state of operation of said distributor means only at predetermined counts of said counter.

9. Apparatus for treating biological ailments in tissue matter, the apparatus being substantially as hereinbefore described with reference to, and as illustrated by, the accompanying drawings.

AMENDED CLAIMS
(received by the International Bureau on 13 July 1981 (13.07.81))

(amended) 1. Apparatus for treating biological ailments resulting from depolarizdd electrons in three dimensionally arrayed molecular mechanisms in the tissue matter, comprising an assembly of first, second and third energizable radiators, for radiating first, second and third electron-attracting bipolar transverse fields to a treatment area of said ailment from directions located in a singular plane of said assembly, with polar field orientations crossing axially and transversely at right angles relative to each other at said treatment area; a bipolar energizing source; first, second and third pairs of controlled rectifier means interconnecting the energizing source and the first, second and third radiators, respectively, each rectifier means having a respective control means; first, second and third pairs of switching means, each pair having a plurality of inputs and a pair of outputs connected to a respective pair of the rectifier control means; and means operable to distribute switching signals selectively to the switching means for selective energization of the radiators, the said distributor means having a plurality of outputs coupled to the inputs of the switching means in an order of sequence such that, in operation the radiated field at said area changes in direction lying successively and with 180 degree polar reversals substantially within three mutually perpendicular planes, for normalizing said depolarized electrons.

(amended) 2. Apparatus for treating biological ailments resulting from depolarized functional electrons in three dimensionally arrayed molecular mechanisms in the tissue matter, comprising an assembly of first, second and third energizable radiator means, for radiating first, second and third electron-attracting bipolar transverse

fields to a treatment area of said ailment from directions located in a singular plane of said assembly, with polar field orientations crossing axially and transversely at right angles relative to each other at said treatment area; a bipolar alternating wave generating source; first, second and third pairs of controlled rectifier means interconnecting the bipolar energizing source and the first, second and third radiator means, respectively, each rectifier means having a respective control means; first, second and third OR-gates, each gate having plurality of mixing inputs and an output; coupling means from the outputs of said first, second and third OR-gates to the pairs of control means of said first, second and third pairs of rectifier means, respectively, for operating each pair of the rectifiers at a time, whereby allowing anyone of said radiators to be energized by either lobe of said alternating wave source that may be present at a time of operation of said OR-gates; and a distributor means under control of the alternations of said source, for distributing operating signals to the plurality of inputs of said first, second and third OR-gates in an order of selective sequence and timing of the alternations of said source, such that, the polar orientation of the field radiated to the region of said area of the body by the selective energization of said radiators changes in angular directions lying successively and with 180 degree polar reversals within three mutually perpendicular planes, for effecting electron polar normalization in said ailing area.

(amended) 3. The system for producing a directional electron-attracting field at a fixed focal point and successively changing the direction of said field in a plurality of angular directions lying successively and with 180 degree polar reversals within three mutually perpendi-

cular planes, the system comprising an assembly of first, second and third energizable radiator means, for radiating first, second and third electron-attracting bipolar transverse fields to a focal point from directions located in a singular plane of said assembly, with polar field orientations crossing axially and transversely at right angles relative to each other at said focal point; a bipolar energizing source; first, second and third pairs of controlled rectifier means interconnecting the energizing source and the first, second and third radiator means, respectively, each rectifier means having a respective control means; first, second and third pairs of switching means, each pair having a plurality of inputs and a pair of outputs connected to a respective pair of the rectifier control means; and means operable to distribute successive switching signals selectively to the switching means for selective energization of the radiators, the said distributor means having a plurality of outputs coupled to the inputs of the switching means in an order of sequence such that, in operation the radiated field at said focal point changes in direction lying successively and with 180 degree polar reversals substantially within three mutually perpendicular planes.

4. The apparatus as in preceding claims, wherein said field radiators are electromagnetic radiators, comprising a first coil having a central longitudinal open space with a winding arranged to radiate a longitudinal first magnetic field through said open space, when energized; a second coil divided into a pair of parallel spaced series-connected coils, wound in an orientation to radiate a second magnetic field between the pair of said second coils, transversely perpendicular to the axis of the first field through said longitudinal space, when energized; a third coil

divided into a pair of parallel spaced series- connected coils, wound in an orientation to radiate a third magnetic field, when energized, between the pair of the third coil, transversely perpendicular both to the axes of the first and second fields, through said longitudinal space, whereby forming a longitudinal open space adaptable for insertion of a segment of a body for treatment, for said polar normalization.

(amended) 5. The method of treating biological ailments, resulting from depolarized functional electrons in three dimensionally arrayed molecular mechanisms of the tissue matter, the method comprising the steps of radiating controllable first, second and third electron-attracting bipolar fields to a treatment area of said ailment from directions within a singular plane with polar field orientations crossing axially and transversely at right angles relative to each other at said treatment area; controlling the poles and radiations of each of said radiations selectively; and selectively distributing the said controls of poles and radiation states in an order of sequence and combinations such that, the polar orientation of the radiated field in said treatment area changes in direction lying successively and with 180 degree polar reversals substantially within three mutually perpendicular planes, thereby effecting polar reorientation of said depolarized electrons at said treatment area to their normal polar orientations for obtaining a desired cure.

