MADE IN THE U.S.A./PATENT PENDING:

T H E C R A N E R E P O R T

For Limited Circulation Only Within Rife Laboratory

Text: pages 1-14
Appendix: pages 15-46

The original version was incomplete, missing many pages. We have now inserted nearly all the missing pages (only Appendix T, page 40 is missing) and extended it by including the full patent in Appendix Z. Released: www.rife.de on May 22, 2017

Introduction -- Rife and Crane

Before examining the issues and papers pertaining to patenting of the Rife-Crane cancer cure technology, it is best if the history of the cure's development be fully understood. This history is described in a report titled THE CANCER CURE THAT WORKED: 50 YEARS OF SUPPRESSION. It provides the necessary overview. For easy reference, it is commonly termed in correspondence THE RIFE REPORT or RR. The report you are holding now, titled THE CRANE REPORT or CR, may be viewed as an essential supplement to RR. However, while the RIFE REPORT is for general circulation and is copyrighted, THE CRANE REPORT is for limited circulation within Rife Laboratory. If you receive a copy, it is with the understanding that it will not be copied or shown to anyone else without authority from the managers of Rife Laboratory. Changes are expected to be made in this report as it evolves.

THE RIFE REPORT describes (1) how Roy Rife invented a super microscope which enabled scientists to see viruses in their live state and "stain" the viruses with color instead of chemicals; (2) how Roy Rife invented Frequency Instruments (FI) which, using electronic frequencies set on the unique rate of each virus, destroyed them in slides, in animals, and in humans; (3) how medical, pharmaceutical, cancer and political authorities combined to suppress the discovery and its various techniques.

What is <u>not</u> covered in THE RIFE REPORT is that in 1950 Rife became partners with John Crane and the microscope and Frequency Instruments were not only improved and further developed through a cooperative effort, but re-invented according to a new design of John Crane's. It is Rife's and <u>Crane's</u> inventions which a patent approval will be sought.

Rife died in 1972. Crane is alive. Crane applied for patents in 1969. Rife had sold all his materials and early instruments to Crane by then. He also prepared a legal document specifying that any patent granted in his name should be assigned to Crane and Crane's assignees.

Because Crane's patent application (1) combined several inventions; (2) did not adhere to Patent Office standards and procedures; (3) were negligently handled -- as the Patent Office admitted in a letter to Crane's Congressional representative -- the years 1969-1973 witnessed a Patent Office blunder of monumental proportions. The patent applications of 1969 and 1971 clearly state that the cure for cancer and other diseases was available because of this technology. Yet the application was treated in a bureaucratically narrow and apparently offhand fashion -- while hundreds of thousands of Americans, including children, died annually and continue to die (480,000 a year is the current rate).

It is possible that patenting of the cancer cure cannot be obtained and that control and protection of the technology will have to be sought through trade secret provisions in leasing contracts or even the establishment of unique healing centers. However, it is also possible that some <u>critical</u> elements of the technology still can be protected as a result of approval by the Patent Office or because of either judicial or legislative action.

For this reason, it is essential that the patent attorney not only have the required expertise, but also an appreciation of the social importance of the technology and perhaps a "fire in the belly." A crime has taken place here and it is monstrous. The numbers of Americans who have died because of the cancer cure's suppression exceed those murdered by Hitler or Stalin.

It is also worth keeping in mind that, given the circumstances, a special Congressional Act might provide legal protection not possible through orthodox channels. With AIDS now a growing health threat and the clear likelihood that the Rife-Crane technology can cure and prevent the spread of AIDS, if not eradicate it, such special political legislation ought not be dismissed as impossible. A public furor concerning this matter is a distinct possibility -- out of which could emerge the foundation for an entirely different health treatment and disease prevention system.

Therefore, from the outset, the attitude of the patent attorney, and indeed all others associated with this endeavor, should be "visionary" as well as realistic.

Patenting Summary

The question of patenting the cure for cancer is crucial to any business plan or indeed general direction for Rife Laboratory. Not only isit a major element in interesting investers, but it also involves the essential choices regarding how resources will be used. This summary will outline some of the problems, some of the options, and perhaps serve as an initial working paper for developing a broad range of policies.

While a patent attorney obviously knows the law, the loopholes, various strategies and more than the author could learn in a year's research, he does have an overview which any patent attorney will lack upon initial examination of this matter. Therefore, it is certain that this report can be valuable. Nevertheless, in presenting facts critical to the ultimate patenting decisions, the author is aware that many ideas or perhaps notions included here will be worthless. Hopefully, a few may be worth developing.

A patent provides a monopoly for 17 years from the time it is issued. Thus, as in the extreme case where General Motors fought the Patent Office through 3 court trials for 26 years, upon winning, the patent provided General Motors with a protection for their invention that lasted for the next 17 years. It also protected them against any infringement which took place during the previous 26 years of litigation.

The patent monopoly is granted for the limited time of 17 years with the understanding that "full disclosure" be made in public records. Thus, when the patent runs out, the invention is in the public domain and anyone can use it. Lincoln, in a famous saying, proclaimed, "The patent system added the fuel of interest to the fire of genius." The patent system rewards the inventor(s) financially. That is integral to the system. But the price of that monopoly is that the inventor bring his system to the public and after a period of time, it belongs to everyone.

The Patent Office's role is to ensure that the invention is original and "useful." Usefulness is a key point as will be seen. Patent examiners have been known to cite ancient writings to show an idea is not original. This also brings forth a critical point -- publishing one's ideas before attempting to patent them is grounds for denying a patent. The "publication" can consist of as little as one typed manuscript being placed in one library. The author will return to this point later because it obviously is central to the cancer cure inasmuch as there are published writings by Rife and Crane or about Rife and Crane prior to Crane's initial 1969 patent submission.

Another reason for denying a patent is "public sale" of the invention prior to the patenting. More on this later.

It should be kept in mind that it is in the government's interest to encourage useful inventions and thus grant a limited monopoly for a time in order that the invention ultimately be put in the public domain. However, an inventor who goes the "trade secrets" route keeps the commercial value for as long as he can protect the secrets and control the interest of his market. The formula for coca-cola has never been patented. It is a closely guarded secret. Whether such a direction would be possible with the Frequency Instrument or even appropriate seems highly unlikely to the author of this report, although the microscope might fit such a program.

One important exception to the "public sale" criteria is that a use in public is not a "public use" if it is genuinely experimental. As a necessary step in bringing about a working, useful model, public experimentation may not invalidate a patent claim. In this situation, requiring doctors' results before an announcement that a cancer cure existed, the sale of the early models possibly may not have invalidated the later patenting. This is especially relevant because of the AMA, FDA quashing of those involved and the fact that as 1986 ended, no cure of cancer by this technology is practiced or publicly known. Obviously this [redacted] "experimental use" exception could be a critical point for later litigation -- affecting all aspects of the patent request (in proceeding with the Patent Office or other channels).

However, the "prior publishing" and "prior sale" restrictions should not be dismissed as easy obstacles. On these two qualification points of patent law and tradition, the Patent Office, the courts, the government's "public interest" and a host of competitive manufacturers (including AMA-affiliated interests) could sue in order to gain the right to produce Frequency Instruments. The record will provide them with mountains of argument.

It is also important to keep in mind that having a patent means nothing if you lose a court case. The Patent Office sits on the sideline. The patent holder must defend himself any and every time he is challenged. With the money at stake here, we can assume that even a patent will not prevent us from being challenged in the courts. One argument in our favor may be that the simplicity of the Frequency Instrument makes it in the nation's interest to grant a patent. Otherwise, cheap Asian copies of the Frequency Instrument are almost certain. Made in the U.S.A./Patent Pending was used as the title of this report for quite specific reasons. We potentially have a chance to establish an entire new industry which could reverse some of America's technological/industrial trade problems. This may be our strongest legal position, political though it may be.

A footnote to this entire question of patenting is that by openly printing the details of an invention, an inventor prevents anyone else from patenting that invention. This is rather important because a patent was issued on a Frequency Instrument in November 1986. While the 36 year old doctor's patent involved stimulating the production of interferon in cells, not the destruction of cancer virus, it is a Frequency Instrument treatment of cancer. He could theoretically prevent us from manufacturing Frequency Instruments unless we showed Rife's and Crane's published reports invalidated his patent. (See Appendix Z for details)

This 1986 patent opens a variety of options. The first is that we have one year to file with the Patent Office and contest the granting of that patent. Reading a patent for a Frequency Instrument also will enable us to see how one is approved. (Comparing the approved version to the rejected applications of John Crane in the 1969-1973 period.) A third choice is to join forces with this doctor at a later stage. He is young, obviously has experience and interest in the field, and certainly we have years of development before us. A book titled INSIDE THE U.S. PATENT OFFICE states:

> "An interference may also arise after a patent has been issued if the patent is not more than 1 year old; and the patentee may lose his patent if the interference proceedings should go against him. An interference proceeding is held under the auspices of the Patent Office and the decision regarding priority of invention is made by a Board of Interference.
>
> "On more than one occasion, however, interferences have been resolved by the parties themselves, through mutual agreement."

Another consideration is that a new application for a patent takes an average of 2 years to be concluded. There is no possibility of waiting for a patent approval -- even if there weren't exceptional obstacles such as exist here -- before manufacturing and using the Frequency Instruments on desperate, dying people (including children). While it may be possible to speed up the patent process through a special petition and reactivation of the '69 claim, we can't devote major attention to the patent process at the expense of making actual treatment available. Obviously, any investor who stresses the patenting as necessary before he can come in should be politely

informed that he wants an unrealistic security -- discussions should cease immediately.

On the question of refiling, any patent application that is rejected can be reinitiated with a new application. The details of rejected patent applications are not made public. Even more significant, an application for a patent may be abandoned and subsequently renewed with the approval of the Patent Office.

A few more relevant facts -- (1) a patent can be extended by an Act of Congress under special circumstances (perhaps a patent such as this can be granted in a similar way); (2) an application can be examined with priority, bypassing those filed ahead of it (again, under special conditions); (3) a patent can be granted to a dead man if an application is filed by the inventor's executor or administrator (pertains to Rife, not Crane).

Finally, to conclude this general section, a quote from George E. Polk which may be relevant in light of the abuse heaped on Rife and Crane by the AMA, government, American Cancer Society, etc. Keep in mind that once we got the cancer cure working openly and the story gradually got known, we would be in a very different position for long-term legal battle. Polk:

> "I was a general patent attorney for, I believe, the largest corporation in the world. The fellow I was most afraid of was the small inventor, for the simple reason that if he succeeded in litigation with the company, the profits and damages he got were so large that we always dealt with the small inventor if we possibly could. So we do not get the idea that the small inventor has not his resources. If he has a good invention, he will get something out of it ultimately, and I would rather be in his place than the large corporation he is bucking."

Crane's Story

THE RIFE REPORT (RR) or THE CANCER CURE THAT WORKED: 50 YEARS OF SUPPRESSION tells the tale of Roy Rife's cure for cancer and also the scientific validation of pleomorphism which has continued to the present time. Absent from RR is the story of his partner, John Crane. In picking up the pieces of the original tale at the time John Crane entered the picture, the author here will be outlining the problems and possibilities involved in patenting the Frequency Instrument as well as the microscope.

In 1950, John Crane met Roy Rife. After learning how Rife had cured cancer in the 1930s but had seen his cure suppressed by the AMA, Crane decided to commit his energy, will and electronic and mechanical knowledge to bringing the cure for cancer to the public. Dr. Gruner of Canada, who worked with Rife in the '30s, provided Crane with one of the original circuit designs for the Rife Ray Tube. Crane also hired Verne Thomson, an electronics expert with the San Diego police force, to help construct the new Frequency Instruments.

Unfortunately, Rife had enlisted the help of electronic experts in the '30s who never wrote down the details of the instruments. Rife was unable to duplicate the marvels of his earlier Frequency Instruments. The instruments were completed by Crane and Thompson in 1953, but the test results were negative.

Nevertheless, Crane continued working to "save" Rife's historic discoveries. In April 1953, the first copyrighted material on the cancer virus was published. In December 1953, Rife's description of the cancer cure was completed under Crane's urging and insistence. It was copyrighted in 1954.

In 1954, Crane began corresponding with the National Cancer Institute and other government agencies concerning the Rife diagnostic and therapeutic instruments. In 1954, the Committee on Cancer Diagnosis and Therapy of the National Research Council "evaluated" the Rife discoveries. They concluded it couldn't work. No effort was made to contact Rife, Gruner, Couche or others who had witnessed actual cures. No physical inspection of the instruments was attempted. Electronic healing was bureaucratically determined to be impossible. (In 1972, Carl G. Baker, M. D., Director of the National Cancer Institute, used this superficial 1954 evaluation to dismiss Crane's and Rife's work when asked for information by Congressman Bob Wilson of San Diego. Millions died and continued to die because government and medical authorities were opposed to a fair, objective evaluation of the evidence.)

While working on the Frequency Instrument from 1954 to 1957, Crane slowly began to get results. Each improvement brought him closer to his goal -- curing cancer. Rife continued to aid him, but in essence, the two men were now working together and discovering together. Because neither had the resources which were available to Rifein the '30s, building a high powered Ray Tube was impossible. But possibly Crane could do just as well or better with a much smaller Frequency Instrument which attached to the body during treatment. This is exactly what evolved.

In 1957, Crane made contact with Dr. Robert Stafford of Dayton, Ohio. Stafford was interested in using the Frequency Instrument in both clinical treatment and new laboratory tests on mice. By November 1957, Stafford had 6 months of testing behind him. His initial evaluation was positive. Of 4 persons with cancer, one made "remarkable and unexpected improvement." The other three were treated whilein a terminal stage. All died, but all obtained relief once the treatment was initiated. Two were autopsied. The results showed they had died from other causes. There was a "surprising paucity of cancer cells." Stafford also noted that of 33 patients treated for a variety of ailments, none experienced any detrimental effects from the treatments.

Stafford concluded his 6 months research with the following summary:

> "To date, it appears that there is definite therapeutic value in the eminations or pulsations from the Rife Machine. While it may be no panacea, as some might claim, I am certain that it has given relief to distressing symptoms in some of my patients. Further, I feel that it has effected a clinical cure in several other cases. To date, I have noted absolutely no harmful effect from the use of this form of therapy. I feel that continued research should and must be carried on in this field of physical medicine."

Then, in 1958, Crane made his great breakthrough. He made another in 1960, enabling hundreds of times more energy to be concentrated on the deadly virus. These methods have never been published and are the heart of Crane's patent claim.

By February 1958, Dr. Stafford in Dayton, Ohio had presented his findings to the Executive Committee of the General Practice Section of the Montgomery Country Medical Society of the A.M.A. The 8 doctors were impressed. Stafford began setting up a Research Committee with Dayton's most influential doctors. Stafford concluded his report to Crane with the following:

> "I feel very priviledged to have been allowed to know of this wonderful instrument and of Dr. Rife's remarkable achievements through your missionary efforts, John. I shall feel well rewarded if I can have the personal satisfaction of seeing the Montgomery Country Medical Society accept this mode of therapy as an additional wonder of the 20th century."

In early 1958, doctors in Salt Lake City, Utah also began using the Frequency Instrument. But in May 1958, the Salt Lake County Medical Board forced them to stop using the electronic treatment. One of the cancer patients broke down and "wept bitterly when the doctor had to tell him he could not continue the treatments." The same doctor later told an associate in Salt Lake City that "if his

own family had cancer that he would immediately purchase a machine and useit on his own family. This would indicate how sold he must be." The writer of the letter concluded, "Too many people have been saying things that have aroused the ire of the medical profession here." It was an old story -- a rerun of California in the late '30s when the medical profession suddenly saw their authority and incomes threatened.

1958 also brought a hearing before the state of California Public Health Department. A Frequency Instrument was provided and tested by the Palo Alto Detection Lab, the Kalbfeld Lab, the UCLA Medical Lab and the San Diego Testing Lab. All reported it was safe to use. Nevertheless, the AMA board under Director of Public Health Dr. Malcolm Merrill declared it unsafe and banned it from the market.

Still, despite the setback, Crane continued toward his goal. By February 1959, Dr. Stafford in Dayton suggested that he, Stafford, manufacture and distribute the Frequency Instruments in the Eastern United States. He contacted a qualified electrical engineer, obtained a patent attorney, and began canvasing for venture capital. Obviously, the results he was seeing in his hospital and with experimental mice were convincing.

Crane decided to license the machines in order to prevent doctors from changing the instrument and thus failing to get results -- Rife's experience with Dr. Yale and Hoyland being the example. Since Crane already had completed a preliminary patent application with a California patent attorney, he sent it to Dr. Stafford for the Ohio patent attorney to examine. The two patent attorneys agreed "all was in order."

However, they couldn't submit it until the "usefulness" of the invention could be shown. Thus, they held back work until enough doctors and others experimenting with the different frequencies could provide substantial evidence. With no organized medical, scientific and laboratory involvement in the research -- as had existed in the '30s -- Crane was forced to establish "usefulness" with a terribly difficult handicap. Opposition from the California Public Health Department and the experience in Salt Lake City, not to mention the AMA assault in 1939, meant they were in a Catch-22 situation regarding patenting.

So Crane leased his Frequency Instrument in order to build his experimental base and thus prove the usefulness of his invention. The numbers of people who were being healed began to mount. He slowly gathered reports, testimonials and refined his procedures for training new operators. As in 1938, the breakout point was nearing.

By 1960, Crane had written and copyrighted a manual which explained how the Frequency Instrument was to be used in the experimental treatment of various diseases and on different parts of the body. In that year, thirty four instruments were built and distributed. And then the medical authorities struck.

They raided Crane's office, took over $20,000 of private files, engineering data, research records and reports, machines and Frequency Instruments, pictures off the walls, private letters, invoices, tape recordings, and electronic parts -- all without a search warrant.

They smashed all the research which had been put together over 10 laborious years. As in 1939, they visited the doctors who were experimenting with the machines and forced them to abondon them. They also pressured ordinary citizens who had begun experimenting on a personal basis.

These visits were made by teams of investigators. "One woman was scared so bad that she has been in a sanitarium driven entirely out of her mind. Her husband cursed them out and told them to get off his property and has threatened to exterminate them should they return. His wife has undergone shock treatments and two months of hospitalization."

The records and materials seized were not allowed to be used by Crane in his own defense during his trial.

Roy Rife, almost 73 and incapable of suffering the abuse of another trial at his age, went into hiding in Mexico. His deposition was not permitted to be introduced at the trial. Neither were the medical and scientific reports from the 1930s and 1940s. Nor were medical reports from Dr. Stafford in Ohio. Dr. Couche's letters were also declared inadmissable. No medical or scientific report which indicated the Frequency Instrument worked as represented was permitted to be introduced at the trial. Crane was left naked with only the patients who had been cured or helped.

The trial was held in early 1961. After 24 days, and despite the testimony of 14 patients who told how the Frequency Instrument cured ailments and diseases which orthodox medicine could not alleviate, Crane and two others were found guilty. The only medical opinion offered by the State of California came from Dr. Paul Shea who had been given the Frequency Instrument for 2 months. He admitted he never tried the Frequency Instrument on anything or made any tests to evaluate it. He simply examined it and decided it had no curative powers and didn't lend itself to investigative use.

Also, and most disturbing, the foreman of the jury was an AMA doctor. Everyone else was carefully screened to see that they had no medical knowledge, no electronic knowledge, and didn't read any newspapers supporting alternative healing. The verdict was a foregone conclusion. Crane was sentenced to 10 years in jail. Following appeals and dismissal of 2 of the 3 counts against him, he was released after 3 years and 1 month. But the cure for cancer had been effectively suppressed again.

During the trial, James Hannibal, age 76, testified. Blind in one eye, he'd been treated by the Frequency Instrument. After several applications, his cataract dissolved -- just as cataracts had dissolved in many of Dr. Milbank Johnson's patients during the 1935-37 clinics. Other witnesses at Crane's trial testified to the curing of chronic bladder irritation, the elimination of a throat lump one-half of the size of an egg, and the disappearance of a 17 year growth the size of an egg on the spine. Also cured were fungus growths on hands, fissures in the anus, pyorrhea, arthritis, ulcerated colon, varicose veins, prostrate troubles, tumorous growth over eyes, colitis, pains in the back, and heart attacks.

When Crane was released from prison, the cure for cancer was in shambles. A weaker man might have thrown in the towel. But Crane didn't waiver. He started to fight all over again. With little money and no legal help, he fought a seemingly hopeless battle to keep alive the discoveries which had been persecuted and denied since the 1930s.

In October 1965, Crane submitted an application to the California Board of Public Health, seeking approval of the Frequency Instrument. Rife was back from Mexico but hanging in the background. The application was made in the name of Rife Virus Microscope Institute of which John Crane was the owner. On November 17, 1965, the Department of Public Health replied that Crane had not shown that the device was safe or "effective in use." Again, Crane could not prove to the authorities that the Frequency Instrument's "usefulness" was a fact. While the reports from the 1930s and the limited research in the late 1950s clearly demonstrated extraordinary healing results had occurred, without living authorities willing to put their expertise and medical licenses on the line, the state officials couldn't approve it. But every time doctors, researchers and ordinary citizens got to the point where the validation of "usefulness" seemed near, the medical authorities quashed further research. Crane and Rife could not patent their invention without proving "usefulness." They couldn't market it without proving "usefulness." They couldn't interest financial men and researchers without "usefulness." And the medical authorities and public officials' deadly game had its death toll also as hundreds of thousands annually died from cancer while many more suffered from chronic diseases which also could not be treated by the Rife-Crane discoveries.

Crane attempted to respond to the Department of Health's request for proof of "usefulness." Dr. Charles W. Bunner, a chiropractor, was one of the men who provided a statement. The result? The Department of Health forbade him from using his Frequency Instrument and then a court ordered it "destroyed." The second man to provide a statement attesting to the Frequency Instrument's effectiveness was Dr. Les Drown, also a chiropractor. An employee of the American Cancer Society was soon sent to his office to entrap him. He was forced to "sign over" his Frequency Instrument or go to jail.

Rife and Crane were intending to patent their joint microscope in the late 1950s along with the Frequency Instrument. A microscope diagram for patenting purposes was drafted with both names listed as inventors. (A photocopy is included in the Appendix to this report.) Rife also was intending to patent his Universal Microscope. The assault on the cancer cure in 1960 disrupted their plans. Without being able to show "usefulness," Rife and Crane could not patent their discoveries. The actions by the defenders of medical orthodoxy stymied every attempt Rife and Crane made to bring the cure for cancer to the general public.

Rife had obtained a patent on a microscope lamp in 1929, but that was before the threat he represented to the orthodox medical (and scientific) establishments was recognized. By the middle and late '60s, Rife had witnessed or learned about (1) the spectacle of the AMA crushing his discoveries in 1939 and forcing doctors to abandon them even when numerous cancer cures were on record; (2) the mysterious death of Dr. Milbank Johnson in 1944, apparently just when he was prepared to make an announcement about cancer being curable; (3) the hopeful revitalization of the 1950s under Crane's direction only to fail when crushed in the 1960 travesty of justice when all research was confiscated and scientific reports were forbidden to be introduced at the trial; (4) the mid-1960s attempt at legitimization and how the medical authorities again had pressured researchers and health practitioners to quit.

Rife would be 80 years old in May 1968. He had fought his last war. He knew he was unlikely to see his Frequency Instruments or his microscopes used to heal virus-caused diseases. And he was uncertain about the protracted exchanges with the Patent Office which lay ahead, especially when the issue of "usefulness" was a Catch-22 situation for which there was no solution. Medical treatment had to be approved by medical and scientific authorities. Every time such men appeared and offered Rife and Crane help, the medical powers crushed them or forced them to give up Rife-associated research or treatment.

So on March 4, 1968, Royal R. Rife signed ownership of his microscope to John Crane, indicating that he intended to patent it and that John Crane would own the rights. The Frequency Instruments Rife considered joint inventions because of all the original work both Rife and Crane had done on them.

But Rife didn't apply for the microscope patent. He was old and at least had legally made his wishes known. His executors could fight that war if Crane's patent applications proved successful. All his cancer-curing rights were assigned to John Crane.

Unfortunately, Crane's patent applications were not successful. Crane applied for a microscope patent and a separate Frequency Instrument patent (along with other inventions) in 1969. Correspondence and amended applications bounced back and forth until 1973. At one point, the Patent Office admitted to Crane's Congressman that it had taken them a year to respond to one of Crane's "inquiry of status" letters.

Crane saw a familiar pattern. He suspected high-level pressure although the history of the Patent Office is an extremely good one as far as ethical conduct is concerned.

Nevertheless, given that Crane's patent application clearly described a clinically successful cure for cancer using a breakthrough technology supported by top scientists and doctors in the 1930s, the Patent Office's "business-as-usual" procedures with John Crane during 1969-1973 certainly leaves much to be desired. "A War on Cancer" had been declared by President Nixon. Hundreds of thousands of Americans were dying annually and even more being diagnosed as having cancer. Yet, no one in the Patent Office could pick up a phone, send a telegram, or alert public officials. Or perhaps they did. Perhaps the National Cancer Institute officials checked their files and told the Patent Office to ignore the claims. They had been dismissed. Perhaps a Patent Officer examiner did exercise responsibility in a quiet way and was instructed (falsely) that this Rife-Crane matter was not worth any serious attention.

In any case, no Patent Office examiner ever bothered to pick up a phone, mail a telegram or pursue the larger issue with John Crane. Yet Patent Office examiners have "informal" meetings with patent attorneys representing clients all the time -- in order to clear up difficulties and come to mutual agreements. But with Crane and the cure for cancer, no such initiative took place -- even though hundreds of thousands of Americans were dying and a declared national policy to cure cancer had been announced by the President of the United States.

Instead, the Patent Office recommended that Crane obtain the services of a registered patent attorney. Crane had poured thousands of dollars into defending himself, fighting a court system he perceived as corrupt (quite rightly in his case), and didn't have the money for a patent attorney.

Again, the powers that served orthodox medical treatment, failing though they were in cancer treatment, seemed to have won.

Roy Rife died in 1972.

In 1987, the question is, can justice be realized at long last? Can the Frequency Instruments be used to cure cancer? Can the microscope be used to determine the frequency of the AIDS virus in order that the virus be destroyed electronically? Can a new patent application or a legal action right the obvious wrongs which have been done so that Rife and Crane finally can be given some small recognition for the fight they have fought against overwhelming ignorance and self-interests opposed to the public's well-being?

The four primary areas of patenting which concern us seem to be:

1. Prior publishing
2. Prior sale
3. "Usefulness"
4. Rife's co-status
5. Crane's oath
6. Special appeal

An outline of the issues can be grasped from the following descriptions:

1. Prior publishing. "The law provides that the inventor is not entitled to a patent if the invention has been described in a printed publication anywhere in the world more than a year before his patent application is filed." (Q & A About Patents, U.S. Patent Office)

"Any disclosure, whether in a scientific magazine, book, or thesis, is sufficient to constitute a printed publication. The description must, however, be complete with respect to the invention that it discloses, and a mere hint or suggestion may not amount to anticipation." (Copyrights, Patents & Trademarks, Wincer & Mandell)

2. Prior sale. "A valid patent may not be obtained if the invention was in public use or on sale in this country for more than one year prior to the filing of your patent application." (Q & A About Patents)

3. "Usefulness." "A patent will not be granted on a useless device . . . or on a machine which serves no useful purpose." (Q & A About Patents)

4. Rife's co-status. "If each had a share in the ideas forming the invention, they are joint inventors and a patent will be issued to them jointly on the basis of a proper patent application filed by them jointly."

"May a patent be granted if an inventor dies before filing his application? Yes, the application may be filed by the inventor's executor or administrator." (Q & A About Patents)

5. Crane's Oath. "This section of the specification requires you by law to make an oath or declaration that to your knowledge your invention was never known or used before, patented, or described in any printed publication, in public use or on sale more than one year prior to your application, and that you have never before filed a patent application on this particular invention." (Ideas, Inventions & Patents, Abernathy & Knipe)

6. Special Appeal. "If you do not reply within the time period specified in the action, your application will be abandoned by the Patent Office and your patent application will no longer be pending, unless you can prove to the Commissioner of Patents that your failure to file a response was unavoidable because of a legitimate reason. (Abernathy & Knipe)

Obviously, any new application -- even if based on the prior patent application -- will have to address prior publishing, prior sale, Rife's co-status, etc. Not only will the inevitable "prior art" cited by the Patent Office to reject the claim have to be carefully offset (Prior art is recorded earlier inventions), but the automatic rejection made likely by the prior publication and prior sale will have to be addressed and successfully overcome.

Usefulness, of course, is a special situation. But here is the two-edged sword. The usefulness of the inventions has to be argued. But it was the suppression which not only prevented usefulness from being established years ago, but which was responsible for any necessary prior publishing and prior sale. It can be argued that prior publishing did not disclose critical technical features and that prior sale (leasing) was in fact essential experimentation to establish usefulness.

However, it seems that if patenting is attempted (which the author believes ought to be done), substantial legal (and political) effort will be required. A standard Patent Office approach seems to be an exercise doomed to fail for any number of reasons.

In conclusion, in making the argument for a patent grant to Rife and Crane -- whether it be through the Patent Office, the courts or the legislature -- it seems appropriate that the abiding principle of the various Patent Acts in American history be cited. This abiding principle is generally recognized to be Jefferson's philosophy that "ingenuity should receive a liberal encouragement." Ingenuity has no meaning if Rife and Crane are denied recognition because of a technical ruling when the authority to grant such recognition is available -- either directly from the Patent Office, via judicial decision, or as the result of a legislative action. To deny Rife and Crane could be historically seen, because of the specific governmental abuses in this case, to sanction such abuses. Thus, it could serve to discourage future inventors who would perceive special interests as being in the control tower. Such a result would not be in the nation's long-term interest or in resonance with America's underlying democratic principles.

APPENDIX

Patents

ROBERT P. STAFFORD

Bob Stafford, M.D.
22 Deshler Place
Dayton 5, Ohio

October 22, 1958

Dear Bob

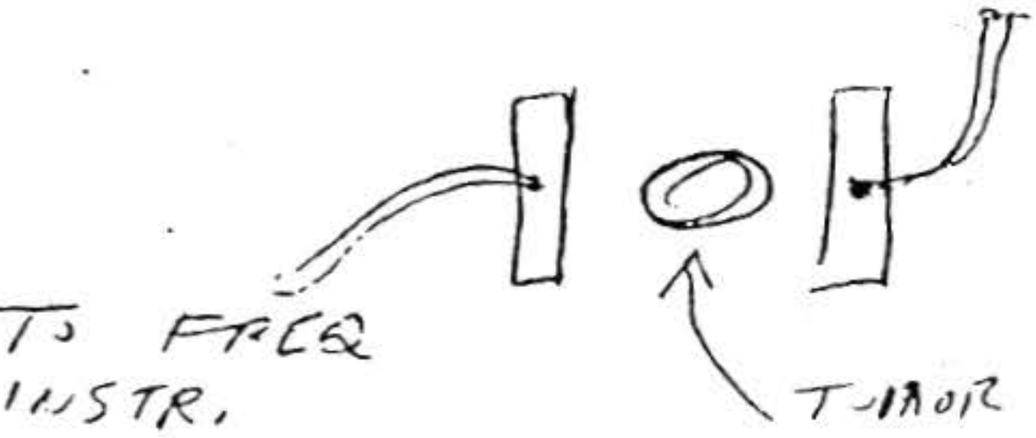
I have been advised by a local group of research doctors that the test set up for proving out the instruments on rats hinges on a certified biopsy by a pathologist before treatments and after treatments when the rats are well, they should be killed and another biopsy taken for each rat. The biopsy should be numbered and identified on each slide which they tell me is the most universally accepted evidence that can be obtained. I hope that you will follow this procedure also on at least 6 rats with one control & and having a pathologist to "sign off the slides" before and after. (and I ~~XXXX~~ sure would like to have those slides.)

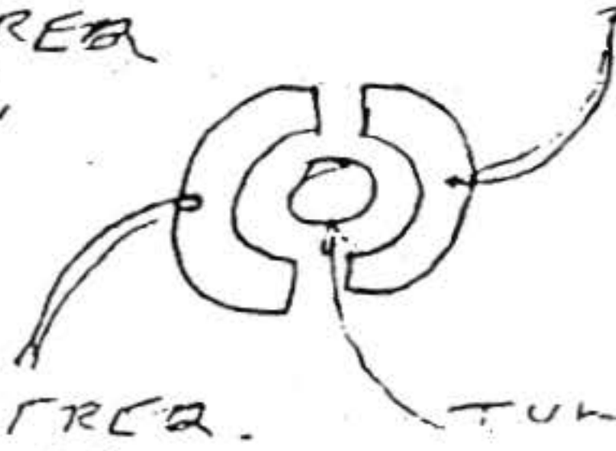
There is another element Bob which may have a great deal of influence on your test results and I'm going to propose it for your tube tests: Buy an RF Power Meter Kit from Heath - Heathkit PM-1 at $14.95. Leave the antenna off as shown in the enclosed picture and you will be able to measure the direction and intensity of the electrostatic space field coming out of your applicator tube of the Frequency Instrument. Many times treatments are given with the force from the tube actually missing the patient. With this little instrument you can actually check this yourself before using the Freqency Instrument on the rats because every tube transmits this field in a different direction. I would suggest that you place this RF Power Meter approximately 10 inches away from the angular electrode of the applicator tube and turn the volume control down until the maximum output of the Frequency Instrument can still be read on the RF Power Meter PM-1 - then adjust the Frequency Instrument ~~X~~ with the tuning knob at the right top which controls your 2400 KC reading and then forget it - and the ~~XXX~~ knob setting that gives you the maximum intensity of the charge of the space field from your applicator tube which can then be read directly on your new RF Power Meter PM-1. Leave this knob in the maximum field intensity setting throughout all of your other dial settings which you will read correctly on the electron counter. Your results should show an amazing improvement.

I am working on some plastic handles that will be shipped with the tube, this will mean another weeks delay. The handles are completed now and special connections will be installed with shielded high voltage wire. I have been doing some thinking about the electrodes which we use direct to the body and I think they are too small - larger ones would let us use more current for even better results.