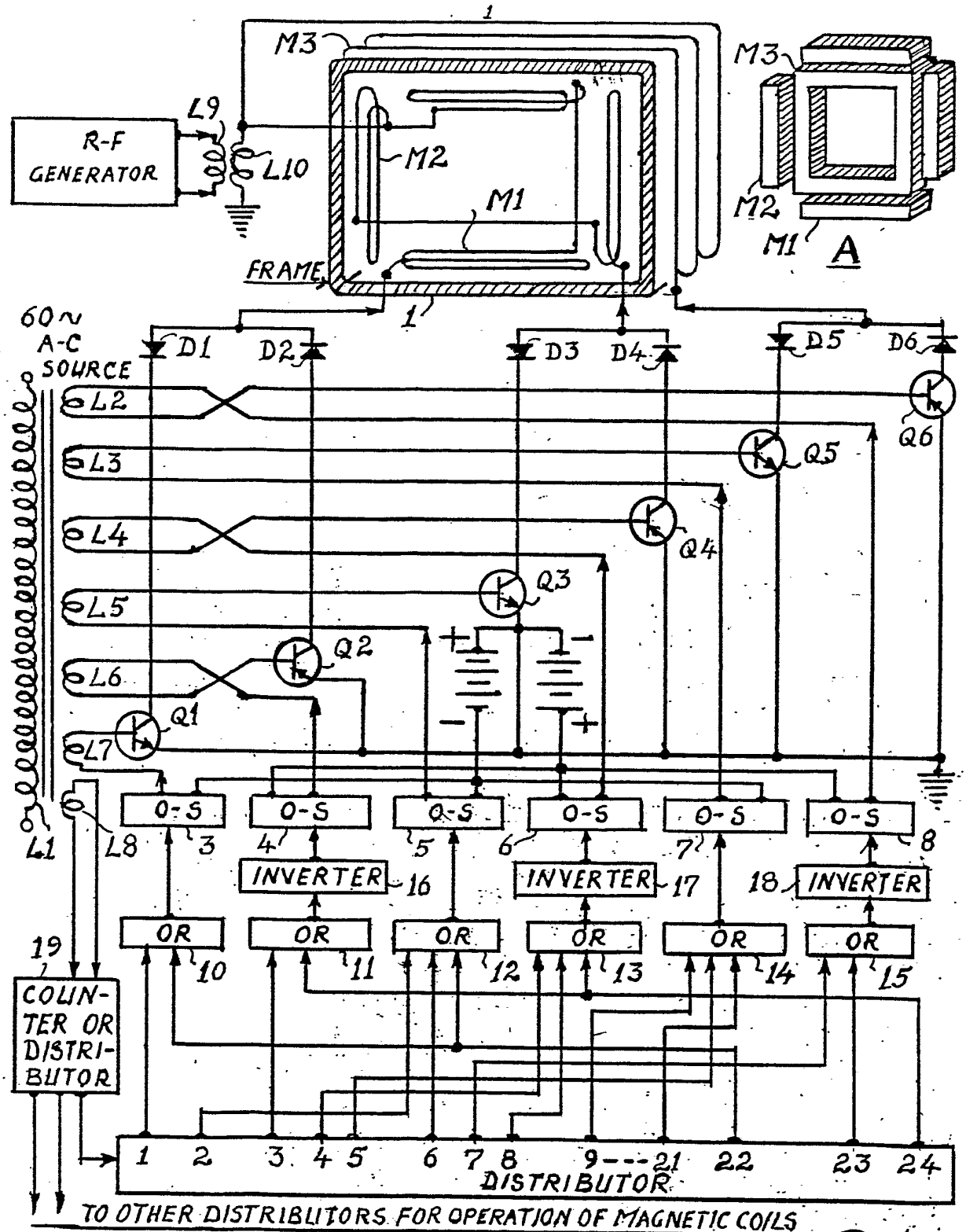

Fig.1

1	M1+	9	M3+	17	M2+
2	M2+	10	M1+	18	M1+, M3+
3	M1-	11	M3-	19	M2-
4	M2-	12	M1-	20	M1-, M3-
5	M3+	13	M1+	21	M3+
6	M2+	14	M1+, M2+	22	M1+, M2+
7	M3+	15	M2+	23	M3-
8	M2-	16	M2+, M1-	24	M1-, M2-