John F. Craig

AS I SEE IT THE ENERGY OF AN ELECTROSTATIC NATURE TRANSMITTED IS A FUNCTION OF THE APPLIED AREA. IF WE USE 1" DIA DIAMETER ELECTRODES WITH A "PATIENT COMFORT" SETTING OF 5 ON THE VOLUME CONTROL THEN PERHAPS WE COULD USE A 3" DIAMETER ELECTRODE AND EXPECT A VOLUME CONTROL SETTING FOR "PATIENT COMFORT" TO BE 9 OR 10. IF YOU WISH YOU CAN HAVE THESE LARGER ELECTRODES MADE UP AND WHO KNOWS WE MAY EVEN HAVE TO FIT HUMAN INDIVIDUALS IN CERTAIN AREAS (TO A CAST MUCH LIKE A DENTIST USES TO MAKE HIS FALSE TEETH) WITH FORM FITTING METAL ELECTRODES. THIN SHEETS OF ALUMINUM FOIL MAY BE TAPED ON ETC. IN THE CASE OF AN OPEN SORE WE MAY USE PARALLEL OR U SHAPED ELECTRODE TO GIVE MAXIMUM CURRENT FLOW THROUGH THE AREA





YOU MAY REST ASSURED THAT YOUR LETTER WILL BE KEPT CONFIDENTIAL.

Best Regards

John C. Ilett

19 Nov 58

Dear Bob

I am sure glad to hear of the rat tests and if they are still alive after 50 days we will be amazed ourselves. Very little work has been accomplished with the leukemia virus as Rife specialized on carcinoma virus and sarcoma virus. Of the 50 to 60 odd types Rife found that the same virus was the culprit and the frequencies which you now have kil these virus. Marsh reported some success with leukemia patients in Sa Lake City and we received a letter from a woman who had gained weight and recovered her strength but how she is now I couldn't say.

Recent treatment of a woman with a serious case of fissures - hemmoro and piles has succombed to the Tube type frequency instrument in combination with the diathermy instrument. This is the second case th we have cleared up. The woman was scheduled for an operation and in severe pain. The pain seemed to vanish after the 2nd c.

I believe it is extremely important to have an exact setting within ≠ + or - one ~~cyclés~~ cps. A research proposal was made on this point for funds but was denied. I wanted to go farther into this problem because we now have electron counters that will read down to 4 decim of a cps such as 2128.0123 etc. Further research can only tell us exactly what the "Critical Frequency Tolerances" will be. Varying th cps after your treatment of three minutes may be very beneficial and it would serve as added insurance toward the results attained I'm su

Another means of allowing the patient to handle higher current input might be novocain such as the dentist uses to momentarily disengage the nerves. A milliamp meter should be used to avoid going over 100 milliamps as I think that is about as high as can be safely attained but again we have no research on this point and much greater power may be used with great effect by this method. The electrocution of bacteria, virus, and fungi by this method is entirely in its infanc Several of these instruments may be employed simultaneously on diff body areas but I believe the total current should be measured and controlled. Your jelly sounds like an insulator to me and the highe input may be erroneous. I think area increase is more of an answer Since silver is the best conductor we have used copper and silver p same. Aluminum would work OK or any other good conductor should be satisfactory.

John F. Crane

Regarding Mrs. Bandura - I feel that your distance from the cervix to the back of the neck is too far. I would suggest that you endeavor to keep the electrodes closer together say within 8 inches - first treat the liver and or cervix area and then go up and ### treat the #### aorta area. This should give a more concentrated current flow in the affected areas and to my meager thinking - give you better results. An electric field may(1 be divided up into lines of force. (2) each line terminates at a positive charge on one end and a negative charge on the other.(3) the lines, throughout the field, coincide with the direction of the electric stress.(4) the lines behave as though they were made of stretched elastic, always tending to contract and bring together the negative and positive charges.(5) a line of force between two conducting surfaces must always meet the conducting surface ########## perpendicularly. This must be so from the very nature of the assumed static conditions. If a line of force entered or left a conducting surface at any other angle than <u>normal</u>, it would have a tangenti component at the surface which would cause the movement of charges within the conductor. This would constitute a continuous electric current and, sin currents do not flow along the surface of the conductor in an electric fiel in a static system, the junction of the line of force and the surface must be a right angle. (the picture of the force lines I drew would apply here) The electrostatic field is stronger when the electrodes are closer together To increase the power a small amplifier of the audio type would be necessar with the heathkit instrument. This again is a matter for further research.

To answer the question about ultraviolet light from the new or old bulb; An analysis of this light was made witha Hilger F-4 quartz spectrograph which indicated the light and the production thereof to be in the visible region of from 4000 A to 6500 Angstroms. The ultra violet extends from 4000 A on down to 2000 A and that is where our chart ends. Some slight overlap may occur in the 4000 A area but it would be so slight that I doub if any effect would be noticeable. Only ordinary visible light is emmitted due to the gas discharge in the tube. The RF has been rated at 330 volts using a Hewlett Packard model 410B, with a model 453A R.F. capacity divide having a 100 to 1 ratio; the impedance without the divider is 10 megohms (D.C.); with the capacity divider it is 100X greater. No loading of the instrument occurs due to this measurement, as judged by a lack of detectable change of audio-output in a radio receiver. No x-rays or ioniz radiation are emitted by the tube while the discharge is taking place. These measurements have been made close to the glass envelope of the tube both with a nuclear model 2611 Geiger-Muller Survey Meter, as well as a sensitive Lauritsen electroscope of the integrating type. No radiation above background was detect###ed by either of these two instruments.

Sincerely

John Crane

APPENDIX C

ROBERT P. STAFFORD, M. D.
THOMAS G. OSWALD, M. D.
GEORGE W. MARKUS, M. D.
702 SALEM AVENUE
DAYTON 6, OHIO

28 February 1959

Mr. John Crane
Life Lab, Inc,
San Diego, California

Dear John,

Pursuant to my inquiry in my last letter regarding possible manufacturing agreements, I would like to know if you would consider letting me handle the Eastern Division for the purpose of manufacturing and distributing the Rife machine. This might be done on a licensing basis, where we would pay to Life Lab a stipulated royalty on each machine sold, or on some percentage distribution of the profits. Perhaps you have some other plan for equitable remuneration due you for the use of your patents and efforts which you might wish us to consider.

My friend, Harold Leland, and I are interested in developing a manufacturing company to handle this project east of the Mississippi River; providing satisfactory arrangements are worked out between us and Life Lab, Inc. Harold Leland is an excellent electrical engineer and has had many years of experience working closely with the management of one of Dayton's successful manufacturing companies. He is the man who did the calibrating of our machines on his "scope" at the factory. He is also the man who knows solonoids from A to Z. This will help us in perfecting the dialings of our present machine. Also, through his past experiences, he could help guide us into proper channels to assist us in protecting our work. Along this line, Harold would like to know what patents are pending and applied for as well as the description of these patents, regarding the Rife machine and its uses.

If satisfactory terms could be agreed upon between us, it seems to me that such a working arrangment would enhance the promulgation of this new medical science among the medical profession. I truly believe this thing is big enough and has enough potential to allow at least this much diversification of capital. Your experience in the Western Division could guide and help us, and likewise, we would share our experiences, developments, and refinements in technique with you. Such an arrangment would not mean weakness through cleavage; but rather, strength through division. Please let me know what you folks out there think about these proposals.

Sincerely yours,

Robert P, Stafford, M.D.

Robert P. Stafford, M.D.

March 6, 1959

Dear Bob,

It is heartening indeed to read of your interest in the eastern market and your request may well become your desire and reward. Since this instrument is a specialty item, legal counsel says that we should require a 10% royalty on the gross income and that all future patents related to the instrument would be assigned to us. If these major terms are satisfactory to you and whomever you care to include, we will have our attorney draw up a preliminary draft for your approval.

We will of course welcome such an outstanding engineer as Harold Leland and a great deal of expert talent will be needed in the various fields encountered. The design of the first production instrument is now of importance and should be perfected below 10 KC to avoid FCC qualification; this can be accomplished but the coil must be used in the center for a little while longer.

It has been our continuing thought that the instruments should be leased and not sold similar to IBM procedure because the instrument must be checked periodically for correct output, tubes, etc. Doctors have had a tendency to change their instruments in the past and then they do not work right and we have experienced this many times and this must be eliminated. Leasing would provide a monthly income on each instrument which is better for the doctor as he can write it off on his income tax and better for us to maintain our control of the instrument. The original cost can be eliminated by installation costs or license fee costs or absorbed by rental fees. Older units could be replaced periodically and shipped overseas for foreign markets.

It may be that your new manufacturing company could turn out to be a division of Life Lab operating independently in the area designated. The franchise for the area east of the Mississippi in the U.S. exclusively will be of great value. Whether we were to accept a royalty or a percentage distribution, the value would be the same as mentioned above. At this time a great deal of flexibility exists and we will welcome your acceptance of these terms and let us know your further comments.

Very truly yours,

John F. Crane

John F. Crane

Enclosure: Patent application
(Please return in one month)

ROBERT P. STAFFORD, M. D.
THOMAS G. OSWALD, M. D.
GEORGE W. MARKUS, M. D.
702 SALEM AVENUE
DAYTON 6, OHIO

20 April 1959

Mr. John Crane
Life Lab, Inc.,
4246 Pepper Drive,
San Diego 5, California

Dear John,

Harold Leland and I have been studying the many facets of establishing a company for the purpose of manufactoring and distributing the Rife Modulated Radio-frequency Transmitter. I'm sure you are well aware of the problems which confront us along organizational lines of this nature. Harold is more experienced in these matters than I am, since he is associated with a local manufactoring company at present.

We have consulted Harold's lawyer, Mr. Ayres Stoddard, who is also a registered patent attorney. Mr Stoddard has examined for us your petition to the U.S. Patent Office. He feels that all is in order, but he suggested that we obtain your permission to review the file wrapper and contents regarding the patent pendings on the Rife machine. Since these matters are of such technical nature, I suggested that Mr. Stoddard write to your attorney, Mr Caldwell, so that this matter can be worked out at the earliest possible moment. As Mr. Stoddard suggested, it would be wise for all of us- you folks in California, as well as for us here in Dayton - to be reasonably sure that we can be protected by patents in the future use of this form of energy on viruses and bacteria before we invest the necessary capital to engineer and produce a practical instrument.

As you requested, I shall return your Petition to the Patent Office by registered mail in the next few days. Also, I am enclosing a summary report of the Rat Experiment. The results of this preliminary experiment have given us a good foot-hold in the door of local medical interest. I'm still trying to figure out where we can get the needed $5,000.00 to proceed with the next phase of laboratory experimentation. However, John, I have sincere faith that we shall continue to make progress with this form of therapy, if we are conscientious, honest, and steadfast. I shall write again regarding the details of forming our company here, as soon as the patent problems are cleared up. Again, John, I want to thank you for your promptness and generosity in offering to license Harold and me to work with you in this area.

Sincerely yours,

Bob.

Bob Stafford.

April 23, 1959

Dear Bob,

Thank you for your report on electron therapy as an entirely new facet of research. Bob - on the next tests, I hope that you will try some carcinoma or sarcoma and I feel sure that your results will be better. We have in the past encouraged trying almost everything and Rife has told me many times "Why not try it on something that it has been proven out on"! It is difficult indeed to realize the time and effort which went in to securing the frequencies and I will not be happy until the whole phase of the research with the microscopes is run thru again so as to determine the frequency tolerances which to me is the key that will unlock critical design secrets of our future instruments.

I have contacted Caldwell and you have our permission to review the file wrapper and contents. Please have Mr. Stoddard write to:

Conrad C. Caldwell
3993 30th St
San Diego, Calif.

We are now trying to figure out how we can get 500,000 — to build a new research lab to carry on Rife's work. We have several local capitalists interested and we hope before too long to have this move accomplished. I can assure you that should this take place, 5 G's of this fund will be yours. There is also some effort being made to treat Sec. John Foster Dulles. Powerful political contacts are now being used to effect this end but the pressure is undoubtably great. In any event, some active interest may be the outcome.

Notice of a medical electronic display in Paris, France this June is of passing interest. We have decided not to submit any material this year as 1) it might rock the boat with your efforts there and 2) we don't want the Russians to get ahold of it.

Again let us bow our heads in praise for your fine research work on electron therapy. Did you ever receive the 24" enlargement of thr Universal Microscope and a second pre-release report on "Electron Therapy" ?? with photos.

John F. Crane

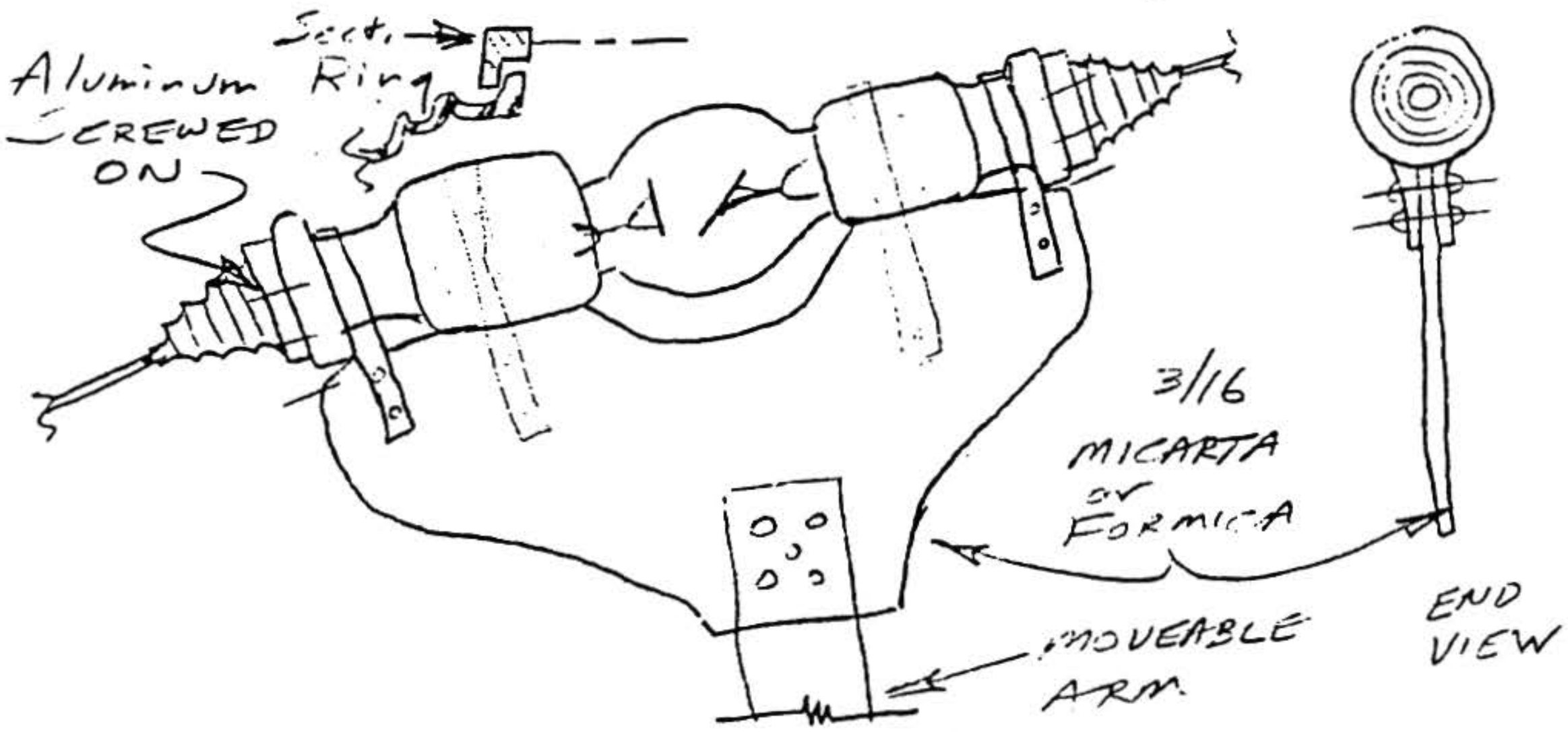
APPENDIX G

July 1, 1959

4246 Pepper Drive
San Diego 5, Calif.

Dear Bob,

Received the tube that you shipped in good shape. I was surprised to find the plastic holders also and if you would like these returned, I will ship them to you; I would suggest however, that you mike up the diameter of the glass to be sure that they will fit as these tubes are all hand made. If a larger inside diameter is necessary for the plastic, I will attempt to bore them out to fit before sending them back to you. I have also designed a new aluminum ring which goes over the rubber insulators and holds them in place to make a more finished looking job out of the tube plastic holders and two metal rings go around the plastic ends replacing the shock cord and are attached to a piece of 3/16 micarta which in turn may be secured to a moveable arm for basic support.



SIDE VIEW

Variations of this design will of course be forthcoming.
We are beginning to open our doors to available money. We have been temporarily assured of 500,000-- from one source and 1 to 10 million from another source for Frequency Instrument progress. Several contacts have been established, we hope to have the ball rolling here this year and are working toward this end now. Since our contacts have been concentrated in the Los Angeles area, a delay in liason and time naturally occurs. I may have to tread this route full time for awhile if necessary. It was last week that I learned of Dr. Gonin's death when I called his house near London. I gave him a Frequency Instrument to evaulate and so I have written regarding the disposition of the equipment. Gonin gave Rife 1000 pounds to build No. 5 Virus microscope in 1939 for his private research lab and Rife gave Henry Seiner $1000.00 to take his No. 4 Virus microscope over and leave and demonstrate it until he could complete the No. 5 instrument. Henry was gone about 11 months but only at Gonin's for six months approx. I talked Gonin into bringing it back here and I was able to get about 6 hours of tape recordings while he was here in San Diego in 1956.

APPENDIX H

Dear Bob - August 22, 1959

Regarding Mr. Brooks Heathman, I believe that he can be helped. As we both know, we are dealing with the worst little killer of all, the most dreaded form of cancer - BY and BX with a few other germs thrown in. His cure will require considerable attention. I would suggest that he be placed on distilled water (only fluid) and good food. Our perscription is as follows: (Grape & orange juice - use also) Welches pure only
Treat with a double action: first place the tube 8 inches from the heart with the maximum intensity directed to the heart area. Determine his cycle blood flow. If it is three minutes, then use 3 minutes time on each frequency; if it is five minutes then use 5 minutes time etc. Do not move tube - suggest using an insulated (plastic or glass) independent holder. First day treat as follows:

Streptococcus	5 minutes over heart	
Sarcoma	5 minutes over heart	(After using these frequencies
Carcinoma	5 minutes over heart	then use the two for T.B. at
Staphlococcis	10 minutes over heart	five minutes each).

TREAT cut off foot area next slowly moving tube 8 to 10 inches away from skin up and down entire leg. Repeat the above provedure for the leg area. Use the same order as above listed. This will take 50 minutes of time and possibly a little more by the time you adjust the frequencies. I would follww this with low diathermy for 15 minutes in the cut off foot area slowly moving the pads up and down the leg. Then five minutes with the pads on both sides of the stomach area to help the lymphatic syatem along and 3 minutes over the top chest area for the same system there. Have him lying down when the treatments are given (flat). That is, lying down flat on a bed ot table or what have you.

Since his difficulty is in the leg area, treat him daily and after one months time, you will know which way he is going to go - in or out of this world.

And now a word about the instrument. I trust you have used 10000 volt shielded wire which is required for the tube connection - if not replace with same and do not use over 6 feet long wires and when using keep them separated. Do not use any metal in the tube area - use plastic for the holders as the metal will set a field up and absorb the energy there and we want the patient to absorb it. It is qtite possible now that the tubes need replacement and you may use the better military spec tubes as/an equivalent replacement. The cost is relatively the same but the performance is better. I had an aluminum mirror put on one side of my tube and they did an excellent job.

Good luck with Brooks,

John F. Crane J. F. Crane
Royal R. Rife Roy

ROBERT P. STAFFORD, M. D.
THOMAS G. OSWALD, M. D.
GEORGE W. MARKUS, M. D.
702 SALEM AVENUE
DAYTON 6, OHIO

May 9, 1960

Mr. Earl Steiff
337 Cardiff St.
San Diego 14, California

Dear Mr. Steiff:

Thank you for your letter of May 1st; I am sorry to hear of the misfortune which has befallen your family.

At the present time, here in Dayton, we are using the Rife Frequency Machine for investigational work only. Because of some inconsistent results and lack of basic fundamental clinical research here in Dayton, I have limited the use of the machine, in the case of malignancies, to carcinoma of the breast only. We have had some encouraging results in breast cancer, but until we have a large enough group of cases of this type consistently "cured", I feel we dare not venture further in the field of malignancy. I hope eventually to develop the knowledge to apply this treatment successfully in other types of malignancies.

Mr. Steiff, I am sorry that we are not prepared to accept your Mother-in-law's case at this time. My phone number, which you requested, is Cr.5-8116. Please feel free to call me if I can be of any further assistance.

Sincerely yours,

Robert P. Stafford, M.D.

Robert P. Stafford, M.D.
RPS/mms

97

APPENDIX J

ENROLLMENT APPLICATION * RIFE VIRUS MICROSCOPE INSTITUTE * 4246 Pepper Drive, San Diego, Calif.

I wish to enroll in a course of instruction to learn how to operate the Frequency Instrument, to join RVMI, and to obtain the loan of a Frequency Instrument for training purposes. I agree to pay $175.00 for instruction, maintenance fees of $2.00 per month, annual membership dues of $10.00 per year, and a deposit on the instrument of $103.00 to be refunded incase the instrument is returned. RVMI agrees to keep instrument in good condition, make inspections of instrument calibration and requires all shipments to be prepaid; total fee - $300.00.

Fee Received 300 oo Trainee Leonard R Chapman M.D.

RVMI Repr. John F. Crane Address 214 Escondido Ave

City Vista Zone ____ State California

Next of Kin Mrs Mildred Chapman Relation wife

Address 320 Escondido Ave Vista Calif

No. 2M Date Sept 20 1960

****

FREQUENCY INSTRUMENT LOAN RECEIPT

Rife Virus Microscope Institute Record of Instrument Loan

Model SQ1A SWITCH TYPE Serial No. - Accessories 1 Set of Probes

Loaned to: LEORNARD R. CHAPMAN Phone PA 4 2238

Address 214 ESCONDIDO AVE, VISTA

Received by: Leonard R Chapman Date Sept 25 1960

This instrument is loaned for a period of training for a minimum time of two years and should be returned if requested thereafter.

Rev. E. M. Mueller
302 NE 2nd St.
Mason City, Iowa.

36 - $175

APPENDIX K

CONTRACT

REGULATIONS FOR TRAINING AND THE USE OF THE

RIFE FREQUENCY INSTRUMENT

I. STATUS OF INSTRUMENT FOR FAMILY USE

A. THE RIFE FREQUENCY INSTRUMENT (hereafter referred to as INSTRUMENT) is loaned to a private individual using it, and it remains the property of the RIFE VIRUS MICROSCOPE INSTITUTE (hereafter referred) to as RVMI).

1. The INSTRUMENT will be loaned to the CONSIGNEE for a donation of $175.00 to be received by RVMI at the rate of $75.00 at the time the contract is validated, and $100.00 at the time of delivery of the INSTRUMENT; or, the full donation may be made at the time the contract is validated.

2. Approximately 1(one) month must be allowed for delivery of herein-mentioned INSTRUMENT following date of validated contract.

3. An additional $2.00 per month donation (minimum) for the replacement of worn-out parts, tubes, and wear and tear in the use of the INSTRUMENT by the CONSIGNEE is to be donated in advance.

4. The $175.00 donation herein mentioned is alloted for the TRAINING PROGRAM which will give the CONSIGNEE a complete and full course on the operation of the INSTRUMENT.

5. It is the responsibility of the CONSIGNEE to adequately insure the INSTRUMENT for Fire, Theft, and Damage.

6. Under no circumstances will RVMI make any claims stating the INSTRUMENT will <u>cure</u> any pathogenic disease.

a. It is designed to devitalize micro-living organisms detrimental to mankind. The worthy body cells will overcome the invaders and the body will heal itself with proper food, rest, and some needed medication.

b. The CONSIGNEE is to make no statements using the word "cure".

c. See separate document concerning the function of the INSTRUMENT.

II. MEMBERSHIP IN RVMI

A. The CONSIGNEE, OPERATORS, AND <u>ALL</u> TRAINEES, (see "C" p. 2) must be members of RVMI. The RVMI license requires that all persons receiving the benefit of the TRAINING PROGRAM and the use of the INSTRUMENT must be members in good standing.

1. There is a minimum donation of $2.00 for membership only.

2. For the privilege of receiving literature, research information, etc., there is a minimum donation of $10 per year.

3. "Application for membership" blanks properly filled out must be sent by the CONSIGNEE to RVMI immediately following the time application is made.

   a. These will include both types:

      1. Those with a donation for literature privileges.

      2. Those with a donation for membership only.

4. In order to become "Qualified as an expert OPERATOR of FREQUENCY INSTRUMENTS" an APPLICANT must be trained by an OPERATOR who has been certified by RVMI.

   a. Qualifying by means of oral and written examinations is a requirement.

   b. Final acceptance will be made by RVMI.

III. TRAINING PROGRAM

A. RVMI will furnish to the CONSIGNEE complete instructions for the TRAINING PROGRAM and the use of the INSTRUMENT.

   1. It is mandatory for the CONSIGNEE personally to know how to operate the INSTRUMENT and to thoroughly understand its function.

B. CONSIGNEE or a QUALIFIED OPERATOR may train a new OPERATOR.

   1. Such an OPERATOR may not use the INSTRUMENT in the possession of the CONSIGNEE for instructing TRAINEES or members of RVMI until he has been approved by RVMI as a QUALIFIED OPERATOR.

C. TRAINEE

   1. A TRAINEE is a person being taught in the use of the INSTRUMENT and its effectivity.

      a. RVMI will make no claim or tolerate a claim by the CONSIGNEE that any person is being "Treated or is receiving "Treatments" under this program. It is the responsibility of the CONSIGNEE to inform each TRAINEE of this fact.

      b. No TRAINEE is allowed to instruct another individual. He must first become a QUALIFIED OPERATOR.

      c. A TRAINEE'S physical status is not to be diagnosed by an OPERATOR.

IV. ADVERTISING -

A. No advertising of the use of the INSTRUMENT is permitted.

V. FEDERAL AND STATE REQUIREMENTS

A. A card must be attached to the INSTRUMENT in full view of each TRAINEE or member of RVMI reading: NEW DEVICE FOR INVESTIGATIONAL PURPOSES ONLY.

VI. SAFEKEEPING OF INSTRUMENT AND OBLIGATIONS

A. The CONSIGNEE is held responsible for the safety and protection of this instrument at all times, while in his possession. To be insured for $500.00 from a reputable insurance firm.

1. Adequate insurance (as mentioned in IAS) will cover this loss. Insurance policy must be shown to and approved by RVMI immediately upon validation of contract.

B. Any violation by RVMI of this contract will necessitate the forfeiture of all monthly depreciation donations for a period of one year.

1. It is the obligation of RVMI to maintain the INSTRUMENT in the possession of the CONSIGNEE in perfect working order. Regular check-out periods will be arranged by RVMI.

a. It is the obligation of the CONSIGNEE to notify RVMI immediately upon discovery of malfunction of the INSTRUMENT.

C. It is the moral obligation and duty interest of RVMI that all RIFE FREQUENCY INSTRUMENTS be kept in constant use if at all possible. This device is too invaluable to mankind to be left unused. For the sake of mankind these devices should be kept in constant use.

D. Any violation by CONSIGNEE of this contract will necessitate the forfeiture of all monies paid to RVMI to and including date of cancellation and the INSTRUMENT will be returned to RVMI.

Sept 6-60

E. M. Mueller — Signature, Consignee

John F. Crane — Signature, President, RVMI

Sold By:

Earl L Steff — Signature, Witness

Signature, Secretary, RVMI

Martha A. Mueller — Notary Public Signature and Stamp

Notary Public Signature and Stamp

NEW DEVICE APPLICATION
California Pure Drugs Act
Division 21, Chapter 2, Section 26288
CALIFORNIA HEALTH AND SAFETY CODE

Name of applicant Rife Virus Microscope Institute

Address 4246 Pepper Drive, San Diego, Calif., 92105

Date October 29, 1965

Name of new device Frequency Instrument

To the STATE BOARD OF PUBLIC HEALTH
For the Director State Department of Public Health
2151 Berkeley Way, Berkeley, California

Dear Sir:

The undersigned, JOHN F. CRANE, submits this application with respect to a new device pursuant to Section 26288 of the California Pure Drugs Act. Attached hereto, in duplicate, and constituting a part of this application are the following:

(1) FULL REPORTS OF ALL INVESTIGATIONS THAT HAVE BEEN MADE TO SHOW WHETHER OR NOT THE DEVICE IS SAFE FOR USE.

(a) An application may be incomplete or may be refused unless it includes full reports of adequate tests by all methods reasonably applicable to show whether or not the device is safe for use as suggested in the proposed labeling. The reports ordinarily should include detailed data derived from appropriate animal or other biological experiments in which the methods used and the results obtained are clearly set forth. Reports of all clinical tests by experts, qualified by scientific training and experience to evaluate the safety of devices, should be attached and ordinarily should include detailed information pertaining to each individual treated, including age, sex, conditions treated, frequency of administration, duration of administration of the device, results of clinical and laboratory examinations made, and a full statement of any adverse effects and therapeutic results observed.

(b) The complete list of components and or method of manufacture of the new device used in each submitted report of investigation should be shown to the extent necessary to establish its identity if it differs from the description in parts (2) or (3) of the application in any way that would bias an evaluation of the report.

(c) The unexplained omission of any reports of investigations made with the device by the applicant or submitted to him by an investigator he supplied with the device that would bias an evaluation of the safety of the device constitutes grounds for the refusal or suspension of an application.

(2) A FULL LIST OF THE ARTICLES USED AS COMPONENTS OF THE DEVICE. Each component should be identified by its common English name. If any proprietary preparation is used as a component, the proprietary name should be followed by a complete descriptive statement. Reasonable alternatives for any listed component may be specified.

(3) A FULL DESCRIPTION OF THE METHODS USED IN THE MANUFACTURE, AND ASSEMBLY OF THE DEVICE. Included in this description should be full information in sufficient

application concerning which no change is proposed. A supplemental application should be submitted for any change beyond the variations provided for in the application, that may alter the conditions of use, the labeling, the safety, identity, of the device or the adequacy of manufacturing methods, facilities, or controls. When necessary for the safety of the device, a supplemental application may be required to specify a period of time within which the proposed change will be made; and in such case the distribution of the device after such change constitutes distribution without an effective new-device application. A supplemental application is not required when the article is no longer a new device unless the proposed change itself causes it to become a new device. If a material change is made from the representations in an effective application for a new device before a supplement is effective for such change, the application may be suspended.)

(8) IT IS UNDERSTOOD THAT ALL REPRESENTATIONS IN THIS APPLICATION REGARDING THE COMPONENTS, COMPOSITION, MANUFACTURING METHODS, FACILITIES, CONTROLS, AND LABELING APPLY TO THE DEVICE PRODUCED UNTIL AN EFFECTIVE SUPPLEMENT TO THE APPLICATION PROVIDES FOR A CHANGE OR THE ARTICLE IS NO LONGER A NEW DEVICE.

Very truly yours,

RIFE VIRUS MICROSCOPE INSTITUTE
(Applicant)

Per John F. Crane
Owner
(Indicate authority)

This application must be signed by the applicant or by an authorized attorney, agent, or official.

The data specified under the several numbered heading should be on separate sheets or sets of sheets, suitably identified. The sample of the device, if sent under separate cover, should be addressed to the STATE BOARD OF PUBLIC HEALTH, Bureau of Food and Drug Inspections, and identified on the outside of the shipping package with the name of the applicant and the name of the device as shown on the application.

The applicant will be notified of the date on which his application is filed. An incomplete application, or one which has not been submitted in duplicate, will usually be retained but not filed as an application provided for in Section 26288 of the Pure Drugs Act. The applicant will be notified in what respect his application is incomplete.

ALL APPLICATIONS AND CORRESPONDENCE SHOULD
BE SUBMITTED IN DUPLICATE

(2-20-57) Form F&D-1730

RIFE VIRUS MICROSCOPE INSTITUTE
4744 Pepper Drive, San Diego, California
92105 Zip Code Phone: 281-0278

- E
- I
THERAPY
++++++
- C
- P
- R
- S
- N

INSTRUMENTS FREQUENCY

October 29, 1965

State Board of Public Health
2151 Berkeley Way
Berkeley, Calif.

Gentlemen:

The NEW DEVICE APPLICATION is submitted with the following reports:

1) Appendix A - RESULTS WITH FREQUENCY INSTRUMENTS AFTER M.D. DIAGNOSIS AND MEDICINES FAILED TO HELP PEOPLE.

2) 10 copies of labeling of Frequency Instruments

3) INSTRUCTIONS FOR THE USE OF THE RIFE FREQUENCY INSTRUMENT - copyrighted 1960

4) INSTRUCTION MANUAL FOR MODEL 377 Sine and Square Wave Generator of Frequency Instrument.

5) INTRODUCTION TO ELECTRON THERAPY by John F. Crane

6) ELECTRON THERAPY - Report No. 1456 by John F. Crane 1959.

7) HISTORY OF THE DEVELOPMENT OF A SUCCESSFUL TREATMENT FOR CANCER AND OTHER VIRUS, BACTERIA, AND FUNGI. Copyrighted by John F. Crane 1954.

8) ELECTRON THERAPY PROPOSAL FOR RESEARCH GRANT by John F. Crane April 1965.

The foregoing constitutes the information and the work carried forward after 1958 on transducer type Frequency Instrument which has proven safe to use without any side effects on the human anatomy with the electrocution of harmful micro-organisms without harm to human cells coupled with a new effect to assisting the metabolism now with an uplift and of eliminating pain and shock from paralyzed nerves and body cells.

Submitted in duplicate,

John F. Crane

John F. Crane, President RVMI

STATE OF CALIFORNIA—HEALTH AND WELFARE AGENCY EDMUND G. BROWN, Governor

DEPARTMENT OF PUBLIC HEALTH
2151 BERKELEY WAY
BERKELEY 94704

November 17, 1965

Mr. John F. Crane
Rife Virus Microscope Institute
4246 Pepper Drive
San Diego 5, California

Dear Mr. Crane:

Subject: New Device Application -
Frequency Instrument

An initial review has been made of your application dated October 29, 1965 and received by this office on November 4, 1965.

Your application fails to indicate which enclosures are specimens of the labeling and advertisements for such device as set forth under Section 26288 (f) of the Health and Safety Code. Upon receipt of this information, a determination would follow as to whether other requirements of the code section have been met.