Fig.2

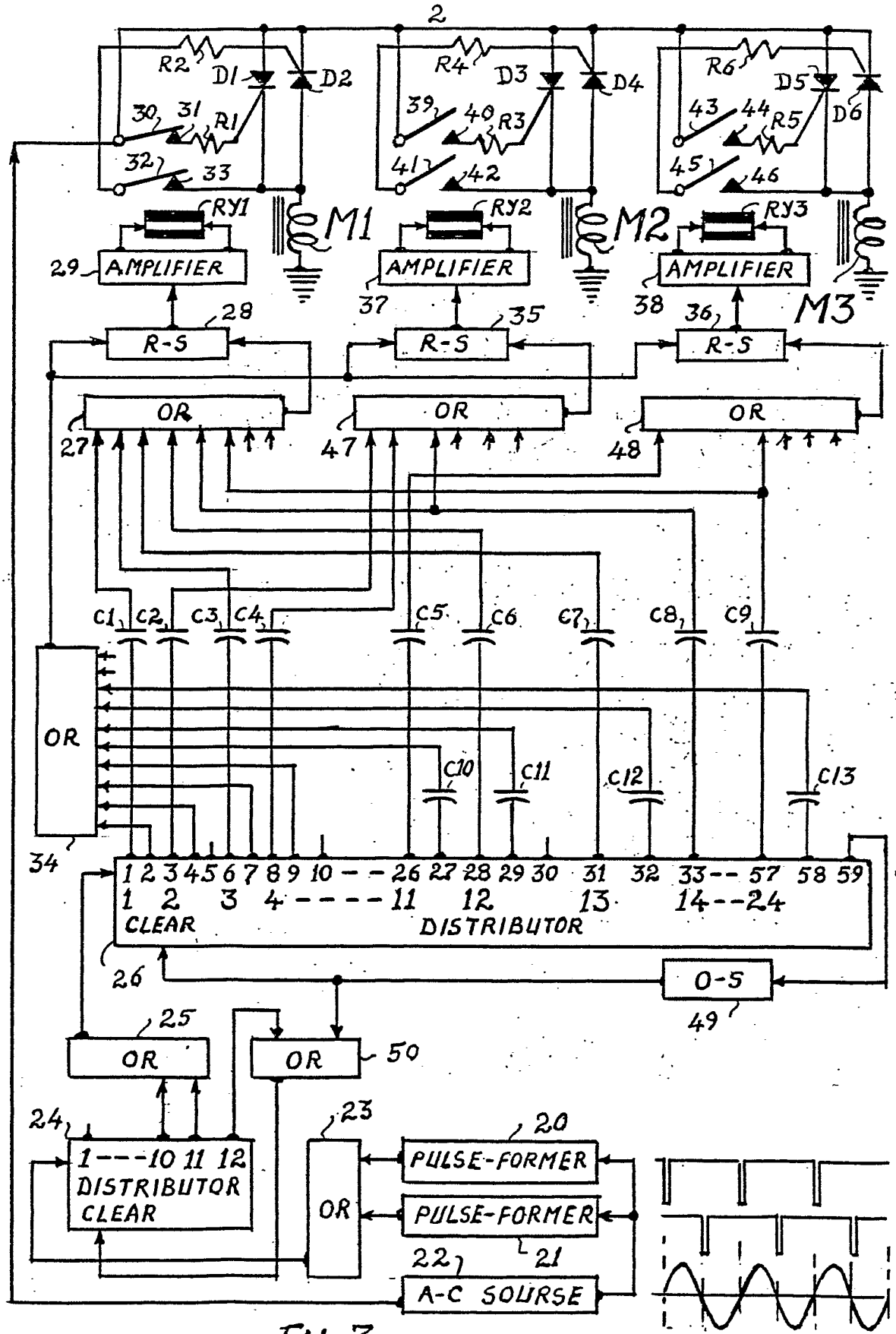

Fig. 3

INTERNATIONAL SEARCH REPORT

International Application No PCT/US80/01114

I. CLASSIFICATION OF SUBJECT MATTER (if several classification symbols apply, indicate all) [3]

According to International Patent Classification (IPC) or to both National Classification and IPC

Int. Cl.[3] A61N 1/00
U.S. Cl. 128/804

II. FIELDS SEARCHED

Minimum Documentation Searched [4]

Classification System	Classification Symbols
US	128/1.3,1.5,653,804 324/307,309,316,317

Documentation Searched other than Minimum Documentation to the Extent that such Documents are Included in the Fields Searched [5]

III. DOCUMENTS CONSIDERED TO BE RELEVANT [14]

Category *	Citation of Document, [16] with indication, where appropriate, of the relevant passages [17]	Relevant to Claim No. [18]
X,E	US,A, 4254778 Published 10 March 1981 CLOW et al	1-9
A	US,A, 4095588 Published 20 June 1978 GOLDMAN et al	
A	US,A, 3658051 Published 25 April 1972 MACLEAN	
A	US,A, 3789832 Published 05 February 1974 DAMADIAN	
A	DE,A, 2353959 Published 07 May 1975 GRAF	
A	DE,A, 2655723 Published 15 June 1978 FICHTNER	

* Special categories of cited documents: [15]

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"L" document cited for special reason other than those referred to in the other categories

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but on or after the priority date claimed

"T" later document published on or after the international filing date or priority date and not in conflict with the application, but cited to understand the principle or theory underlying the invention

"X" document of particular relevance

IV. CERTIFICATION

Date of the Actual Completion of the International Search [2]	Date of Mailing of this International Search Report [2]
10 June 1981	17 JUN 1981
International Searching Authority [1]	**Signature of Authorized Officer [20]**
ISA/US	Francis J. Jaworski

Form PCT/ISA/210 (second sheet) (October 1977)