Section 26288 (a) of the Code reads as follows:

> "Full reports of investigations which have been made to show whether or not such drug or device is safe for use, and whether such drug or device is effective in use;"

In this regard, you are advised that the application and supportive material submitted does not satisfy the above requirement. It is required that full reports of adequate tests by all methods reasonably applicable, including clinical tests by experts qualified by scientific training and experience to evaluate the safety and efficacy of this device accompany this application. Until all the requirements of the code section are met, this application must be considered incomplete.

Very truly yours,

James W. Bell

James W. Bell, Chief
Bureau of Food and Drug Inspections

JWB
gsl:ev

STATE OF CALIFORNIA—HEALTH AND WELFARE AGENCY

EDMUND G. BROWN, Governor

DEPARTMENT OF PUBLIC HEALTH
2151 BERKELEY WAY
BERKELEY 94704

February 10, 1966

Mr. John F. Crane, President
Rife Virus Microscope Institute
4246 Pepper Drive
San Diego, California 92105

Dear Mr. Crane:

Subject: New Device Application -
Frequency Instrument

This is to acknowledge receipt of the statements of Dr. Leslie Drown, D.C. and Dr. Charles W. Bunner, D.C. in regard to the safety of the Rife Frequency Instrument.

We again wish to refer you to Section 26288 (a) of the Health and Safety Code which reads as follows:

> "Full reports of investigations which have been made to show whether or not such drug or device is safe for use, and whether such drug or device is effective in use;"

Let me emphasize that this section requires full reports of investigations to determine safety and efficacy. In this regard, the two statements do not satisfy the above requirement.

Very truly yours,

James W Bell

James W. Bell, Chief
Bureau of Food and Drug Inspections

JWB:ev
cc: Los Angeles

RIFE VIRUS MICROSCOPE INSTITUTE
4346 Pepper Drive, San Diego, California
92105 Zip Code Phone: 281-0278

INSTRUMENTS

FREQUENCY

- E
- L
THERAPY
++++++++
- -
- S
- R
- O
- N

Dr. Lester Breslow,M.D.
Director of Public Health
2151 Berkeley Way
Berkeley, Calif. 94704

March 7, 1966

Dear Sir:

We have sent in an application for a new device and have complied with all the requirements. We have received nothing but dereliction of duty from James W.Bell, Chief of Food and Drug Inspections.

Clinical evidence was included along with reports of absolute safety which can no longer be denied. Your departments practice of class discrimination to foreclose free enterprise and to stop the use of Frequency Instruments is a national disgrace as well as a monopolistic practice in depriving the people of this country of their right to live.

If the deprivation of our civil rights continues, there seems to be grounds for Federal grand jury action. We ask that this application be processed and approved without further harrassment and delay.

Let me assure you that the previous phony hearing held here in San Diego does not carry the present consequences.

Sincerely yours,

John F. Crane, President

RIFE VIRUS MICROSCOPE INSTITUTE

cc: Governor Edmund G. Brown
: RVMI Members and Friends
: The International Association of Cancer Victims And Friends
: Dr. Charles W. Bunner, D.C.

RIFE VIRUS MICROSCOPE INSTITUTE
4246 Pepper Drive, San Diego, California
92105 Zip Code Phone: 281-0278

- E
- L
THERAPY
++++++
- C
- T
- R
- O
- N

INSTRUMENTS
FREQUENCY

United States District Court
District of Utah
Salt Lake City, Utah

May 6, 1966

Deputy Clerk: Re: C 37-61
United States of America
vs
One Article Device***"Rife Frequency Instrument"...etc.

Per your letter of July 17, 1961 [Wayne Christoffersen by Hana Shirata] you state that an order was made for the release of Exhibit.

Please advise us of the disposition of this $1000.00 Frequency Instrument - does the Court still hold it and if it is released could it be sent to its lawful owner - John F, Crane/?

We understand that this instrument was unlawfully seized from Dr. George E. Eason, N.D.

John F. Crane

John F. Crane, President
RIFE VIRUS MICROSCOPE INSTITUTE

The item in question was released to
W. H. Lightfoot, Resident Inspector,
Food and Drug Administration on June 9, 1961
as per order of the Court. For further information,
please contact the United States Attorneys Office.

Filed in United States District Court, District of Utah
MAY 9 1966
Andrew John Brennan
Clerk

ANDREW JOHN BRENNAN, Clerk

By: Deputy Clerk

RIFE VIRUS MICROSCOPE INSTITUTE
4246 Pepper Drive, San Diego, California
92105 Zip Code Phone: 281-0278

- E
- L
THERAPY
++++++++
- C
- T
- R
- O
- N

INSTRUMENTS
FREQUENCY
M
E
N
T
S

U.S.District Court
District of Utah
Salt Lake City, Utah

May 12,1966

Deputy Clerk: Re: C 37-61

You have given us two names (1) W.H.Lightfoot, Resident Inspector, Food and Drug Administration and that of the U.S.Attorneys Office. Would you please send addresses for the two above referenced sources so that we may contact them. Thank you.

John F. Crane, President
RIFE VIRUS MICROSCOPE INSTITUTE

U.S. Attorney's Office
Room 200 U. S. Courthouse Bldg.
Salt Lake City, Utah

WILLIAM T. THURMAN
UNITED STATES ATTORNEY
200 U. S. POST OFFICE & COURT
HOUSE BLDG.
SALT LAKE CITY, UTAH 84101

Filed in United States District Court, District of Utah

MAY 1[illegible] 1966

Clerk

We are unable to find the address of W. H. Lightfoot, one-time Resident Inspector for the Food and Drug Adm. You might obtain the information you desire from the Food and Drug Adm. Dept. of Health, Education, and Welfare, Rm. 573, New Customhouse Bldg., Denver, Colorado 80202

AMERICAN MEDICAL ASSOCIATION
535 NORTH DEARBORN STREET • CHICAGO, ILLINOIS 60610 • PHONE (312) 527-1500 • TWX 910-221-0300

LAW DIVISION
BERNARD D. HIRSH, Director

DEPARTMENT OF INVESTIGATION
H. DOYL TAYLOR, Director

September 14, 1967

Miss Ellen L. Adams
2779 A Street
San Diego, California 92102

Dear Miss Adams:

This is in reply to your letter of September 6, asking for information on the "Rife Frequency Instrument."

We attach photocopies of pages from a report of the Food and Drug Administration, issued in 1962. This concerned the seizure of a Rife Frequency Instrument in an action filed in federal court, because it was misrepresented within the meaning of the federal law.

You will notice reference in the Notice of Judgment to John E. Marsh. The file contains an indication that Mr. Marsh was a defendant in the case brought by the State of California against several individuals, who were convicted by a jury for attempted grand theft and conspiracy to commit grand theft, and for conspiracy to violate the Business and Professions Code of California, prohibiting the practice of medicine without a license. The conviction was reversed on the first two counts, but affirmed on the third by the Supreme Court of California. Involved was the sale of Rife Frequency Instruments to residents of California, at prices ranging from $175 to $2,000, under the guise of "donations."

Very truly yours,

Oliver Field

Oliver Field.

6616. RIFE FREQUENCY INSTRUMENT. (F.D.C. No. 45509. S #17-356 R.)

QUANTITY: 1 device consisting of a variable frequency generator with a controlled power output designated "RIFE FREQUENCY INSTRUMENT" and a frequency counter designated "Model WE-110 Counter R.V.M.I. San Diego, Calif.," at Salt Lake City, Utah. * [Seized without Search and Seizure Warrant...] Taken from the office of Dr. George Eason.

SHIPPED: 8-1-60, from San Diego, Calif., by RIFE VIRUS MICROSCOPE INSTITUTE.

ACCOMPANYING LABELING: Four page leaflet entitled "Contract"; two letters signed by John E. Marsh, one dated 9-12-60, and one on the Rife Virus Microscope Institute letterhead dated 7-17-60; and an Instruction Manual

RESULTS OF INVESTIGATION: The device was a variable frequency generator with a controlled power output used in conjunction with a Model WE-110 frequency counter. The device included two metal electrodes with insulated handles which were intended to be applied in direct contact with the patient's body.

LIBELED: 3-13-61, Dist. Utah. [Coerced confession by the U.S. District Court in violation of the Fifth Amendment and the Sixth Amendment.] *

CHARGE: 502(a) - when shipped, the accompanying labeling of the article contained false and misleading representations that the article was adequate and effective as a treatment for devitalizing micro-living organizms detrimental to mankind, and thereby overcoming such conditions as cancer, colds, tumors, leukemia, athlete's foot, varicose veins, tetanus, typhoid, gonorrhea, staphylococcus, pneumonia, streptothrix, TB virus, carcinoma, sarcoma, treponema, abscess, fistula, hemorrhoids, hernia, irritations, arthritis, bursitis, palsy, diseased lymph nodes, acne, cystitis, boils, bubonic plague, diptheria, elephantitis, fungus, impertigo, hardening of the artieries, leprosy, moles, multiple sclerosis, poison oak, poison ivy, poliomyelitis, skin eruptions, spinal meningitis, warts, constipation, typhoid fever, colitis, cataract, glaucoma, leakage of the heart, coronary thrombosis, tetanus, peptic ulcers, and other abnormal and dosease conditions.

DISPOSITION: 5-29-61. Default-delivered to the Food and Drug Administration.

* The above charge was false in that no claims were made at all. This was stipulated in the contract carefully ignored by the United States Government sued herein for common grand theft without legal cause; by John E. Marsh and John F. Crane.

THE INSTRUMENTS WERE NOT SOLD AS FALSELY ALLEGED.

Patented Sept. 10, 1929. 1,727,618

UNITED STATES PATENT OFFICE.

ROY R. RIFE, OF SAN DIEGO, CALIFORNIA.

MICROSCOPE LAMP.

Application filed August 2, 1927. Serial No. 210,099.

My invention relates to microscope lamps and the objects of my invention are: first, to provide a lamp of this class which is positiond directly below the stage of the microscope; second, to provide a device of this class which fits into the mirror yoke of the microscope; third, to provide a device of this class in which the intensity of light may be easily controlled; fourth, to provide a device of this class in which the lamp is of ample intensity for the most minute or microscopic studies; fifth, to provide a device of this class which is attached to the microscope and is not an accessory thereto; sixth, to provide a device of this class which provides superior quality of flat and uniform light which is excellent for microscopic and microphotographic work; seventh, to provide a device of this class which is well ventilated to prevent excessive heat; eighth, to provide a device of this class in which the light emitted therefrom does not fluctuate and therefore reduces to a minimum the strain on the operator's eyes; and ninth, to provide a device of this class which is simple of construction, easy to install on any conventional microscope, neat in appearance, durable, efficient in its action, and which will not readily deteriorate or get out of order.

With these and other objects in view as will appear hereinafter, my invention consists of certain novel features of construction, combination and arrangement of parts and portions as will be hereinafter described in detail and particularly set forth in the appended claims, reference being had to the accompanying drawings and to the characters of reference thereon which form a part of this application, in which:

Figure 1 is a side elevational view of my microscope lamp shown in connection with a conventional microscope; Fig. 2 is a top or plan view of my microscope lamp shown in connection with a rheostat means for varying the intensity of the light of the lamp; Fig. 3 is an enlarged sectional view of my microscope lamp through 3—3 of Fig. 4, with certain parts shown in plan to facilitate the illustration, and with the light bulb therein shown by dotted lines, and Fig. 4 is a sectional elevational view thereof through 4—4 of Fig. 3 with the light bulb therein shown by dotted lines.

Similar characters of reference refer to similar parts and portions throughout the several views of the drawings.

The lamp housing 1, lamp socket support 2, lamp socket 3, incandescent lamp 4, reflector 5, lens support 6, lens 7, cord 8, and the rheostat 9, constitute the principal parts and portions of my microscope lamp.

My lamp is positioned below the stage S and at the side thereof opposite the objective O, and is mounted in its preferred form, on the conventional mirror yoke B of the microscope, in place of the usual mirror as will be described later.

The housing 1, is cylindrical, is open at its ends and is provided with a plurality of perforations 1^a in the walls thereof. Extending from an opening in the side wall of the housing 1, is a lamp socket support 2. Its inner end is flanged and is soldered or otherwise secured to the housing 1. The support 2, is provided with a clip means 2^a for frictionally engaging the lamp socket 3 which is positioned therein. The lamp socket 3, is similar to the conventional automobile lamp socket and may be adjustably positioned in the lamp socket support 2. An incandescent lamp 4 is removably secured in the lamp socket 3. Positioned over the lower open end of the housing 4, is a reflector 5, which is preferably metallic and which is provided with a reflecting surface on its upper side. An opening 5^a is provided in the reflector 5, which is centered therein and which, with the perforations 1^a in the housing 1, permits thorough circulation of air around the lamp 4. The hole 5^a, also permits the light emitting portion of the lamp 4 to be more easily centered on the axial line of the microscope lamp. Positioned over the upper open end of the housing 1, is a lens support 6, which is provided with a large central opening 6^a, therein. The lower edge of the opening 6^a, has an inwardly extending flange 6^b, on which rests the lens 7. The lens 7 is plano-convex and is frosted on its plane and inner

side. The lens 7, is held in position by means of plastic material 7a.

The cord 8, which furnishes electricity to the incandescent lamp 4, is connected with the rheostat 9, which varies the strength of current and thereby regulates the intensity of the light of the lamp 4. As shown in Fig. 1 of the drawings the microscope lamp is mounted under the stage of the microscope in place of the microscope mirror. For this purpose, the housing 1, is provided with two oppositely disposed openings in the side walls thereof in which extend projections of the mirror yoke B.

It is obvious from the construction as illustrated in the drawings and included in the foregoing specification, that there is provided a microscope lamp as aimed at and set forth in the objects of my invention, and although I have shown and described a particular construction, combination and arrangement of parts and portions, I do not wish to be limited to this particular construction, combination and arrangement, but desire to include in the scope of my invention the construction, combination and arrangement substantially as set forth in the appended claims.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In a microscope lamp of the class described, the combination with a microscope having a stationary base and a pivotal objective, of a cylindrical housing pivotally mounted between said base and said objective in connection with and in alignment with said objective and movable therewith, a lens positioned over the one end of said housing, a reflector positioned over the other end of said housing, and an incandescent lamp extending into said housing from the side thereof at a right angle to its axis between said lens and said reflector.

2. In a microscope lamp of the class described, the combination with a microscope having a stationary base and a pivotal objective, of a cylindrical housing pivotally mounted between said base and said objective in connection with and in alignment with said objective and movable therewith, a lens positioned over the one end of said housing, a reflector positioned over the other end of said housing, an incandescent lamp extending into said housing from the side thereof at a right angle to its normally vertical axis, and means to facilitate the positioning of the light emitting portion of said lamp on the axial line of said housing.

3. In a means of the class described, the combination with a microscope having a stage and an objective at one side thereof, of a support carried by and shiftable with said stage, and a lamp mounted on said support and shiftable therewith opposite the objective.

4. In a means of the class described, the combination with a microscope having a stage, an objective mounted at one side thereof, and a conventional mirror support at the opposite side of said stage, of a lamp, mounted on said support and directed toward said stage.

In testimony whereof, I have hereunto set my hand at San Diego, California, this 16th day of July, 1927.

ROY R. RIFE.

Sept. 10, 1929. R. R. RIFE 1,727,618

MICROSCOPE LAMP

Filed Aug. 2, 1927

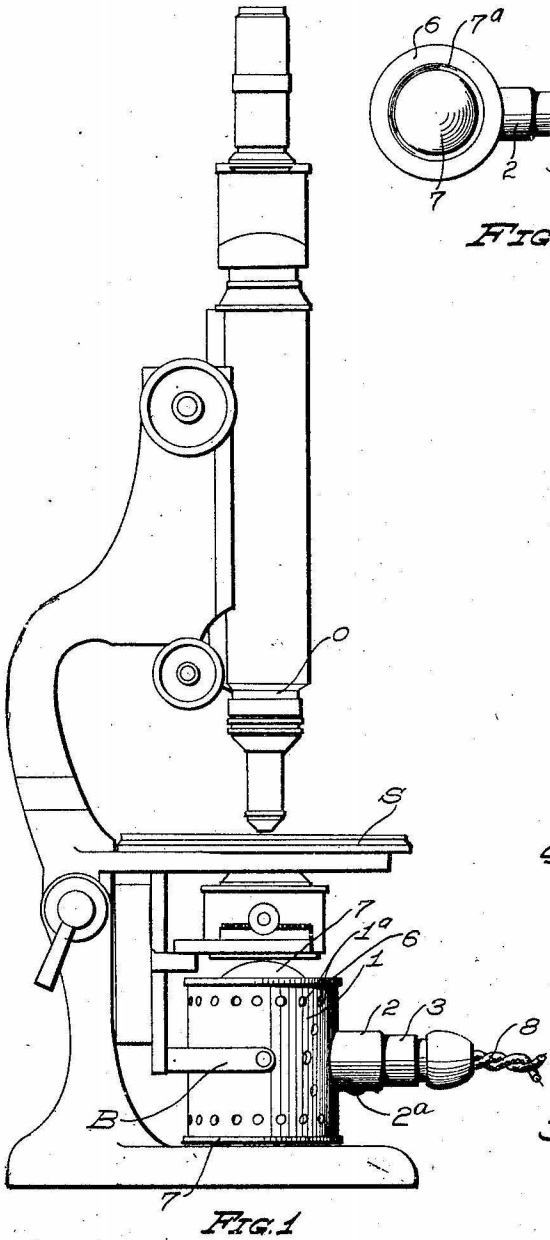


FIG. 1

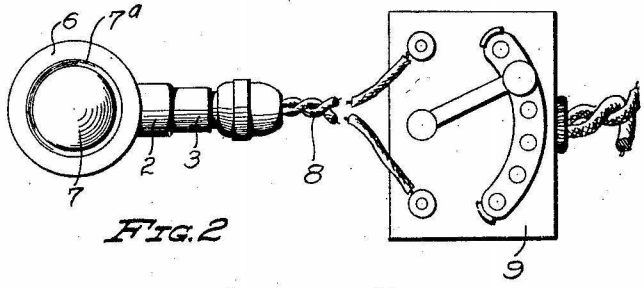


FIG. 2

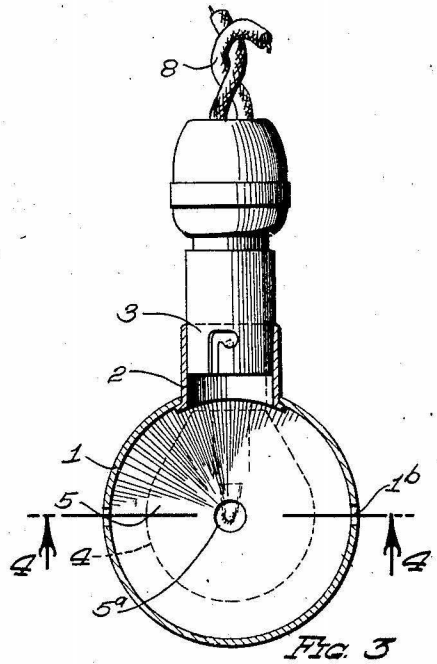


FIG. 3

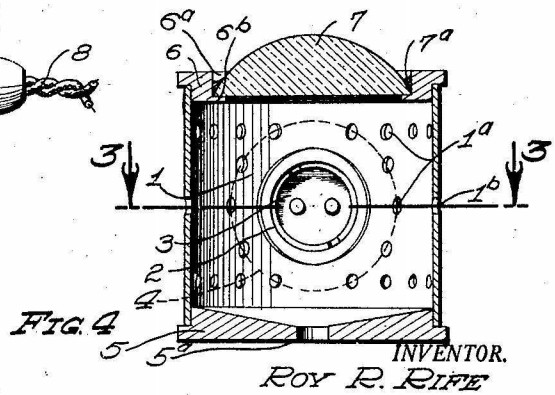
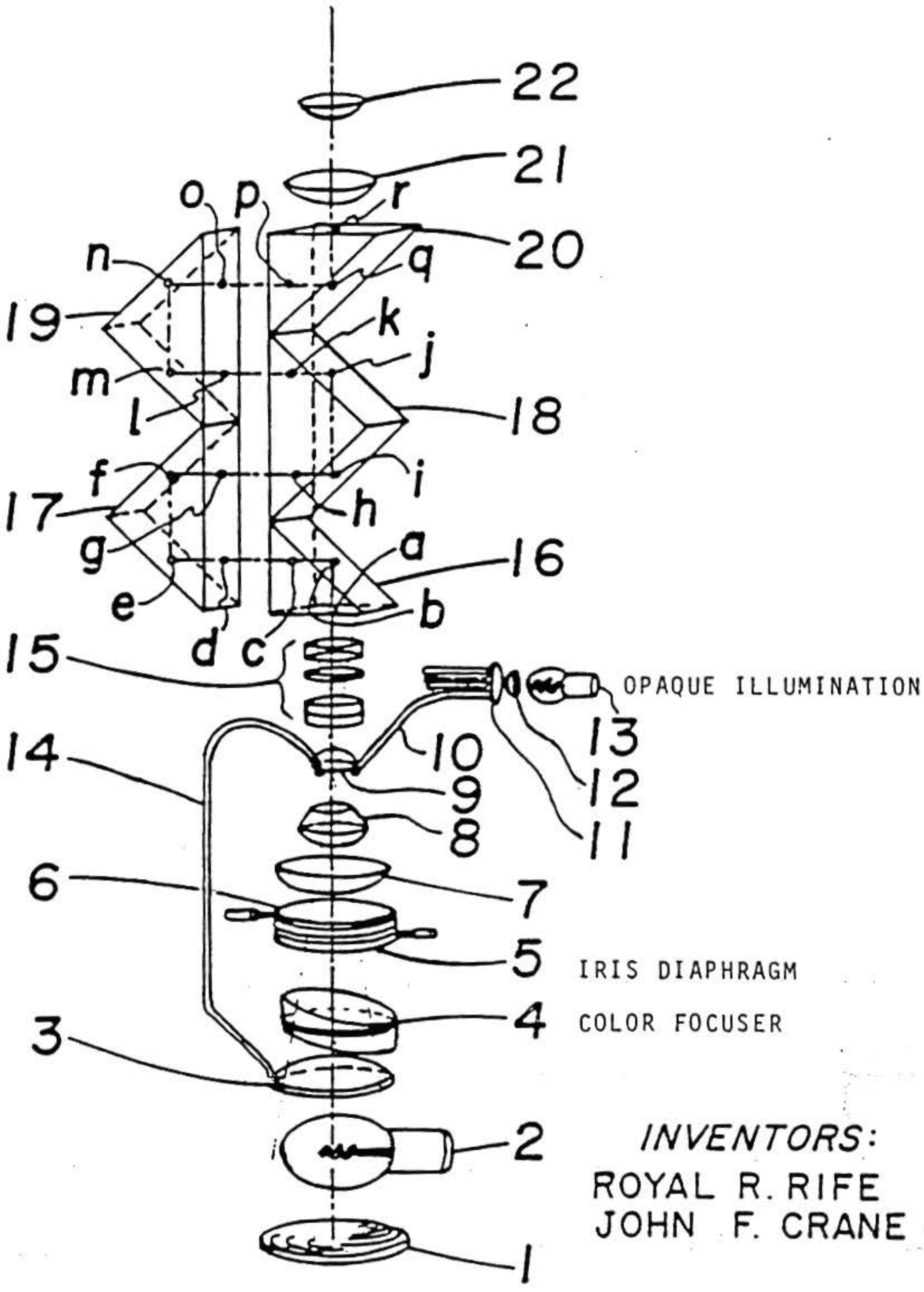


FIG. 4

INVENTOR.
ROY R. RIFE
BY A.B. Bowman
ATTORNEY

APPENDIX W



PRISMATIC VIRUS MICROSCOPE

Fig. 2

INVENTORS:
ROYAL R. RIFE
JOHN F. CRANE

Patent Pending

APPENDIX X

ASSIGNMENT OF INVENTION OF UNIVERSAL MICROSCOPE, OPTICAL AND ELECTRONIC SYSTEMS

WHEREAS, I, ROYAL R. RIFE, a resident of San Diego County, California, have invented a certain new and useful microscope, for which I am about to make application for letters patent of the United States; and

WHEREAS, JOHN F. CRANE, a resident of San Diego County, California, is desirous of acquiring an interest in said invention and in the letters patent to be obtained therefor;

NOW, THEREFORE, IN CONSIDERATION of the sum of Five Hundred Dollars ($500.00), receipt of which is acknowledged, Royal R. Rife hereby sells, assigns and transfers to John F. Crane the full and exclusive right to the said invention, including all working models of said invention which have not previously been sold, possession of which is acknowledged to be with John F. Crane. I further assign my right to the application for a patent and in and to any and all continuations, divisions and renewals thereof, and in and to any and all United States Letters Patent granted thereon and in and to any and all reissues and extensions thereof as well as all Letters Patent and applications therefor in any foreign country, and I do hereby authorize and request the Commissioner of Patents to issue the said letters patent to the said John F. Crane as the assignee of my entire right, title and interest in and to the same for the sole use and behoof of the said John F. Crane and his legal representatives.

I further agree that on request of the assignee and at its expense, but without further consideration, I will testify in any proceeding and execute all proper papers and otherwise act to aid assignee in obtaining and enforcing proper patent title and protection in said assignee.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my seal on this 4th day of March, 1968.

Royal R Rife.

ROYAL R. RIFE
3676 Zola Street
Point Loma, CA

WITNESS:
Richard D. Streeper

Richard D. Streeper

Attorney at Law
STREEPER AND SHANNER
2067 1st Ave., San Diego, CA.

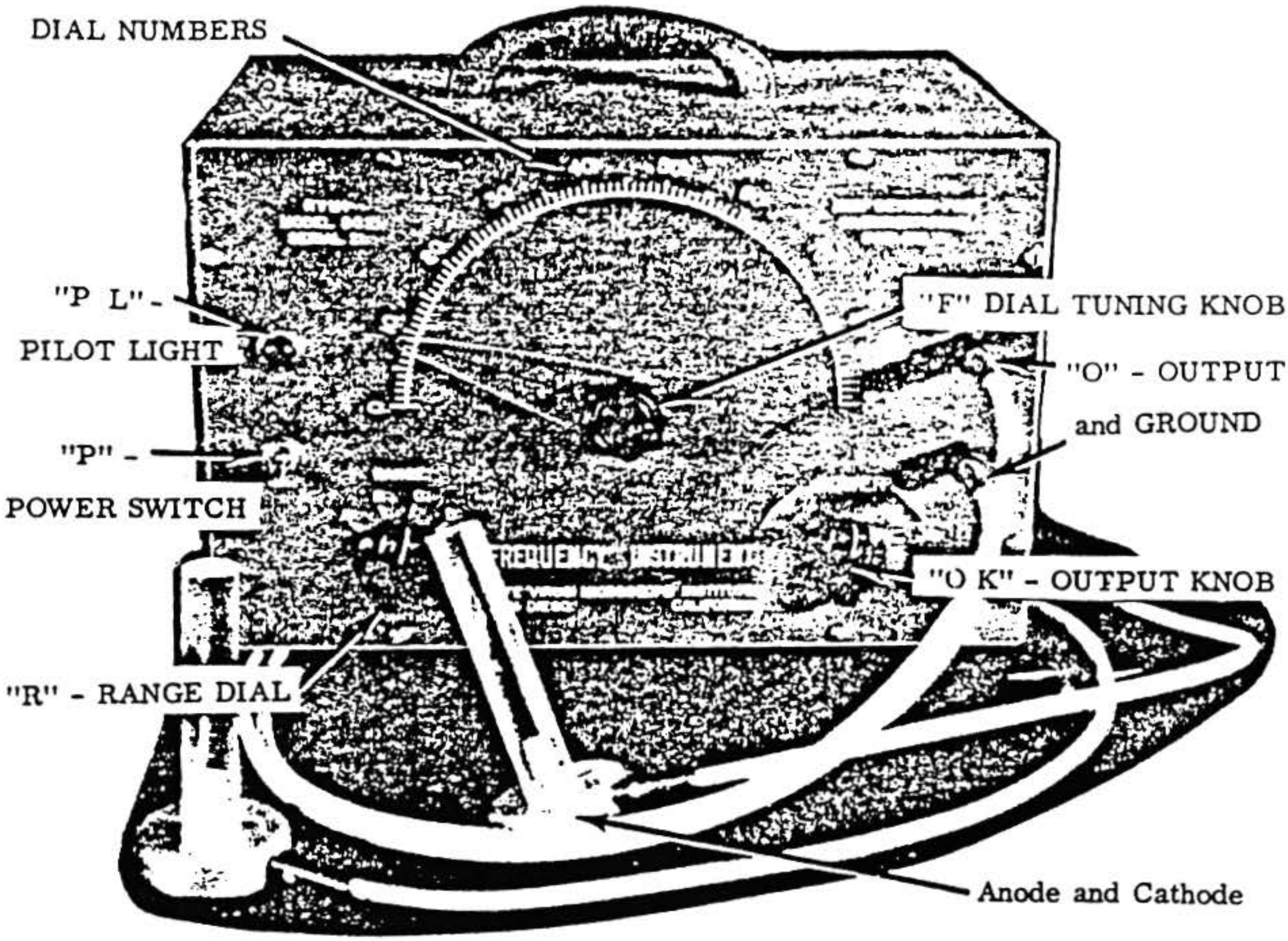
WITNESS:
John F. Crane

John F. Crane

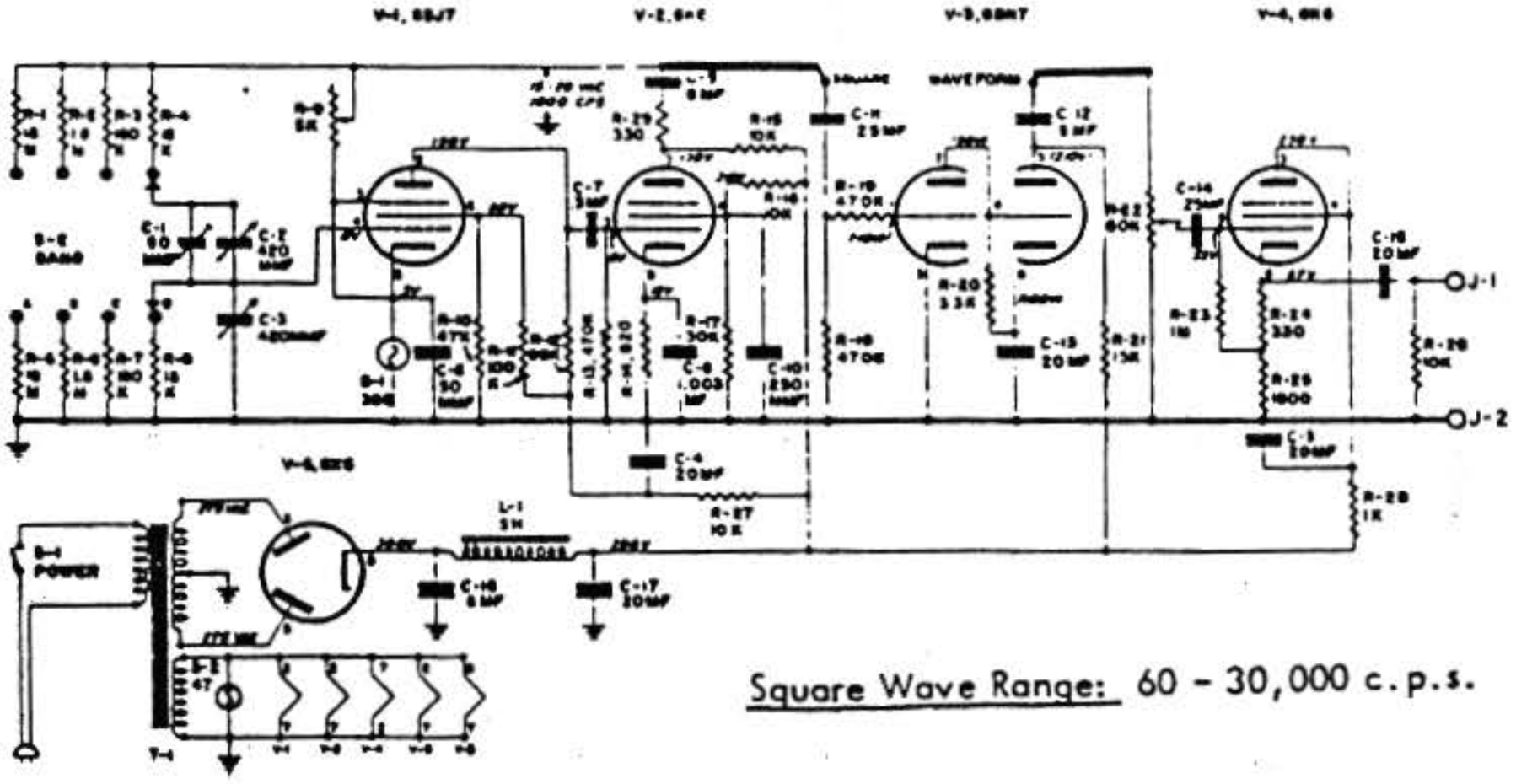
President, Rife Virus Microscope Institute
4246 Pepper Drive, San Diego, CA. 92105

APPENDIX Y

RIFE FREQUENCY INSTRUMENT



AUDIO SQUARE WAVE GENERATOR



Square Wave Range: 60 - 30,000 c.p.s.

Rated Output Power: 100 milliwatts into rated load (10 volts across a 1000 ohm resistive load).

DIAGRAM OF INSTRUMENT

FOR ELECTRON THERAPY Patent Pending

United States Patent [19]

Gordon

[11] **Patent Number: 4,622,952**

[45] **Date of Patent: Nov. 18, 1986**

[54] **CANCER TREATMENT METHOD**

[76] Inventor: **Robert T. Gordon,** 4936 W. Estes, Skokie, Cook County, Ill. 60077

[21] Appl. No.: **681,697**

[22] Filed: **Dec. 14, 1984**

Related U.S. Application Data

[63] Continuation of Ser. No. 457,715, Jan. 13, 1983, abandoned, which is a continuation of Ser. No. 96,413, Nov. 21, 1979, abandoned.

[51] **Int. Cl.**[4] **A61N 1/42**

[52] **U.S. Cl.** **128/1.3**; 128/422; 604/20

[58] **Field of Search** ..... 128/1 R, 1.1, 1.3, 1.5, 128/422, 736, 804; 604/20, 21; 424/1.1, 9, 85, 147; 514/824, 889

[56] **References Cited**

U.S. PATENT DOCUMENTS

3,474,777	10/1969	Figge et al.	604/28
3,489,522	1/1970	McConnell	424/9
3,542,915	11/1970	Bodkin	424/147
4,005,699	2/1977	Bucalo	128/1.3
4,027,021	5/1977	Underwood	514/889
4,186,729	2/1980	Harrison	128/1.3
4,202,323	5/1980	Zweig et al.	128/1.1
4,269,826	5/1981	Zimmermann et al.	128/1.1
4,303,636	12/1981	Gordon	128/1.1
4,323,056	4/1982	Borrelli et al.	128/1.3
4,325,361	4/1982	Harrison	128/1.3

FOREIGN PATENT DOCUMENTS

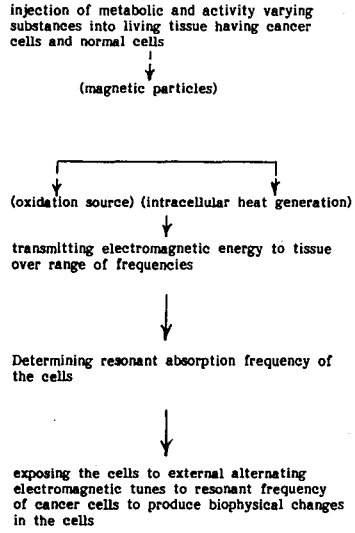
522688	5/1977	U.S.S.R.	128/1.3
789119	12/1980	U.S.S.R.	128/1.3

Primary Examiner—William E. Kamm
Attorney, Agent, or Firm—Lalos, Keegan & Kaye

[57] **ABSTRACT**

A process for the treatment of cancer by the application of external electromagnetic energy capable of achieving biophysical alterations in the intracellular structure of cancer cells in living tissue, including stimulation of intracellular production of interferon. The process accomplishes these biophysical alterations by tuning an external electromagnetic energy to the resonant energy absorption frequencies of the intracellular structure of the selected cells and then exposing the subject to this tuned electromagnetic energy field. Alternatively, the field can be tuned to the frequency which has been calculated to be closest to the resonant frequency of the cancer cells and furthest from the resonant frequency of the normal cells. The process may be further enhanced by the intracellular absorption of selected materials designed to alter the magnetic susceptibility and therefore the resonant energy absorption frequency of the intracellular structure.

17 Claims, 1 Drawing Figure



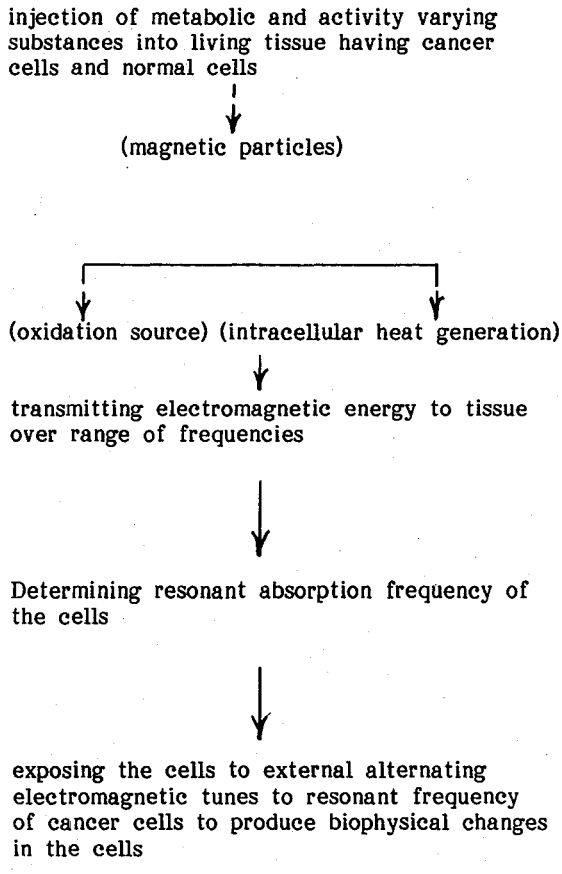

injection of metabolic and activity varying substances into living tissue having cancer cells and normal cells
(magnetic particles)
(oxidation source) (intracellular heat generation)
transmitting electromagnetic energy to tissue over range of frequencies
Determining resonant absorption frequency of the cells
exposing the cells to external alternating electromagnetic tunes to resonant frequency of cancer cells to produce biophysical changes in the cells

Fig. 1

CANCER TREATMENT METHOD

This is a continuation of co-pending application Ser. No. 457,715, filed on Jan. 13, 1983, now abandoned, which is a continuation of application Ser. No. 096,413, filed on Nov. 21, 1979, now abandoned.

INTRODUCTION

This invention relates generally to a process for the treatment of cancer in living tissues and is an extension of the technology described in U.S. Pat. No. 4,106,488 issued Aug. 15, 1978; and U.S. Pat. No. 4,136,683 issued Jan. 30, 1979. More particularly, the present invention relates to method for achieving biophysical alterations in the intracellular structure of cells. These biophysical alterations include thermal changes, stimulation of the intracellular production of interferon, stimulation of the intracellular production of prostaglandins, and the treatment of cancer by intracellularly killing the cancer cells without injuring the normal cells.

BACKGROUND OF THE INVENTION

There are presently a number of methods and techniques for the treatment of cancer, among which may be included: radiation therapy, chemotherapy, immunotherapy, and surgery. The common characteristic for all of these techniques as well as any other presently known technique is that they are extracellular in scope; that is, the cancer cell is attacked and attempted to be killed through application of the killing force or medium outside of the cell; the only known exception being, U.S. Pat. No. 4,106,488, Cancer Treatment Method, Robert Thomas Gordon, issued Aug. 15, 1978, of which this invention is an extension of the technology therein described.

The extracellular approach is found to be less effective because of the difficulties of penetrating the outer membrane of the cancer cell that is composed of two protein layers with a lipid layer in between. Of even greater significance is that in order to overcome the protection afforded the cell by the cell membrane in any extracellular techniques, the attack on the cancer cells must be of such intensity that considerable damage is caused to the normal cells resulting in severe side effects upon the subject. These side effects have been found to limit considerably the effectiveness and usefulness of these extracellular treatments.

A safe and effective cancer treatment has been the goal of investigators for a substantial period of time. Such a technique to be successful in the destruction of the cancer cells must be selective in effect upon the cancer cells and produce no irreversible damage to the normal cells. In sum, cancer treatment must selectively differentiate cancer cells from normal cells and must selectively weaken or kill the cancer cells without affecting the normal cells.

It has been known that there are certain physical differences that exist between cancer cells and normal cells. One primary physical difference that exists is the temperature differential characteristics between the cancer cells and the normal cells. Cancer cells, because of their higher rates of metabolism, have higher resting temperatures compared to normal cells. In the living cell, the normal temperature of the cancer cell is known to be 37.5° Centigrade, while that of the normal cell is 37° Centigrade. Another physical characteristic that differentiates the cancer cells from the normal cells is

that cancer cells die at lower temperatures than do normal cells. The temperature at which a normal cell will be killed and thereby irreversibly will be unable to perform normal cell functions is a temperature of 46.5° Centigrade, on the average. The cancer cell, in contrast, will be killed at the lower temperature of 45.5° Centigrade. The temperature elevation increment necessary to cause death in the cancer cell is determined to be at least approximately 8.0° Centigrade, while the normal cell can withstand a temperature increase of at least 9.5° Centigrade.

It is known, therefore, that with a given precisely controlled increment of heat, the cancer cells can be selectively destroyed without injury to the normal cells. On the basis of this known differential in temperature characteristics, a number of extracellular attempts have been made to treat cancer by heating the cancer cells in the body. This concept of treatment is referred to as hyperthermia. To achieve these higher temperatures in the cancer cells, researchers have attempted a number of methods including inducing high fevers, utilizing hot baths, diathermy, applying hot wax, and even the implantation of various heating devices in the area of the cancer.

Presently, none of the various known approaches to treat cancer have been truly effective and all have the common characteristic of approaching the problem by treating the cancer cell extracellularly; the only known exception being, U.S. Pat. No. 4,106,488, Cancer Treatment Method, Dr. Robert Thomas Gordon, issued Aug. 15, 1978. The outer membrane of the cancer cell being composed of lipids and proteins, is a poor thermal conductor, thus making it difficult for the application of heat by external means to penetrate into the interior of the cell where the intracellular temperature must be raised to effect the death of the cell. If, through the extracellular approaches of the prior hyperthermia techniques, the temperatures were raised sufficiently to effect an adequate intracellular temperature to kill the cancer cells, many of the normal cells adjacent the application of heat would be destroyed as well.

It has been known that the nuclei of cancer cells and the nuclei of normal cells possess some differences. The alterations which occur in a cell to produce malignancy either take place in, or are transmitted to, the nucleus. This is evident by the fact that the cells produced by tumor cell multiplication possess the same characteristics as the original tumor cell.

A large amount of work has been done "in vitro" concerning the magnetic resonant frequencies of cancer tissues as compared to those of normal tissues. Differences have been attributed to differences in the amount of water present in the cancer cells and the way in which the water molecules are ordered. A key to this process lies in the nuclear differences, including energy changes characteristic of structural and conformational changes in the deoxyribonucleic acid and the histones of the nucleus, including their relationship, resulting in differential resonant frequencies for the cancer cells from the normal cells.

A further key to this process is the additional changes in intracellular biophysical characteristics which occur in this process. Included in these changes is the intracellular production of interferon and/or prostaglandins. The production of interferon in the past has been shown to be triggered by foreign agents or materials which alter the internal biophysical characteristics of the cell

by increases in the intracellular temperature or energy levels.

Due to the unstable characteristics of interferon and prostaglandins, even if interferon and prostaglandins were to be synthesized and subsequently injected intravascularly into a subject, the effectiveness of the synthesized interferon and/or prostaglandins would be limited due to the loss of time between injection into the subject and the time when the synthesized interferon and/or prostaglandins would reach the cellular level where their effectiveness is required. Interferon and prostaglandins are most effective when their production is stimulated intracellularly so that their peak effectiveness and potential are utilized, where required, intracellularly.

OBJECT OF THE INVENTION

It is therefore the purpose and principal object of the present invention to selectively destroy cancer cells by achieving biophysical alterations in the intracellular structure of the cancer cells while producing no significant effects upon the normal cells. The biophysical alterations include thermal changes, the stimulation of the intracellular production of interferon and/or the stimulation of the intracellular production of prostaglandins. In addition, the present invention provides a technology for the detection of cancer cells wherever they exist in the body.

SUMMARY OF THE INVENTION

A treatment of cancer by the application of external electromagnetic energy capable of achieving biophysical alterations in the intracellular structure of cancer cells in living tissue. These biophysical alterations include thermal changes, the stimulation of intracellular production of interferon and the stimulation of intracellular production of prostaglandins. The process comprises accomplishing these biophysical alterations by tuning the external electromagnetic energy to the resonant energy absorption frequencies of the intracellular structure of the selected cells. Alternatively, the field can be tuned to the frequency which has been calculated to be closest to the resonant frequency of the cancer cells and furtherest from the resonant frequency of the normal cells. The process may be further enhanced by the intracellular absorption of selected materials designed to alter the magnetic susceptibility and therefore the resonant energy absorption frequency of the intracellular structure. The biophysical differences between diseased cells and normal cells make possible the selective absorption of materials thereby enhancing the differences in magnetic susceptibilities between diseased cells and normal cells resulting in an increased capability of selective energy absorption by diseased cells. This technology has diagnostic applications in the detection of cancer cells in combination with the use of differential resonant frequencies, magnetic resonance and electron spin resonance techniques. The process will have application in the treatment of a wide range of diseases at the cellular level, particularly, in the field of cancer where this mode of affecting the thermal characteristics and of stimulating the intracellular production of interferon and/or prostaglandins in the diseased cells will be effective in the selective destruction of cancer cells without injuring the normal cells and tissue.

DESCRIPTION OF THE INVENTION

The present invention achieves a precise increment of heat rise within the cancer cell and within the cytoplasm. The thermal barrier that characteristically exists as the outer membrane or cell wall of the cell is now utilized as a means of retaining the heat produced within the cell, rather than, as in the past, preventing any heat build-up within the cell. On the basis of the cell resting temperatures and the temperature necessary to produce cell death, the increment that the cell temperature must be raised to cause the cell death is critical. For the normal cell, the temperature rise is 9.5° Centigrade, while in the cancer cell the temperature rise is approximately 8.0° Centigrade. Thus, any temperature rise in the cancer cell or in the normal cell that is at least 8.0° Centigrade and not more than 9.5° Centigrade above the normal cell temperature results in the selective destruction of the cancer cell without any harmful effects to the normal cell.

In accordance with the present invention, there are found to be a number of approaches that can successfully achieve the end result of an intracellular heat rise and an intracellular destruction of the cancer cell.

In its simplest and broadest aspect, the invention contemplates the use of the differential resonant frequencies of cancer cells and normal cells to allow significant energy absorption into the cancer cells at their specific resonant frequency while allowing very little energy absorption into the normal cells. The nuclei of the cancer cells (the DNA, histones, etc.) besides often being different in content, usually differ in conformation and binding from the nuclei of normal cells (the DNA, histones, etc.). These differences contribute to the variance in the resonant frequencies between the structures in cancer cells and in normal cells. This difference between the cancer cells and the normal cells being nuclear in origin, is transmitted to the daughter cancer cells formed by cell division and explains the daughter cells' propensity towards malignancy.

A tuning fork will resonate, absorbing energy, from sound produced by another tuning fork of the same pitch (frequency) twenty or thirty feet away. If a variety of structures were placed within the effective range of a high frequency electromagnetic field, those structures having the same resonant frequency as the electromagnetic field will absorb energy from the field. Therefore, by placing the subject within the effective range of the high frequency electromagnetic field and by tuning the frequency of this field to the specific resonant frequency of the cancer cells, the cancer cells will then absorb energy from this electromagnetic field resulting in the raising of their intracellular temperature and the affecting of their biophysical properties so as to selectively destroy the cancer cells without affecting the normal cells.

Computerized axial tomography techniques are combined with an electromagnetic field generator and detection receiver sensing techniques to obtain three-dimensional data on specific point resonant energy abosorption at a range of frequencies. The resonant frequency of the cancer cells being different from that of the normal cells will serve to identify the location of the cancer cells.

One possible configuration would embody the subject being placed within a large helical coil and the entire coil energized by a high frequency generator so that the entire subject would be within the effective

range of this electromagnetic field. The frequency of this electromagnetic field would be selected as the one closest to the resonant frequency of the cancer cells and furthest from that of the normal cells. The cancer cells will absorb energy at their resonant frequency and will be destroyed intracellularly while the normal cells are unharmed.

This destruction of the cancer cells can be monitored by repeating the first part after completion of the second in order to monitor the destruction of the cancer cells. This destruction can be monitored by observing the absence of cells which absorb energy at the cancer cells resonant frequency.

This technology has application in the treatment of Atherosclerosis. Research work by the inventor and studies in the literature suggest that the development of atherosclerotic lesions is in many ways similar to tumor formation with the multiplication of a single cell line and the proliferation of smooth muscle cells (the monoclonal theory). These proliferating smooth muscle cells along with the deposition of cholesterol allow the components of the atherosclerotic plaque to have resonant frequencies different from those of the normal intimal wall. The magnetic resonant frequencies of lipids in bilayers and membranes as well as of phospholipids in relation to membrane permeability (which of course is very important to this discussion of atherosclerosis), have been studied. Membrane perturbations by physical agents can actually be followed using electron spin probe analysis. Using selective irradiation of the specimen in switched magnetic field gradients, blood flow in a vessel can be measured due to the different spin characteristics of the new polarized blood entering a specific region of the vessel. Studies by the inventor along with others found in the literature, illustrate the changes in the newly formed atherosclerotic plaques.

Therefore by performing a three-dimensional scan utilizing magnetic resonant sensing techniques, the areas of atherosclerotic lesions may be identified. Subsequently by subjecting the subject to the frequency closest to the resonant frequency of the atherosclerotic lesions, the lesions may be destroyed due to the absorption of energy, without affecting the normal vessel wall whose cells respond to a different set of frequencies.

The uptake of particles by tumors and atherosclerotic plaques in certain stages of their formation has been demonstrated. Magnetic resonant sensing techniques may be utilized to characterize the magnetic parameters of the structures. Electron spin probe analysis has been used to detect membrane perturbation by physical agents. By allowing the tumor or atherosclerotic plaque to take up the particles, be they ferromagnetic, paramagnetic, or diamagnetic, the process of determining the resonant frequencies of the cancer cells or the atherosclerotic lesions and of energy absorption at the desired resonant frequency, may be enhanced.

The production of interferon is triggered by a foreign substance which the cell senses. A magnetically excitable particle which is absorbed intracellularly by the tumor cell and then magnetically excited, results in energy absorption, temperature rise, and some mechanical vibration, which acts to trigger and to stimulate interferon production as well as prostaglandins production in the cell and other intracellular immunological responses. These responses aid in the processes' ability to destroy the cancer cells. The intracellular absorption of resonant energy, alone, will excite and alter the intracellular biophysical characteristics and will stimulate the intracellular production of interferon and/or prostaglandins.

The intracellular absorption of agents other than magnetically excitable particles; i.e. various sugars, agents affecting cyclic-AMP, a material or materials capable of generating heat intracellularly by chemical reaction and/or the application of an increased oxygen supply to the cells resulting in an increased rate of chemical reaction and increased intracellular metabolism can also be utilized to alter the magnetic susceptibility of the cell and to help the absorption of energy at the cancer cell's resonant frequency. The intracellular production of interferon, prostaglandins, and other immunological agents, is also stimulated. The intracellular absorptions enhance the difference in the resonant frequencies between the cancer cells and the normal cells as well as to affect the magnetic susceptibility of the cell thereby enhancing the processes in this invention to selectively destroy cancer cells.

The cancer cells and the normal cells metabolic rate and activity are affected differently by agents such as sugars, prostaglandins, interferon, and agents affecting cyclic-AMP as well as by the intracellular resonant energy changes, themselves. This differential response of the cancer cells and normal cells metabolic activity allows for a variation with time in the respective resonant frequencies of the cancer cells and the normal cells. These differences can be utilized in choosing the specific time when the resonant frequencies of the cancer cells and the normal cells differ the most so as to enhance the process of detecting cancer cells and the process of selectively killing the cancer cells without injuring the normal cells and tissues.

"A method according to the present invention is illustrated in the form of a flow chart in the drawings."

EXAMPLE I

Determination of resonant energy absorption frequency for materials or tissues is obtained by using a high frequency signal generator with the capability of sweeping the frequency range to be scanned which is connected to an antenna. A receiving coil connected to a power meter (so as to measure the power received) is placed a short distance away. The material or tissues (whose resonant absorption frequency is to be determined) is placed in the space between the transmitting antenna and the receiving coil. Appropriate shielding is placed laterally around the specimen being tested in such a manner that any RF energy being transmitted from the antenna to the receiving coil must pass through the specimen. As the frequency range of the signal generator is scanned and the power received by the coil is measured, the resonant absorption frequency for the specimen being tested will be indicated by a significant drop in the power received by the receiving coil (since at this resonant frequency, the specimen will be absorbing some of the power).

This method will be applicable to determining different resonant absorption frequencies for cancer cells and for normal cells and for the various additive materials. The method will also be useful in measuring the alteration of the resonant absorption frequency by the intracellular absorption of various materials and by changes in the intracellular metabolic rate.

EXAMPLE II

As a specific example of the simplest form of the present invention, prior to treatment, tumor tissue biop-

sies are taken and examined under light microscopy to confirm tumor cell identification. 2 cc. of an aqueous colloidal solution of FeOOH and dextran is injected intravenously into the subject. This solution when injected intravenously is capable of being intracellularly absorbed and thus greatly increases the magnetic susceptibility of the intracellular structure of the cell. Moreover, after this solution is intracellularly absorbed, it is capable of being metabolized by the cell thus producing a variable magnetic susceptibility with reference to time. Biopsies taken several hours after the intravenous injection of the solution and examined under electron microscopy, confirm the intracellular absorption of this solution, particularly by the cancer cells. Biopsies of cancer tissue and normal tissue taken at 1 hour, 2 hours, 4 hours, 12 hours, 24 hours, and 48 hours after the intravenous injection of this solution are immediately frozen and subsequently taken for measurements of magnetic susceptibility in a Vibrating Sample Magnetometer, Princeton Applied Research Model No. 159. Using this data, it is possible to plot the rise in magnetic susceptibility due to the intracellular absorption of the solution in the cancer cells and to compare it to the magnetic susceptibility changes in the normal cells. This gives data on the increase in magnetic susceptibility not only due to the intracellular absorption of the solution, but also with reference to the matabolism in the time period. Using frozen samples from a time period which indicates high relative magnetic susceptibility of cancer cells to normal cells, and using the method described in Example I earlier, for determining the optimal resonant absorption frequency, it was determined that a high frequency electromagnetic field of 450 kilohertz applied approximately 4 hours after the intravenous injection of this solution, would provide optimal resonant energy absorption and resultant biophysical alterations by the cancer cells. Approximately 48 hours after this procedure was followed, biopsies are taken and examined under light microscopy and electron microscopy which confirmed the effectiveness of this procedure in destroying cancer cells without injurying surrounding normal cells and normal tissue.

EXAMPLE III

Basically this invention relates to achieving biophysical alterations in the intracellular structure of living cells, particularly cancer cells, by raising the energy level inside the cells, intracellularly. The application of energy derived from chemical reaction can be utilized for this purpose, for example; ferric oxyhydroxide particles of 0.7 micron size are colloidally suspended in a 5% dextrose aqueous solution in an amount of approximately 50 mg. of the particles per cc. Dosages in the amount of 30 mg. per kg. of body weight of the subject are intravenously injected. Techniques described in U.S. Pat. No. 4,106,488 may be employed to more selectively direct the particles to the cancer cells. Approximately 4 hours after injection, particles will have been intracellularly absorbed by the cancer cells. Subject is then placed in a hyperbaric oxygen chamber and subjected to an approximate 50% oxygen concentration at a pressure of 3 atmospheres for a period of approximately 3 hours. Normal hyperbaric chamber safety procedures in achieving compression and decompression would be followed.

The hyperbaric oxygen chamber procedure would serve to raise the oxygen level of the subject's blood which, in turn, would raise the rate of intracellular absorption of oxygen. The increased rate of intracellular oxygen absorption, especially by the cancer cells, coupled with the already intracellularly absorbed ferric oxyhydroxide, results in an increased rate of oxidation and metabolism of the ferric oxyhydroxide and therefore in a significant rise in intracellular energy. This significant rise in intracellular energy further results in intracellular thermal changes, stimulates the intracellular production of interferon and/or stimulates the intracellular production of prostaglandins, resulting in a destruction of cancer cells wherever they exist in the subject.

EXAMPLE IV

The subject is placed on a table with the electromagnetic energy transmitter on one side and the detection receiver on the opposite side. The transmitter and the receiver are on a moveable axis which can rotate 360° and move laterally the length of the subject. The frequency is varied from 1 Kilohertz to 50 Megahertz at each point on the 360° circle. The input from the detection receiver is fed into a computer which composes a three-dimensional picture of the resonant frequencies of all points in the subject. The distribution of cancer cells is noted as is their resonant frequency.

The subject is then placed in a large coil approximately 3 feet–6 feet in diameter. The coil is energized at the frequency determined by the computer. The subject is then treated for an increment of time determined from computer data. This increment of time could range from 2 minutes–30 minutes. Approximately 48 hours later, the subject is placed back on the original table and the procedure of detection repeated. Should any cancer cells with their specific resonant frequency be detected, then the subject is treated again, etc.

There are many variations of the invention as described and this invention should be limited solely by the scope of the following claims.

I claim:

1. A process for the treatment of cancer cells in a subject's living tissue comprising the steps of:
   - determining a resonant absorption frequency of said cancer cells,
   - generating an electromagnetic field,
   - turning said electromagnetic field to said absorption frequency of said cancer cells, and
   - exposing the subject to said tuned field to achieve biophysical alteration in said cancer cells' intracellular structures, said biophysical alteration including the stimulation of intracellular production of interferon.

2. The process according to claim 1 further comprising the step of:
   - intravenously injecting into said tissue metabolic and activity varying substances to alter the biophysical characteristics of the intracellular structure of the living cell.

3. The process according to claim 1 further comprising the step of:
   - introducing into said tissue intracellular chemically generated energy substances to stimulate the intracellular production of interferon.

4. A process for the treatment of cancer cells in a subject's living tissue comprising the steps of:
   - determining the resonant absorption frequencies of said cancer cells,
   - determining the resonant absorption frequencies of the normal cells of said subject,

calculating the frequency closest to said resonant frequency of said cancer cells and furtherest from said resonant frequency of said normal cells,
generating an electromagnetic field,
tuning said electromagnetic field to said calculated frequency, and
exposing the subject to said tuned field to achieve biophysical alteration in said cancer cells' intracellular structures, said biophysical alteration including the stimulation of intracellular production of interferon.

5. The process according to claim **4** further comprising the step of:
intravenously injecting into said tissue metabolic and activity varying substances to alter the biophysical characteristics of the intracellular structure of said cancer cell.

6. The process according to claim **4** further comprising the step of:
introducing into said tissue intracellular chemically generated energy substances to stimulate the intracellular production of interferon.

7. A process for the treatment of cancer cells in a subject's living tissue comprising the steps of:
determining a resonant absorption frequency of said cancer cells,
generating an electromagnetic field which includes energy with variable frequency in the range of 1 kilohertz to 50 megahertz,
tuning said electromagnetic field to said absorption frequency of said cancer cells, and
exposing the subject to said tuned field to achieve biophysical alteration in said cancer cells' intracellular structures, said biophysical alteration including the stimulation of intracellular production of interferon.

8. A process for the treatment of cancer cells in a subject's living tissue comprising the steps of:
determining the resonant absorption frequencies of said cancer cells,
determining the resonant absorption frequencies of the normal cells of said subject,
calculating the frequency closest to said resonant frequency of said cancer cells and furtherest from said resonant frequency of said normal cells,
generating an electromagnetic field which includes energy with variable frequency in the range of 1 kilohertz to 50 megahertz,
tuning said electromagnetic field to said calculated frequency, and,
exposing the subject to said tuned field to achieve biophysical alteration in said cancer cells' intracellular structures, said biophysical alteration including the stimulation of intracellular production of interferon.

9. A process for the treatment of cancer cells in a subject's living tissue comprising the steps of:
determining a resonant absorption frequency of said cancer cells,
generating an electromagnetic field,
tuning said electromagnetic field to said absorption frequencies of said cancer cells, and
exposing the subject to said tuned field to achieve biophysical alteration in said cancer cells' intracellular structures, said biophysical alteration including the stimulation of intracellular production of interferon and the intracellular heat rise of said cancer cells.

10. A process for the treatment of cancer cells in a subject's living tissue comprising the steps of:
determining the resonant absorption frequencies of said cancer cells,
determining the resonant absorption of the normal cells of said subject,
calculating the frequency closest to said resonant frequency of said cancer cells and furtherest from said resonant frequency of said normal cells,
generating an electromagnetic field,
tuning said electromagnetic field to said calculated frequency, and
exposing the subject to said tuned field to achieve biophysical alteration in said cancer cells' intracellular structures, said biophysical alteration including the stimulation of intracellular production of interferon and the intracellular heat rise of said cancer cells.

11. A process for the treatment of cancer cells in a subject's living tissue comprising the steps of:
determining the resonant absorption frequency of said cancer cells,
generating an electromagnetic field,
tuning said electromagnetic field to said absorption frequency of said cancer cells,
intravenously injecting into said tissue metabolic and activity varying substances to alter the biophysical characteristics of the intracellular structure of the living cell,
said biophysical characteristics inlcuding the magnetic susceptibility of said intracellular structure and therefore the resonant energy absorption frequency of said living cell, and
exposing the subject to said tuned field to achieve biophysical alteration in said cancer cells' intracellular structures, said biophysical alteration including the stimulation of intracellular production of interferon.

12. A process for the treatment of cancer cells in a subject's living tissue comprising the steps of:
determining the resonant absorption frequencies of said cancer cells,
determining the resonant absorption frequencies of the normal cells of said subject,
calculating the frequency closest to said resonant frequency of said cancer cells and futherest from said resonant frequency of said normal cells,
generating an electromagnetic field,
tuning said electromagnetic field to said calculated frequency,
intravenously injecting into said tissue metabolic and activity varying substances to alter the biophysical characteristics of the intracellular structure of the living cell,
said biophysical characteristics including the magnetic susceptibility of said intracellular structure and therefore the resonant energy absorption frequency of said cancer cells, and
exposing the subject to said tuned field to achieve biophysical alteration in said cancer cells' intracellular structures, said biophysical alteration including the stimulation of intracellular production of interferon.

13. A process for the treatment of cancer cells in a subject's living tissue comprising the steps of:
determining a resonant absorption frequency of said cancer cells,

generating an electromagnetic field which is external of the subject,

tuning said electromagnetic field to said absorption frequencies of said cancer cells, and

exposing the subject to said tuned field to achieve biophysical alteration in said cancer cells' intracellular structures, said biophysical alteration including the stimulation of intracellular production of interferon.

14. A process for the treatment of cancer cells in a subject's living tissue comprising the steps of:

determining the resonant absorption frequencies of said cancer cells,

determining the resonant absorption frequencies of the normal cells of said subject,

calculating the frequency closest to said resonant frequency of said cancer cells and furtherest from said resonant frequency of said normal cells,

generating an electromagnetic field which is external of the subject,

tuning said electromagnetic field to said calculated frequency, and

exposing the subject to said tuned field to achieve biophysical alteration in said cancer cells' intracellular structures, said biophysical alteration including the stimulation of intracellular production of interferon.

15. A process for the treatment of cancer cells in a subject's living tissue comprising the steps of:

intravenously injecting into said tissue particles selected from the group of ferromagnetic, paramagnetic, and diamagnetic materials and capable of being absorbed in said cancer cells to enhance the determination of the resonant absorption frequencies of said cancer cells,

determining a resonant absorption frequency of said cancer cells,

generating an electromagnetic field,

tuning said electromagnetic field to said absorption frequency of said cancer cells, and

exposing the subject to said tuned field to achieve biophysical alteration in said cancer cells' intracellular structures, said biophysical alteration including the stimulation of intracellular production of interferon.

16. A process for the treatment of cancer cells in a subject's living tissue comprising the steps of:

introducing into said tissue substances capable of being absorbed by said cancer cells to alter the biophysical characteristics of said cancer cells,

determining the resonant absorption frequencies of said cancer cells,

generating an electromagnetic field tuned to at least one said absorption frequencies of said cancer cells, and

placing said subject within the effective range of the electromagnetic field and exposing the said subject to field to achieve biophysical alteration, including the stimulation of intracellular production of interferon, in said cancer cells' intracellular structures.

17. The process according to claim **16** wherein,

said placing step commences before said generating step.

* * * * *

Appendix 2 (page 2)

On November 18, 1986, Robert T. Gordon was granted a patent for a Frequency Instrument treatment of cancer. A summary of what he has done and is doing follows.

Gordon's patent is a short 12 pages with only 1 diagram and that only a sketch of the process. Gordon has experimented only with animals. He makes no claims for any instrument, but instead uses existing technology. Given his age (36), he certainly might be worth working with well into the future.

Gordon is not attempting to devitalize cancer microbes with his frequency, but instead attack cancer cells. He does this in two ways. Because a cancer cell will be destroyed if it increases in heat by 8.0° Centigrate while a normal cell is destroyed if it increases 9.5°, Gordon is using frequency to heat cancer cells past 8.0° but less than 9.5°. He determines a separate frequency resonance for the cancer cells and normal cells, claiming that since the difference between the frequencies varies with a number of factors, the treatment occurs when the frequencies are most distant. The notion is to use the cancer cell's frequency to heat the cancer cell from within.

Of course, this has no effect on the cancer microbes elsewhere in the body and he has no way of determining the cancer microbe's frequency. However, by establishing a patent for a frequency treatment of cancer, he has given us a big argument in seeking a patent for Rife-Crane cancer treatment.

Gordon also clearly states that traditional cancer treatment - surgery, radiation, chemotherapy - are "extracellular." His is first intracellular approach. He also uses frequency to stimulate the body's production of interferon.

Quotations from his patent follow.

A process for the treatment of cancer by the application of external electromagnetic energy capable of achieving biophysical alterations in the intracellular structure of cancer cells in living tissue, including stimulation of intracellular production of interferon. The process accomplishes these biophysical alterations by tuning an external electromagnetic energy to the resonant energy absorption frequencies of the intracellular structure of the selected cells and then exposing the subject to this tuned electromagnetic energy field. Alternatively, the field can be tuned to the frequency which has been calculated to be the closest to the resonant frequency of the cancer cells and furthest from the resonant frequency of the normal cells. The process may be further enhanced by the intracellular absorption of selected materials designed to alter the magnetic susceptibility and therefore the resonant energy absorption frequency of the intracellular structure.

Object of Invention: selectively destroy cancer cells by achieving biophysical alterations in the intracellular structure of the cancer cells while producing no significant effects upon the normal cells. The biophysical alterations include thermal changes, the stimulation of the intracellular production of interferon and/or the stimulation of the intracellular production of prostaglandins. In addition, the present invention provides a technology for the detection of cancer cells wherever they exist in the body.

The field can be tuned to the frequency which has been calculated to be closest to the resonant frequency of the cancer cells and furtherest from the resonant frequency of the normal cells.

By placing the subject within the effective range of the high frequency electromagnetic field and by tuning the frequency of this field to the specific resonant frequency of the cancer cells, the cancer cells then will absorb energy from the electromagnetic field resulting in the raising

of their intracellular temperature and the affecting of their biophysical properties so as to selectively destroy the cancer cells without affecting the normal cells.

Computerized axial tomography techniques are combined with an electromagnetic field generator and detection receiver sensing techniques to obtain three-dimensional data on specific point resonant energy absorption at a range of frequencies. The resonant frequency of the cancer cells being different from that of the normal cells will serve to identify the location of the cancer cells.

One possible configuration would embody the subject being placed within a large helical coil and the entire coil energized by a high frequency generator so that the entire subject would be within the effective range of this electromagnetic field.

range: 1 kilohertz to 50 megahertz